

DEPARTMENT OF BENGALI  
Kalipada Ghosh Tarai Mahavidyalaya, Bagdogra, Darjeeling

**Programme Outcome, Programme Specific Outcome and Course Outcome**

**Programme Outcome ::**

উত্তরবঙ্গ বিশ্ববিদ্যালয়ের পাঠক্রম নির্ধারণ কমিটির সুপারিশ অনুযায়ী আমরা অর্থাৎ বঙ্গভাষা ও সাহিত্য বিভাগ, কালিপদ ঘোষ তরাই মহাবিদ্যালয়, দার্জিলিং - সমগ্র পাঠক্রমকে অনার্স ও জেনারেল কোর্স অনুযায়ী পাঠদান করছি। অনার্স পাঠক্রমের পাঠ সমাপনান্তে ছাত্র-ছাত্রীরা উচ্চশিক্ষার জগতে নিজেদেরকে তুলে ধরতে পারবে। উত্তরবঙ্গ বিশ্ববিদ্যালয় ছাড়াও অন্যান্য যে সমস্ত বিশ্ববিদ্যালয় বঙ্গভাষা ও সাহিত্য বিভাগে মাস্টার ডিগ্রী আছে সেখানে উচ্চশিক্ষা লাভ করে গবেষণার্থী কাজ করবে। স্কুল, কলেজ, বিশ্ববিদ্যালয়ে চাকরির জন্য নিজেদের প্রস্তুত করতে পারবে।

অন্যক্ষে, সাম্প্রতিক না নিয়ে যারা জেনারেল বা প্রোগ্রাম কোর্স নিয়ে বি.এ পাস করবে তারা মহাবিদ্যালয়ে পাঠকালীন যে শিক্ষা অর্জন করবে তার দ্বারা বিভিন্ন প্রতিযোগিতামূলক পরীক্ষাগুলিতে বসতে পারবে। যেহেতু বিষয়টি বাংলা, তাই বাংলার শিক্ষক হিসেবে - বিশেষত প্রাথমিক, উচ্চ প্রাথমিক ধরনের স্কুলে চাকরি পেতে পারে। সরকারি বা বেসরকারি যে কোনও ধরনের প্রতিষ্ঠানে করণিক-এর চাকরি বা কোন কোর্স করে নিয়ে সুপারভাইজার-এর চাকরির যোগ্যতা পেতে পারে।

ছাত্র-ছাত্রীদের দক্ষতা বাড়ানো ও সেইসঙ্গে আগ্রহ সৃষ্টি করতে বর্তমান পাঠক্রমটি খুবই সহায়কের ভূমিকা নিয়েছে। বর্তমান CBCS (Choice Based Credit System) পাঠক্রমটি ছাত্র-ছাত্রীদের আরও বেশি ক্লাসের সাথে যুক্ত থাকতে উদ্বুদ্ধ করবে।

সামগ্রিকভাবে যে পাঠক্রম ৬টি সেমিস্টার-এ বিভক্ত করা হয়েছে- তা অনার্স কোর্স হোক অথবা পাস কোর্স হোক পুরোটাই খুব সুন্দরভাবে ধাপে ধাপে ছাত্র-ছাত্রীদের অধ্যয়ন, মননকে বাড়িয়ে তুলতে সহায়ক। ক্রমপর্যায়ে বিভক্ত বিষয়গুলি শিক্ষা গ্রহণকারীদের চিন্তাভাবনাকে আরও এগিয়ে নিয়ে যেতে সাহায্য করবে।

বঙ্গবন্ধু  
বিভাগীয় প্রধান  
বঙ্গভাষা ও সাহিত্য বিভাগ  
কালিপদ ঘোষ তরাই মহাবিদ্যালয়  
2/6/2023

Prakratty 2/6/2023  
PRINCIPAL  
Kalipada Ghosh Tarai  
Mahavidyalaya  
Bagdogra

## Programme Specific Outcomes ::

Programme Specific Outcomes include :

**P.S.O.1** : বাংলা সাহিত্যের ইতিহাস (প্রাচীন ও মধ্যযুগ)পাঠে ছাত্রসমাজ বাংলা সাহিত্যের ইতিহাসকে শুরু থেকে জানতে পারবে। এছাড়া বৈষ্ণব পদাবলী, মধ্যযুগের কুঞ্জিবাসী রামায়ণ পাঠে ছাত্ররা মধ্যযুগের ধর্মীয় বিষয় সম্পর্কে, সমাজ সম্পর্কে জানতে পারবে।

**P.S.O.2** : বাংলা সাহিত্যের সঙ্গে সংস্কৃত সাহিত্য, হিন্দি সাহিত্য এবং ইংরেজি সাহিত্যের ইতিহাস সম্পর্কে ধারণা লাভ করতে পারবে।

**P.S.O.3** : বাংলা সাহিত্যে অন্যান্য সাহিত্যের প্রভাব সম্পর্কে ছাত্রসমাজ জানতে পারবে।

**P.S.O.4** : বাংলা ভাষাতত্ত্ব ও ভাষাবিজ্ঞান সম্বন্ধীয় জ্ঞান অর্জন করতে পারবে।

**P.S.O.5** : বিভিন্ন ধরনের আধুনিক ছোটগল্প পাঠে মানব জীবন, বাস্তবধর্মী জীবন চিত্রণ ছাত্রদের মনের বাস্তবতার দার খুলে দেবে। উপন্যাস পাঠে ভাবনার জগৎ প্রসারিত হবে।

**P.S.O.6** : বাংলা ভাষা, তার সাহিত্য ও তার বৈজ্ঞানিক প্রয়োগ বুঝতে সাহায্য করবে।

**P.S.O.7** : বাংলা সাহিত্যের আধুনিক রীতি সম্পর্কে জানতে সমর্থ হবে।

**P.S.O.8** : বাংলা নাট্যমঞ্চ, নাট্যসাহিত্য সম্পর্কে এর উদ্ভবের সময় এবং বর্তমানের রীতি ও তাৎপর্য সম্বন্ধীয় জ্ঞান অর্জন করতে পারবে।

## Course Outcomes ::

SEMESTER সেমিস্টার	COURSE কোর্স	COURSE OUTCOMES কোর্স আউটকামস
SEM -1 সেমিস্টার-১	১. বাংলা সাহিত্যের ইতিহাস (প্রাচীন ও মধ্যযুগ) ২. মধ্যযুগের কাব্য ও কবিতা	১. বাংলা সাহিত্যের যুগ বিভাজনের তিনটি অংশের দুটি অংশ এখানে রয়েছে। এখানে বাংলা সাহিত্যের উদ্ভব, তার ক্রমবিকাশ এবং তার বিভিন্ন সাহিত্যধারা (যেমন-মঙ্গলকাব্য, বৈষ্ণব সাহিত্য, অনুবাদ সাহিত্য প্র.) সম্পর্কে ছাত্র-ছাত্রীরা জ্ঞান লাভ করবে।

		২. মধ্যযুগের কাব্য ও কবিতা পাঠের মধ্য দিয়ে ছাত্র-ছাত্রীরা কবিতার বিষয়ের সঙ্গে সমাজ জীবন ও দার্শনিক চিন্তাভাবনার সঙ্গে পরিচিত হবে।
SEM-2 সেমিস্টার-২	১. বাংলা সাহিত্যের ইতিহাস (আধুনিক যুগ) ২. সংস্কৃত সাহিত্যের ইতিহাস ও ইংরেজি সাহিত্যের ইতিহাস	১. মধ্যযুগের গতানুগতিক সাহিত্যখারা পেরিয়ে কিভাবে বাংলা সাহিত্যে আধুনিকতা বা পরিবর্তন এসেছে সে বিষয়ে ছাত্র-ছাত্রীরা সম্যক জ্ঞান অর্জন করবে। এবং সেই সঙ্গে আধুনিক যুগের বিভিন্ন সাহিত্য প্রকরণগুলি সম্পর্কে ছাত্র-ছাত্রীরা জানতে পারবে। ২. বাংলা সাহিত্যের পাশাপাশি ছাত্র-ছাত্রীরা সংস্কৃত সাহিত্য ও ইংরেজি সাহিত্যের ইতিহাস জানতে পারবে। এটা তাদের তুলনামূলক সাহিত্য সম্পর্কে জ্ঞান বৃদ্ধি করবে।
SEM-3 সেমিস্টার-৩	১. মঙ্গলকাব্য ও চরিত সাহিত্য ২. হৃদ ও অলংকার ৩. উনিশ শতকের কাব্য	১. মধ্যযুগের ধর্মীয় আবহ সম্পর্কে জ্ঞানলাভ, মঙ্গলকাব্যের বিষয়ে জ্ঞানলাভ ও শ্রীচৈতন্যের বিষয়ে জ্ঞানলাভ করতে পারবে। ২. অলংকার সাহিত্যের মধ্যে সৌন্দর্য বৃদ্ধি করতে, চমৎকারিত্ব নিয়ে আসতে এবং কাব্য দেহের রমণীয়তা বৃদ্ধি করতে ব্যবহৃত হয়। আর হৃদ বাক্যের মধ্যে একটা তাল বা হৃদস্পন্দ সৃষ্টি সাহিত্যে বাক্যের মূল্যমান দেয়। ছাত্র ছাত্রীদের ক্ষেত্রে হৃদ ও অলংকার -এর জ্ঞান থাকলে তারা এগুলির সার্থক ব্যবহারে নিজেরাও সুন্দর রচনা তৈরি করতে পারবে। ৩. এই বিশেষ সময়ের কাব্যগুলি পাঠ করে ছাত্রসমাজ কবি মানসিকতা ও সে সময়ের সমাজ মানসিকতার সঙ্গে পরিচিত হতে পারবে।
SEM-4 সেমিস্টার-৪	১. উনিশ শতকের নাটক ২. বিশ শতকের নাটক ৩. উনিশ ও বিশ শতকের উপন্যাস	১. এই পর্বে বাংলা সাহিত্যে নাটকের উদ্ভব, বিকাশ, নাট্যমঞ্চ এবং নাটক সম্পর্কে ছাত্র-ছাত্রীরা অবহিত হবে। ২. এই পর্বে আধুনিক নাটক ও তার বিষয়বস্তু, বিভিন্ন নাট্য আন্দোলন ও নাট্যকারের মানসিকতা সম্পর্কে ছাত্রছাত্রীরা অবহিত হবে। ৩. এখানে বাংলা উপন্যাসের উদ্ভব, তার ক্রমবিকাশ, উপন্যাসিকের মানসিকতা ও সমকালীন সমাজের মানসিকতা সম্পর্কে ছাত্রছাত্রীরা জ্ঞান লাভ করবে।



SEM-5 সেমিস্টার-৫	১. উনিশ ও বিশ শতকের কবিতা ২. বিশ শতকের দ্বিতীয়ার্ধের উপন্যাস	১. মধ্যযুগের গতি পেরিয়ে আধুনিক যুগে এসে বাংলা কবিতা যেভাবে এগিয়েছে, এই দুই শতকের কবিতার পরিচয় নিয়ে সে সম্পর্কে ছাত্র-ছাত্রীরা জ্ঞান লাভ করবে। ২. বিশ শতকের দ্বিতীয়ার্ধের উপন্যাসের পাঠ নিয়ে ছাত্র-ছাত্রীরা উপন্যাসে আধুনিক রীতি-নীতির প্রয়োগ-এর সঙ্গে যুব মানসিকতা এবং যুগের পরিচয় পাবে।
SEM-6 সেমিস্টার-৬	১. নির্বাচিত বাংলা ছোটগল্প ২. সাহিত্যতত্ত্ব, প্রবন্ধ ও সমালোচনা সাহিত্যের রূপভেদ, নাট্য সাহিত্যের রূপভেদ	১. এখানে নির্বাচিত ছোটগল্পগুলি পাঠের মাধ্যমে ছাত্র-ছাত্রীদের ছোটগল্পে আধুনিক ধারা সম্পর্কে সম্যক জ্ঞান অর্জন করতে সাহায্য করবে। ২. এখানে বিভিন্ন সাহিত্যিক মতবাদ, সাহিত্যের তাত্ত্বিক আলোচনা এবং সেই সঙ্গে সাহিত্যের বিভিন্ন রূপভেদ সম্পর্কে ছাত্র-ছাত্রীরা সম্যক ধারণা অর্জন করবে।

## COURSE OUTCOMES INCLUDE EXCEPT HONOURS COURSE ::

### 1<sup>st</sup> SEMESTER ::

#### GE (Generic Elective) :

ফার্স্ট সেমিস্টারের অনার্সের (বাংলা অনার্স ব্যতীত) ছাত্র-ছাত্রীদের ঐচ্ছিক বিষয় হিসেবে এই পেপারটি রয়েছে। এখানে পাঠক্রমের মধ্যে আছে দুটো বিষয় - ১. বাংলা সাহিত্যের ইতিহাস(আধুনিক যুগ) ও ২. ভাষাতাত্ত্বিক টীকা। বাংলা সাহিত্যের ইতিহাসে যে যুগ বিভাজন তাতে মধ্যযুগকে বাদ দিয়ে আধুনিক যুগকে পাঠ্যক্রমে অন্তর্ভুক্ত করা হয়েছে। যদিও মধ্যযুগের আলোচনা, মধ্যযুগের পরিচয় সাহিত্যের পাঠকদের, ছাত্র-ছাত্রীদের অবশ্যই জানা দরকার তথাপি পাঠক্রমে গুরুত্ব দেওয়া হয়েছে আধুনিক যুগকে। সাহিত্যের ইতিহাসে আধুনিক যুগে বাংলা গদ্যের উদ্ভব কিভাবে ঘটে, বাংলা গদ্য চর্চা ও তার বিকাশ কিভাবে ঘটে তার পরিচয় আছে। বাংলা কাব্যচর্চার প্রাচীনতা অনেক পুরনো, তাই হয়তো ছাত্র-ছাত্রীদের বিশাল বিস্তৃতির মাঝে না নিয়ে গিয়ে আধুনিক যুগকে পাঠ্যক্রমে অন্তর্ভুক্ত করা হয়েছে। যদিও আধুনিক যুগেও কাব্য সাহিত্য সম্পর্কে আলোচনা আছে। তার সঙ্গে আছে কথাসাহিত্য ও নাট্যসাহিত্য। সাহিত্য প্রকরণের এই যে বিভিন্ন

দিক, এই বিষয়গুলি সাহিত্যের ছাত্র-ছাত্রীদের অবশ্যই জানতে হবে। বাংলা সাহিত্যের ইতিহাসের গদ্য চর্চার গোড়ার কথা, আধুনিক যুগের সাহিত্য প্রকরণগুলির গোড়ার কথা যে পরিচয় এই বিভাগে রয়েছে তা সাহিত্যের ছাত্র-ছাত্রীদের জানা আবশ্যিক। আর ভাষাতাত্ত্বিক টিকার ক্ষেত্রে কতকগুলি সুনির্দিষ্ট বিষয় পাঠ্যক্রমে অন্তর্ভুক্ত করা হয়েছে যেগুলো ভাষার ধ্বনিতাত্ত্বিক ও রূপতাত্ত্বিক গঠন, ভাষার ধ্বনিগত বা শব্দগত এবং অর্থগত পরিবর্তনকে জানতে সাহায্য করে। আমরা জানি প্রতিনিয়ত ভাষা পরিবর্তন হয়ে চলেছে। তার ধ্বনিগত বা শব্দগত পরিবর্তন যেমন হয়ে চলেছে, তেমনি তার অর্থগত পরিবর্তন হয়ে চলেছে। আর এই পরিবর্তন কিভাবে হয় তার পরিচয় জানার জন্য ভাষাতাত্ত্বিক জ্ঞান সাহিত্যের ছাত্র ছাত্রীদের অবশ্যই থাকা দরকার।

#### **DSC (DISCIPLINE SPECIFIC CORE COURSE) :**

এই পত্রে বাংলা সাহিত্য ও বাংলা ভাষার ইতিহাস রয়েছে। এই বিষয়গুলো পড়ার মাধ্যমে শিক্ষার্থীরা আধুনিক যুগের বাংলা সাহিত্যের উদ্ভব ও ক্রমবিকাশ সম্পর্কে জানতে পারে। আধুনিক সাহিত্যের বিভিন্ন শাখা, যেমন- গদ্য সাহিত্য, কাব্য সাহিত্য, কথাসাহিত্য, নাট্য সাহিত্য ইত্যাদি বিষয়গুলোর সঙ্গে পরিচিত হয়। বাংলা ভাষার সৃষ্টি কিভাবে হয়েছে তা কেমন ভাবে বিবর্তিত হয়েছে সে সম্পর্কেও জানতে পারে। বাংলা উপভাষা, শব্দভাণ্ডার, ধ্বনি পরিবর্তন ও শব্দার্থ পরিবর্তন ইত্যাদি বিষয়গুলো সম্পর্কে স্পষ্ট ধারণা তৈরি হয়।

#### **LCC (LANGUAGE CORE COURSE) :**

এই কোর্স পড়ার মাধ্যমে বাংলা ভাষার ব্যবহারিক ক্ষেত্রে জ্ঞানলাভ হয়। মন্তব্য পত্র রচনা, পত্র রচনা, বিজ্ঞাপন রচনা ইত্যাদি বিষয় গুলো শেখার মধ্য দিয়ে ছাত্র-ছাত্রীদের বাংলা ভাষার প্রাথমিক ধারণা তৈরি হয়।

### **2<sup>nd</sup> SEMESTER ::**

#### **GE (GENERIC ELECTIVE) :**

দ্বিতীয় সেমিস্টারের অনার্সের (বাংলা অনার্স ব্যতীত) ছাত্র-ছাত্রীদের ঐচ্ছিক বিষয় বিষয় – ১. ছন্দ, ২. অলংকার, এবং ৩. লোকসাহিত্য। ছন্দ ও অলংকার হল সাহিত্যের সৌন্দর্য। ছন্দ সাহিত্যের মধ্যে বিশেষ করে কবিতার মধ্যে সৃষ্টি করে তাল, সৃষ্টি করে সুর। রবীন্দ্রনাথের কথায়- “তটের বুকে লাগে জলের ঢেউ, তবে সে

কলতান উঠে/বাতাসে বনসভা শিহরি কাঁপে, তবে সে মর্মের ফুটো সাহিত্যের এই সৌন্দর্য নিয়ে সাহিত্যের ছাত্র-ছাত্রীদের কারবার। আর অলংকার সাহিত্যের মধ্যে নিয়ে আসে চমৎকারিত্ব; অলংকার ধ্বনি বা শব্দ বা শব্দের অর্থকে কেন্দ্র করে বর্ণ বা ধ্বনি সৌন্দর্যের সৃষ্টি করে, শব্দকে সুন্দর করে তোলে, শব্দকে মনোহর করে তোলে, বাক্যকে রমণীয় করে তোলে। সাহিত্য যেহেতু সৌন্দর্যের সঙ্গে সম্পর্কিত তাই ছন্দ ও অলংকার সাহিত্যের ছাত্র-ছাত্রীদের অবশ্যই পঠিতব্য। এই বিভাগে আরও একটি বিষয় রয়েছে, সেটা হলো লোকসাহিত্য। লোকসাহিত্যকে সাহিত্যের প্রাণ হিসেবে দেখা হয়। কেননা, লোকসাহিত্যের অন্তর্ভুক্ত বিষয় লোকসংস্কৃতি, ছড়া, প্রবাদ, ধাঁধা ও লোকসংগীত – এসবের মধ্যে লোকায়ত মানুষের দৈনন্দিন জীবনের এমন কিছু পরিচয় রয়েছে যার সাথে আমাদের আদি সমাজ বা প্রাচীন সমাজের যোগসূত্র রয়েছে। আমাদের ঐতিহ্যের আদি সূত্র লোকসাহিত্যের মধ্যেই পাওয়া যায়। কাজেই, আমাদের ঐতিহ্যের মূল, আমাদের সংস্কৃতির আদি পরিচয় জানার জন্য এই বিষয়টিও ছাত্র-ছাত্রীদের অবশ্যই পঠিতব্য।

#### **DSC (DISCIPLINE SPECIFIC CORE COURSE) :**

এই পত্রে বাংলা ছন্দ ও অলংকার বিষয় হিসেবে রয়েছে। এই পত্র পাঠের মধ্য দিয়ে শিক্ষার্থীরা ছন্দের সংজ্ঞা, প্রকারভেদ, ছন্দ নির্ণয় ইত্যাদি বিষয়গুলো শিখতে পারবে। অলংকারের সংজ্ঞা, বিভিন্ন অলংকারের স্বরূপ, অলংকার নির্ণয় ইত্যাদি বিষয়গুলো পাঠের মাধ্যমে শিক্ষার্থীর ছন্দ ও অলংকার সম্পর্কে স্পষ্ট ধারণা তৈরী হয়।

#### **AECC ( ABILITY ENHANCEMENT COMPULSORY/CORE COURSE) :**

এই পত্রে নির্বাচিত কবিতা, নির্বাচিত প্রবন্ধ, নির্বাচিত গল্প, ভাবসম্প্রসারণ, সংক্ষিপ্তসার, প্রতিবেদন রচনা ইত্যাদি বিষয়গুলো রয়েছে। এই বিষয়গুলো পড়ার ফলে শিক্ষার্থীরা বাংলা সাহিত্যের কবিতা, প্রবন্ধ, ছোটগল্প ইত্যাদি বিষয় এবং লেখক সম্পর্কে জানতে পারবে। সেইসঙ্গে ভাবসম্প্রসারণ, সংলাপ লিখন, প্রতিবেদন রচনা, ভাষণ প্রস্তুতি ইত্যাদি বিষয়গুলো পাঠ করলে বাংলা ভাষা ও সাহিত্যের ব্যবহারিক ক্ষেত্রে শিক্ষার্থীদের দক্ষতা বাড়িয়ে দেয়।

#### **3<sup>rd</sup> Semester ::**

#### **GE (Generic Elective) :**

থার্ড সেমিস্টারের অনার্সের (বাংলা অনার্স ব্যতীত) ছাত্র-ছাত্রীদের ঐচ্ছিক বিষয় হিসেবে এই পেপারটি রয়েছে। এখানে পাঠক্রমের মধ্যে আছে দুটো বিষয় – ১. বাংলা সাহিত্যের ইতিহাস (আধুনিক যুগ) ও ২. ভাষাতাত্ত্বিক



টীকা। বাংলা সাহিত্যের ইতিহাসে যে যুগ বিভাজন তাতে মধ্যযুগকে বাদ দিয়ে আধুনিক যুগকে পাঠ্যক্রমে অন্তর্ভুক্ত করা হয়েছে। যদিও মধ্যযুগের আলোচনা, মধ্যযুগের পরিচয় সাহিত্যের পাঠকদের, ছাত্র-ছাত্রীদের অবশ্যই জানা দরকার তথাপি পাঠ্যক্রমে গুরুত্ব দেওয়া হয়েছে আধুনিক যুগকে। সাহিত্যের ইতিহাসে আধুনিক যুগে বাংলা গদ্যের উদ্ভব কিভাবে ঘটে, বাংলা গদ্য চর্চা ও তার বিকাশ কিভাবে ঘটে তার পরিচয় আছে। বাংলা কাব্যচর্চার প্রাচীনতা অনেক পুরনো, তাই হয়তো ছাত্র-ছাত্রীদের বিশাল বিস্তৃতির মাঝে না নিয়ে গিয়ে আধুনিক যুগকে পাঠ্যক্রমে অন্তর্ভুক্ত করা হয়েছে। যদিও আধুনিক যুগেও কাব্য সাহিত্য সম্পর্কে আলোচনা আছে। তার সঙ্গে আছে কথাসাহিত্য ও নাট্যসাহিত্য। সাহিত্য প্রকরণের এই যে বিভিন্ন দিক, এই বিষয়গুলি সাহিত্যের ছাত্র-ছাত্রীদের অবশ্যই জানতে হবে। বাংলা সাহিত্যের ইতিহাসের গদ্য চর্চার গোড়ার কথা, আধুনিক যুগের সাহিত্য প্রকরণগুলির গোড়ার কথাই যে পরিচয় এই বিভাগে রয়েছে তা সাহিত্যের ছাত্র-ছাত্রীদের জানা আবশ্যিক। আর ভাষাতাত্ত্বিক টিকার ক্ষেত্রে কতকগুলি সুনির্দিষ্ট বিষয় পাঠ্যক্রমে অন্তর্ভুক্ত করা হয়েছে যেগুলো ভাষার ধ্বনিতাত্ত্বিক ও রূপতাত্ত্বিক গঠন, ভাষার ধ্বনিগত বা শব্দগত এবং অর্থগত পরিবর্তনকে জানতে সাহায্য করে। আমরা জানি প্রতিনিয়ত ভাষা পরিবর্তন হয়ে চলেছে। তার ধ্বনিগত বা শব্দগত পরিবর্তন যেমন হয়ে চলেছে, তেমনি তার অর্থগত পরিবর্তন হয়ে চলেছে। আর এই পরিবর্তন কিভাবে হয় তার পরিচয় জানার জন্য ভাষাতাত্ত্বিক জ্ঞান সাহিত্যের ছাত্র ছাত্রীদের অবশ্যই থাকা দরকার।

### **SEC (Skill Enhancement Course For HONOURS) :**

এই পত্র পাঠ করে বাংলা ভাষার ব্যাকরণের প্রাথমিক বিষয় সম্পর্কে ধারণা তৈরি হয়। এই পত্রে ব্যাকরণ চর্চার ইতিহাস জানা যায় এবং ব্যাকরণের সঙ্গে যুক্ত বিখ্যাত মানুষদের পরিচয় পাওয়া যায়। বাংলা ভাষার বিভিন্ন উপাদান যেমন- বাক্য, শব্দ ইত্যাদি সম্পর্কেও জানতে পাওয়া যায় এই পত্র পাঠের মাধ্যমে।

### **DSC (DISCIPLINE SPECIFIC CORE COURSE) :** বাংলা সাহিত্যে মধ্যযুগের একটি বিশেষ

শাখা বৈষ্ণব পদাবলী। এই বৈষ্ণব সাহিত্য বা বৈষ্ণব পদ পাঠের মাধ্যমে ছাত্র-ছাত্রীরা বৈষ্ণব দর্শন সম্পর্কে যেরকম জানতে পারবে তেমনি সে সময়ের ধর্মীয় চিন্তা চেতনার সঙ্গে তারা পরিচিত হবে। এর সঙ্গে এখানে ছাত্রছাত্রীদের পড়তে হবে রবীন্দ্রনাথ ঠাকুরের 'লোকসাহিত্য' গ্রন্থটি। ছাত্র- ছাত্রীরা এই গ্রন্থটি পাঠে রবীন্দ্রনাথ ঠাকুরের লোকসাহিত্য সম্পর্কে চিন্তা-ভাবনার পরিচয় পাবে। এর সঙ্গে লোকসাহিত্যের বিভিন্ন উপাদান থেকে বাংলার বিভিন্ন সময়ের সামাজিক, সাংস্কৃতিক এবং অর্থনৈতিক জ্ঞান লাভ করবে।

### **SEC (Skill Enhancement Course for PROGRAMME COURSE) :**

এই পত্র পাঠের মাধ্যমে দিয়ে বাংলা ভাষার ব্যবহারিক প্রয়োগের দক্ষতা শেখায়া বাংলা ভাষায় কথা বলার দক্ষতা, ব্যাকরণ সম্পর্কে ধারণা, বিজ্ঞাপন, গণমাধ্যম ও সমাজ ইত্যাদি বিষয় গুলো পড়ার ফলে ছাত্রছাত্রীদের বাংলা ভাষার ব্যবহারিক দিক শিখতে সাহায্য করে।

#### **LCC ( Language Core Course ) :**

এই কোর্স পড়ার মাধ্যমে বাংলা ভাষার ব্যবহারিক ক্ষেত্রে জ্ঞানলাভ হয়। মস্তব্য পত্র রচনা, পত্র রচনা, বিজ্ঞাপন রচনা ইত্যাদি বিষয় গুলো শেখার মধ্য দিয়ে ছাত্র-ছাত্রীদের বাংলা ভাষার প্রাথমিক ধারণা তৈরি হয়।

#### **4<sup>th</sup> Semester ::**

#### **SEC ( SKILL ENHANCEMENT COURSE for HONOURS ) :**

এই পত্র পাঠের মাধ্যমে বাংলা ভাষার প্রয়োগিক বিষয় সম্পর্কে ছাত্র-ছাত্রীরা জানতে পারে। সাহিত্য-সংস্কৃতি ও সামাজিক সামাজিক প্রবন্ধ রচনা, কাহিনী নাট্যরূপান্তর, পত্র রচনা, প্রুফ সংশোধন বিজ্ঞাপন রচনা ইত্যাদি বিষয় সম্পর্কেও ছাত্র-ছাত্রীরা জানতে পারে এবং বাংলা ভাষার ব্যবহারিক চর্চাকে আরও সমৃদ্ধ করে তোলে।

হিসেবে এই পেপারটি রয়েছে। এখানে পাঠক্রমের মধ্যে আছে তিনটি **GE(Generic Elective) :**

ফোর্থ সেমিস্টারের অনার্সের(বাংলা অনার্স ব্যতীত) ছাত্র-ছাত্রীদের ঐচ্ছিক বিষয় বিষয় – ১. ছন্দ, ২. অলংকার, এবং ৩. লোকসাহিত্য। ছন্দ ও অলংকার হল সাহিত্যের সৌন্দর্য। ছন্দ সাহিত্যের মধ্যে বিশেষ করে কবিতার মধ্যে সৃষ্টি করে তাল, সৃষ্টি করে সুর। রবীন্দ্রনাথের কথায়- “তটের বুকে লাগে জলের ঢেউ, তবে সে কলতান উঠে/বাতাসে বনসভা শিহরি কাঁপে, তবে সে মর্মর ফুটে।” সাহিত্যের এই সৌন্দর্য নিয়ে সাহিত্যের ছাত্র-ছাত্রীদের কারবার। আর অলংকার সাহিত্যের মধ্যে নিয়ে আসে চমৎকারিত্ব ; অলংকার ধ্বনি বা শব্দ বা শব্দের অর্থকে কেন্দ্র করে বর্ণ বা ধ্বনি সৌন্দর্যের সৃষ্টি করে, শব্দকে সুন্দর করে তোলে, শব্দকে মনোহর করে তোলে, বাক্যকে রমণীয় করে তোলে। সাহিত্য যেহেতু সৌন্দর্যের সঙ্গে সম্পর্কিত তাই ছন্দ ও অলংকার সাহিত্যের ছাত্র-ছাত্রীদের অবশ্যই পঠিতব্য। এই বিভাগে আরও একটি বিষয় রয়েছে, সেটা হলো লোকসাহিত্য। লোকসাহিত্যকে সাহিত্যের প্রাণ হিসেবে দেখা হয়। কেননা, লোকসাহিত্যের অন্তর্ভুক্ত বিষয় লোকসংস্কৃতি, ছড়া, প্রবাদ, ধাঁধা ও লোকসংগীত – এসবের মধ্যে লোকায়ত মানুষের দৈনন্দিন জীবনের এমন কিছু পরিচয় রয়েছে যার সাথে আমাদের আদি সমাজ বা প্রাচীন সমাজের যোগসূত্র রয়েছে। আমাদের ঐতিহ্যের আদি সুর লোকসাহিত্যের মধ্যেই পাওয়া যায়। কাজেই, আমাদের ঐতিহ্যের মূল, আমাদের সংস্কৃতির আদি পরিচয় জানার জন্য এই বিষয়টিও ছাত্র-ছাত্রীদের অবশ্যই পঠিতব্য।



### **DSC (DISCIPLINE SPECIFIC CORE COURSE) :**

আধুনিক কবিতার গতিপ্রকৃতি, সেই সঙ্গে 'সঞ্চয়িতা' গ্রন্থে সংকলিত রবীন্দ্রনাথের কয়েকটি বিভিন্ন বিষয়ক কবিতা ও আধুনিক কবিদের কয়েকটি কবিতা ছাত্র-ছাত্রীদের পড়তে হবে। নির্বাচিত কবিতাগুলিতে সমাজ ও পরিবেশের বৈচিত্রে ভরা জীবনেরও পরিচয় আছে। এগুলো পড়ার ফলে ছাত্র-ছাত্রীদের বাংলা কবিতা বিষয়ে একটা স্বচ্ছ ধারণা তৈরি হবে। যা তাদের প্রতিযোগিতামূলক পরীক্ষার ক্ষেত্রে যেমন কাজে দেবে তেমনি পড়াশোনার পরবর্তী ধাপে তারা এই জ্ঞান নিয়ে আধুনিক কবিতাকে সুন্দর ভাবে বিচার বিশ্লেষণ করতে পারবে।

### **SEC (SKILL ENHANCEMENT COURSE for PROGRAMME COURSE) :**

এই পত্র পাঠে বাংলা ভাষার সৃজনমূলক চর্চার বিভিন্ন বিষয় শিখতে ও জানতে সাহায্য করে। ছোটগল্প রচনা, বক্তব্য রচনা, সংলাপ রচনা ইত্যাদির শেখার মধ্য দিয়ে ছাত্র-ছাত্রীদের বাংলা ভাষার সৃজনশীল চর্চা হয়।

### **5<sup>th</sup> SEMESTER ::**

### **GE (GENERIC ELECTIVE For PROGRAMME COURSE) :**

পঞ্চম সেমিস্টারের জেনারেল কোর্সের ছাত্র-ছাত্রীদের ঐচ্ছিক বিষয় হিসেবে এই পেপারটি রয়েছে। এখানে পাঠ্যক্রমের মধ্যে আছে দুটো বিষয় – ১. বাংলা সাহিত্যের ইতিহাস (আধুনিক যুগ) ও ২. ভাষাতাত্ত্বিক টীকা। বাংলা সাহিত্যের ইতিহাসে যে যুগ বিভাজন তাতে মধ্যযুগকে বাদ দিয়ে আধুনিক যুগকে পাঠ্যক্রমে অন্তর্ভুক্ত করা হয়েছে। যদিও মধ্যযুগের আলোচনা, মধ্যযুগের পরিচয় সাহিত্যের পাঠকদের, ছাত্র-ছাত্রীদের অবশ্যই জানা দরকার তথাপি পাঠ্যক্রমে গুরুত্ব দেওয়া হয়েছে আধুনিক যুগকে। সাহিত্যের ইতিহাসে আধুনিক যুগে বাংলা গদ্যের উদ্ভব কিভাবে ঘটে, বাংলা গদ্য চর্চা ও তার বিকাশ কিভাবে ঘটে তার পরিচয় আছে। বাংলা কাব্যচর্চার প্রাচীনতা অনেক পুরনো, তাই হয়তো ছাত্র-ছাত্রীদের বিশাল বিস্তৃতির মাঝে না নিয়ে গিয়ে আধুনিক যুগকে পাঠ্যক্রমে অন্তর্ভুক্ত করা হয়েছে। যদিও আধুনিক যুগেও কাব্য সাহিত্য সম্পর্কে আলোচনা আছে। তার সঙ্গে আছে কথাসাহিত্য ও নাট্যসাহিত্য। সাহিত্য প্রকরণের এই যে বিভিন্ন দিক, এই বিষয়গুলি সাহিত্যের ছাত্র-ছাত্রীদের অবশ্যই জানতে হবে। বাংলা সাহিত্যের ইতিহাসের গদ্য চর্চার গোড়ার কথা, আধুনিক যুগের সাহিত্য প্রকরণগুলির গোড়ার কথা যে পরিচয় এই বিভাগে রয়েছে তা সাহিত্যের ছাত্র-ছাত্রীদের জানা আবশ্যিক। আর ভাষাতাত্ত্বিক টীকার ক্ষেত্রে কতকগুলি সুনির্দিষ্ট বিষয় পাঠ্যক্রমে অন্তর্ভুক্ত করা হয়েছে যেগুলো ভাষার ধ্বনিতাত্ত্বিক ও রূপতাত্ত্বিক গঠন, ভাষার ধ্বনিগত বা শব্দগত এবং অর্থগত পরিবর্তনকে জানতে সাহায্য করে। আমরা জানি প্রতিনিয়ত ভাষা পরিবর্তন হয়ে চলেছে। তার ধ্বনিগত বা শব্দগত পরিবর্তন যেমন হয়ে চলেছে, তেমনি তার অর্থগত পরিবর্তন হয়ে চলেছে। আর এই পরিবর্তন কিভাবে হয় তার পরিচয় জানার জন্য ভাষাতাত্ত্বিক জ্ঞান সাহিত্যের ছাত্র ছাত্রীদের অবশ্যই থাকা দরকার।

## **DSE ( DISCIPLINE SPECIFIC ELECTIVE/ENHANCEMENT For PROGRAMME COURSE ) :**

এই পেপারটিতে চয়েস হিসেবে দুটো শিরোনাম রয়েছে - উপন্যাস নিয়ে একটি শিরোনাম আর ছোটগল্প নিয়ে একটি শিরোনাম। আমরা ছোটগল্প বিষয়টিকে পাঠদানের জন্য গ্রহণ করেছি। বাংলা ছোটগল্পের উদ্ভব ও ক্রমবিকাশে উনিশ ও বিশ শতকের অর্থ-সামাজিক, সাংস্কৃতিক, রাজনৈতিক প্রেক্ষাপট ও বিভিন্ন আন্দোলনের পরিচয় এখানে আছে। আর এই পরিচয়গুলি তুলে ধরতে বিভিন্ন সময়ের কয়েকটি ছোটগল্পের পরিচয়ও এখানে আছে। ছাত্র-ছাত্রীরা এই পত্র থেকে ছোটগল্পের ইতিহাস সম্পর্কে সম্যক ধারণা লাভ করার পাশে বিভিন্ন ছোটগল্প সম্পর্কে জানবে।

## **SEC (SKILL ENHANCEMENT COURSE for PROGRAMME COURSE) :**

এই পত্র পাঠের মাধ্যমে দিয়ে বাংলা ভাষার ব্যবহারিক প্রয়োগের দক্ষতা শেখায়াবাংলা ভাষায় কথা বলার দক্ষতা, ব্যাকরণ সম্পর্কে ধারণা, বিজ্ঞাপন, গণমাধ্যম ও সমাজ ইত্যাদি বিষয় গুলো পড়ার ফলে ছাত্রছাত্রীদের বাংলা ভাষার ব্যবহারিক দিক শিখতে সাহায্য করে।

## **6<sup>th</sup> SEMESTER ::**

### **GE (GENERIC ELECTIVE For PROGRAMME COURSE) :**

ষষ্ঠ সেমিস্টারের জেনারেল কোর্সের ছাত্র-ছাত্রীদের ঐচ্ছিক বিষয় বিষয় – ১. ছন্দ, ২. অলংকার, এবং ৩. লোকসাহিত্য। ছন্দ ও অলংকার হল সাহিত্যের সৌন্দর্য। ছন্দ সাহিত্যের মধ্যে বিশেষ করে কবিতার মধ্যে সৃষ্টি করে তাল, সৃষ্টি করে সুর। রবীন্দ্রনাথের কথায়- “তটের বুকে লাগে জলের ঢেউ, তবে সে কলতান উঠে/বাতাসে বনসভা শিহরি কাঁপে, তবে সে মর্মর ফুটে।” সাহিত্যের এই সৌন্দর্য নিয়ে সাহিত্যের ছাত্র-ছাত্রীদের কারবার। আর অলংকার সাহিত্যের মধ্যে নিয়ে আসে চমৎকারিত্ব; অলংকার ধ্বনি বা শব্দ বা শব্দের অর্থকে কেন্দ্র করে বর্ণ বা ধ্বনি সৌন্দর্যের সৃষ্টি করে, শব্দকে সুন্দর করে তোলে, শব্দকে মনোহর করে তোলে, বাক্যকে রমণীয় করে তোলে। সাহিত্য যেহেতু সৌন্দর্যের সঙ্গে সম্পর্কিত তাই ছন্দ ও অলংকার সাহিত্যের ছাত্র-ছাত্রীদের অবশ্যই পঠিতব্য। এই বিভাগে আরও একটি বিষয় রয়েছে, সেটা হলো লোকসাহিত্য। লোকসাহিত্যকে সাহিত্যের প্রাণ হিসেবে দেখা হয়। কেননা, লোকসাহিত্যের অন্তর্ভুক্ত বিষয় লোকসংস্কৃতি, ছড়া, প্রবাদ, ধাঁধা ও লোকসংগীত – এসবের মধ্যে লোকায়ত মানুষের দৈনন্দিন জীবনের এমন কিছু পরিচয় রয়েছে যার সাথে আমাদের আদি সমাজ বা প্রাচীন সমাজের যোগসূত্র রয়েছে। আমাদের ঐতিহ্যের আদি সুর



লোকসাহিত্যের মধ্যেই পাওয়া যায়। কাজেই, আমাদের ঐতিহ্যের মূল, আমাদের সংস্কৃতির আদি পরিচয় জানার জন্য এই বিষয়টিও ছাত্র-ছাত্রীদের অবশ্যই পঠিতব্য।

### **DSE ( DISCIPLINE SPECIFIC ELECTIVE/ENHANCEMENT for PROGRAMME COURSE ) :**

এখানে বিকল্প শিরোনাম হিসেবে পাঠদানের জন্য আমরা যে বিষয়টি গ্রহণ করেছি, সেখানে আছে একটি কাব্য (মরীচিকা-যতীন্দ্রনাথ সেনগুপ্ত), একটি উপন্যাস (সুবর্ণলতা-আশাপূর্ণা দেবী) এবং সতীনাথ ভাদুড়ীর নির্বাচিত কয়েকটি ছোটগল্প। কাব্যটি পড়ার মধ্য দিয়ে ছাত্র-ছাত্রীরা কাব্যের প্রধান সুরের পরিচয় যেমন পাবে তেমনি কবির মানসিকতা সম্পর্কে জানতে পারবে। আর উপন্যাসটি পড়ার মধ্য দিয়ে ছাত্র-ছাত্রীরা সমাজে নারীদের অবস্থান এবং নারী জাগরণের চিত্রটি জানতে পারবে। আর সতীনাথ ভাদুড়ীর নির্বাচিত গল্পগুলো থেকে ছাত্র-ছাত্রীরা গল্পের রীতি-নীতির সঙ্গে বিষয় হিসেবে দেশভাগ, কারাগার, রাজনৈতিক অবস্থা, হিন্দু-মুসলিম সম্পর্ক, সামাজিক মানুষ প্রভৃতি বিষয়ে জানতে পারবে।

### **SEC ( SKILL ENHANCEMENT COURSE ) :**

এই পত্র পাঠে বাংলা ভাষার সৃজনমূলক চর্চার বিভিন্ন বিষয় শিখতে ও জানতে সাহায্য করোছোটগল্প রচনা, বক্তব্য রচনা, সংলাপ রচনা ইত্যাদির শেখার মধ্য দিয়ে ছাত্র-ছাত্রীদের বাংলা ভাষার সৃজনশীল চর্চা হয়।

### **OLD SYLLABUS ::**

#### **PART III (Honours & General) ::**

Honours Paper	Course	Course Outcome
V	এই পত্রটি পুরোপুরি নাটকের পত্র।	এখানে বিভিন্ন নাট্যকারের নাটক পাঠের মাধ্যমে ছাত্র-ছাত্রীরা নাটকের বিষয়বৈচিত্র সম্পর্কে জ্ঞান অর্জন করতে পারবে। নাটকের রূপ ও রীতি পাঠে জানতে পারবে নাটকের শ্রেণীভেদ, তার সংজ্ঞা ও বৈশিষ্ট্য সমূহ।
VI	এই পত্রটি পুরোপুরি কাব্যের পত্র।	এই কাব্যের পত্রে ছাত্রসমাজ রবীন্দ্রনাথের কাব্য, তাঁর সমসময়ের অন্য কবিদের কাব্য ও আধুনিক কবিদের কাব্য



		পাঠ করে বাংলা কাব্য সম্পর্কে বিস্তারিত ধারণা লাভ করবে। আবার সেই সঙ্গে যুগানুযায়ী কাব্যের বিষয় সম্পর্কে ধারণা লাভ করবে।
VII	এখানে আছে উপন্যাস ও ছোটগল্প।	এই পত্রটিতে যেমন বিভিন্ন উপন্যাসিকের উপন্যাস স্থান পেয়েছে ঠিক তেমনি বিভিন্ন ছোটগল্পকারদের ছোটগল্প স্থান পেয়েছে। বাংলা সাহিত্যের এই বিভাগ দু'টির উৎপত্তি, এর পশ্চাৎপট ও বর্তমানে তার ধারা সম্পর্কে ছাত্র-ছাত্রীরা জ্ঞানার্জন করতে সক্ষম হবে।
VIII	এখানে আছে কাব্যজিজ্ঞাসা, সাহিত্য, সাহিত্য বিষয়ক প্রবন্ধ।	বাংলা সাহিত্যে, প্রবন্ধে যুক্তি ও বিশ্লেষণকে প্রাধান্য দেওয়া হয়। এই প্রবন্ধ পাঠের মাধ্যমে ছাত্র-ছাত্রীদের মধ্যে যুক্তি ও বিশ্লেষণের ক্ষমতা তৈরি হয়। সেই সঙ্গে ছাত্রছাত্রীদের কাছে সাহিত্যের নব নব দিক উন্মোচিত হতে পারে।
General Paper	Course	Course Outcome
VIII	এখানে আছে সাহিত্য বিষয়ক প্রবন্ধ, পরিভাষা, বঙ্গানুবাদ, আই.পি.এ, ভাষাতাত্ত্বিক টীকা।	এই পত্রটি পাঠে জেনারেল বি.এ ক্লাসের ছাত্র-ছাত্রীরা নিজেদের সাহিত্য বিষয়ক দক্ষতা বাড়াতে পারে। ব্যাকরণের দিকটিও সমৃদ্ধ করে তুলতে পারে।

ব্রজেন চন্দ্র  
মি. অধ্যক্ষ  
সহকারী ও সাহিত্য বিভাগ  
কালিপদ ঘোষ টারাই মহাবিদ্যালয়  
2/6/2023

Chakraborty  
2/6/2023  
PRINCIPAL  
Kalipada Ghosh Tarai  
Mahavidyalaya  
Bagdogra

**Kalipada Ghosh Tarai Mahavidyalaya**  
**Department of Economics**  
**Course Outcomes**

**Discipline Specific Core Course (DSC)**  
**Semester-I (Under CBCS)**

**Chapter-I: Demand Analysis:** Law of Demand simply expresses the relationship between the quantity demanded of a commodity and its price. We know if price of the commodity increases then quantity of the commodity decreases. Price elasticity can be defined as the proportionate change in quantity demanded in response to a small change in its price, divided by the proportionate change in price.

**Chapter II: Consumption and Utility:** We know the Utility generally explain the capacity or the power of a commodity to satisfy a want. Suppose A person takes food, his hunger is satisfied. Marginal utility is the utility of one additional unit per unit of time. The Consumer purchases some units of the commodity to get some amount of utility he has to spend some amount of money.

**Chapter III: Theory of Production and Cost:** We know the Production function is a technical relationship between inputs and output. If we apply inputs then in return we get output.

The Cost relating to the short run is called short run cost and if it is related to the long run is called long run cost. We see two types of factors – fixed factor and variable factors. Hence the cost corresponding to fixed factor is called fixed cost and corresponding to the variable factor is called variable cost. So can explain we can produce in production process what amount cost is needed.

**Chapter IV: Perfect and Imperfect Competition:** Perfect competition is a market Situation in which there are many firms selling identical products and there is no restriction to enter into the market and there is free entry and free exists in the market. Price of the product is well known to each other.

Monopoly market is the market in which there is a single seller or the producer control the entire market, but there are large no of buyers. The seller always tries to maximize his profit and there may be existence of super normal profit.

**Chapter –V: Input Market:** we learned that when firms produce a good or service they do so by combining various inputs. These inputs, also known as factors of production, have a price.

**Semester –II DSC**  
**Macroeconomics**

**Chapter –I : National Income Accounting:** we know the National income means the value of goods and services produced by a country during a financial year. Thus, it is the net result of all economic activities of any country during a period of one year.

**Chapter-II; Value of Money:** Money is often defined in terms of the three functions or services that it provides. Money serves as a medium of exchange, as a store of value, and as a unit of account. Medium of exchange. Money's most important function is as a medium of exchange to facilitate transactions.

**Chapter –III: Classical Theory:** we want to know from the classical theory; output and employment are determined by the production function and the demand for labour and the supply of labour in the economy.

**Chapter-IV: Keynesian Theory of Employment:** In the Keynesian theory, employment depends upon effective demand. Effective demand results in output. According to Keynes, employment can be increased by increasing consumption and/or investment. Consumption depends on income  $C(Y)$  and when income rises, consumption also rises but not as much as income.

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Bagdogra  
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**Chapter-V: Theories of Interest:** We know from the theory the actual rate of interest is determined by investment (demand side) and saving (supply side). Classical theory determines the interest rate through the interaction of demand and supply of capital in the long run.

**Chapter-VI: Inflation:** From Inflation when prices for energy, food, commodities, and other goods and services rise, then entire economy is affected.

## **Semester-III DSC Development Economics**

**Chapter-I: Economic Growth and Economic Development:** From this chapter we know the Economic growth is an increase in the production of economic goods and services, development of a country or society is usually associated with rising incomes and related incomes in consumption, savings and investment.

**Chapter-II: Development planning and its Necessity:** What we get from the development planning are the Development plan provides our employees with opportunities and clear direction on how to increase our skills

**Chapter-III: Population:** Population growth has relatively easy and inexpensive solutions and because population impacts every environmental challenge and it is an essential element to achieve sustainability.

**Chapter -IV: Capital Formation:** Capital formation of an economy, the faster an economy can grow its aggregate income. Capital formation plays a very important role in the process of economic development.

**Chapter-V: Foreign Investment:** we know from the Role of FDI in the Economic Development of India. The capital inflow of foreign investors allows strengthening infrastructure, increasing productivity and creating employment opportunities in India.

**Chapter-VI: Role of IMF and World Bank:** What we get from this chapter the World Bank Group works with developing countries to reduce poverty. The World Bank concentrates on long-term loans to developing countries. The bank help the poor countries increase their economic growth, reducing poverty.

## **Generic Elective Courses (GE) Semester-I**

**Chapter-I: Demand Analysis:** Law of Demand simply expresses the relationship between the quantity demanded of a commodity and its price. We know if price of the commodity increases then quantity of the commodity decreases. Price elasticity can be defined as the proportionate change in quantity demanded in response to a small change in its price, divided by the proportionate change in price.

**Chapter II: Consumption and Utility:** We know the Utility generally explain the capacity or the power of a commodity to satisfy a want. Suppose A person takes food, his hunger is satisfied. Marginal utility is the utility of one additional unit per unit of time. The Consumer purchases some units of the commodity to get some amount of utility he has to spend some amount of money.

**Chapter III: Theory of Production and Cost:** We know the Production function is a technical relationship between inputs and output. If we apply inputs then in return we get output. The Cost relating to the short run is called short run cost and if it is related to the long run is called long run cost. We see two types of factors – fixed factor and variable factors. Hence the cost



corresponding to fixed factor is called fixed cost and corresponding to the variable factor is called variable cost. So can explain we can produce in production process what amount cost is needed.

**Chapter IV: Perfect and Imperfect Competition:** Perfect competition is a market Situation in which there are many firms selling identical products and there is no restriction to enter into the market and there is free entry and free exists in the market. Price of the product is well known to each other. Monopoly market is the market in which there is a single seller or the producer control the entire market, but there are large no of buyers. The seller always tries to maximize his profit and there may be existence of super normal profit.

**Chapter –V: Input Market:** we learned that when firms produce a good or service they do so by combining various inputs. These inputs, also known as factors of production, have a price.

## (B) Indian Economy – I

**Chapter:-I India's Economic Structure:** We get Economic structure is a term that describes the changing balance of output, trade, incomes and employment drawn from different economic sectors ranging from primary (farming, fishing, mining etc) to secondary (manufacturing and construction industries) to tertiary and quaternary sectors (tourism, banking, software ..

**Chapter-II : India's National Income:** We know the National income means the value of goods and services produced by a country during a financial year. Thus, it is the net result of all economic activities of any country during a period of one year.

**Chapter –III: India's Population Problem:** India is the over populated country. There are various problems in India by which population is increases day to day. Migration, illiteracy, low death rate high birth rate these are the main problems in India.

**Chapter –IV: Agriculture:** From the topic of agriculture we know that the Most of the people in less developed countries (LDC) like India depends upon agriculture – directly or indirectly. The major agricultural products can be broadly grouped into foods, fibers, fuels and raw materials (such as rubber). Food classes include cereals (grains), vegetables, fruits, oils, meat, milk, fungi and eggs.

**Chapter : V: Land Reform In India:** From this chapter we get the agricultural productivity is increases with the help of Land reform in India. An empirical observation shows that small sized farms tend to be more productive or efficient than large farms.

## (C) Money and Banking

**Chapter - I: Money:** Money is the medium of Exchange as a store of value and as a unit of account. Money's most important function is as a medium of exchange to facilitate transactions.

**Chapter-II: Financial Institution,** We get from this chapter the Markets, Instruments and Financial Innovations: Financial markets plays a vital role in the allocation of resources and operation of modern economics. Financial markets create products that provide a return for those who have excess funds.

**Chapter-III : Interest Rate:** We get The rate of interest is determined by investment (demand side) and saving (supply side). Classical theory determines the interest rate through the interaction of demand and supply of capital in the long run.

**Chapter –IV: Banking System:** We know the Bank accounts are safe, our money will be protected from theft and fires. It's an easy way to save money and Bank accounts can help us access credit.

**Chapter –V: Central bank and Monetary Policy:** Central Bank of India, a public sector banking institution is one of the oldest and largest commercial banks in India. The Banks main business is taking deposits, lending money and making investments.

GE

Paper 2

Macro Economics



**Chapter –I : National Income Accounting:** We get from this chapter National income means the value of goods and services produced by a country during a financial year. Thus, it is the net result of all economic activities of any country during a period of one year

**Chapter-II; Value of Money:** We know from this chapter Money is often defined in terms of the three functions or services that it provides. Money serves as a medium of exchange, as a store of value, and as a unit of account. Medium of exchange. Money's most important function is as a medium of exchange to facilitate transactions.

**Chapter –III: Classical Theory:** In the classical theory, output and employment are determined by the production function and the demand for labour and the supply of labour in the economy.

**Chapter- IV: Keynesian Theory of Employment:** Keynes theory of employment, effective demand signifies the money spent on the consumption of goods and services and on investment. The total expenditure is equal to the national income, which is equivalent to the national output

**Chapter-V: Theories of Interest:** From this theory we know the rate of interest is determined by investment (demand side) and saving (supply side).

**Chapter-VI: Inflation:** When prices for energy, food, commodities, and other goods and services rise, the entire economy is affected. Rising prices, known as inflation,

## (B) Indian Economy

**Chapter –I Industry:** Now a days We are very much depends on Industry. The rapid development of capital goods industries promote the growth of agriculture, transport and communication. It also enables the country to produce a variety of consumer goods in large quantities and at low costs. It also eliminates our dependence on other countries for the supply of essential goods

**Chapter-II: Industrial Labour:** We get the Most of the strikes of workers are for more facilities and increase in wage levels. In economic strike, the labourers demand increase in wages, leave travel allowance, local travel allowance, house rent allowance, dearness allowance and other facilities such as increase in privilege and casual leave etc.

**Chapter –III Indias Monetary System:** We know the monetary policy of India refers to that policy which is concerned with the measures taken to regulate the volume of credit created by the banks. The main objectives of monetary policy are to achieve price stability, financial stability and adequate availability of credit for growth

**Chapter-IV: Indias Foreign Trade:** It is very important that Encourage sustained economic growth by providing access to raw materials, components, intermediates (goods used as inputs for the production of other goods), consumables and capital goods required for production. strengthen Indian agriculture, industry and services. generate employment.

**Chapter-V:India's Economic Planning:** From Planning we know the Economic planning in India aims at bringing about a rapid economic development in all sectors. Through development of the economy, the country aims at increasing national and per capita incomes. Thus, poverty will be removed and the standard of living will be improved.

## SEM III (SEC) Basic Computer Applications

**Chapter:I Introduction of computer:** Computers are now-a-days often used in making complicated investment decisions. We reduce our ability to analyze the problems quickly. However, the rapid development of sophisticated computer equipment has increased the usefulness of computer-based analysis of complex investment decisions.



**Chapter: II Storage Devices:** we know the Storage is the activity of storing products at warehouses and logistics centers. Its role is to provide a steady supply of goods to the market to fill the temporal gap between producers and consumers.

**Chapter: III Word Processing MS Word:** We improved the writing skills due to mastery of good spellings and Computer word processing guarantees are easy to revise, and add ideas or remove vague statements. Microsoft Word is one of the most widely used and familiar pieces of office software in the world.

**Chapter: IV Worksheet & MS Excel:** From this chapter we know the Excel tool for managing, analyzing and reporting economic data and many data sets exist in Excel-ready formats for students to get hands-on experience applying economic theories and concepts. We are also much more likely to use Excel when we enter the real world than we are to use an econometrics package, so being proficient in Excel is a useful skill.

**Chapter: V Presentation Graphics MS Power Point:** Make sure to not make our slides too wordy and concentrate on adding only basic bullet points. Power Point can be an effective tool to present material in the classroom and encourage student learning. We can use Power Point to project visuals that would otherwise be difficult to bring to class.

## **Business Project Formulation and Entrepreneurship Development**

**Chapter: I Business Project Formulation:** Project formulation enables the decision maker to take decision to accept or reject the project. For the same purposes, the PF examines the project idea from the stand point of its objectives, social impacts and financial and technical viability.

**Chapter: II Entrepreneurship:** We know from this chapter Entrepreneurship and Innovation minors will be able to sell themselves and their ideas. Students master oral and visual presentation skills and establish a foundation of confidence in the skills necessary to cause others to act. Entrepreneurship and Innovation minors will be able to find problems worth solving.

**Chapter: III Small Scale Industries:** The small scale industries are to create more employment opportunities and to help develop the rural and less developed regions of the economy and reduces regional imbalances.

**Chapter: IV Entrepreneurial Environment:**

Entrepreneurs boost economic growth by introducing innovative technologies, products, and services. Increased competition from entrepreneurs challenges existing firms to become more competitive. Entrepreneurs provide new job opportunities in the short and long term.

**Chapter: V : Entrepreneurial Development :** Entrepreneurship development is the means of enhancing the knowledge and skill of entrepreneurs through several classroom coaching and programmer's, and training.centres. This entrepreneur development process helps new firms or ventures get better in achieving their goals, improve business and the nation's economy

**Chapter VI Project Work :** improve our chances of achieving the desired result. Gain a fresh perspective on our project, and how it fits with our business strategy. Prioritise our business' resources and ensure our efficient use.

## **Semester-IV Discipline Specific Core Course (DSC) Paper -4 Elementary Statistics**

Chapter-I: **Collection of Data, Classification & Tabulation:**

Chapter-II: **Charts and Diagrams:**

Chapter-III: **Frequency Distribution:**

Chapter-IV: **Measures of Central Tendency:**

Chapter-V: **Measures of Dispersion:**



**Course outcome:** According to Semester-IV, Discipline Specific Core Course (DSC), Paper -4 (Elementary Statistics) truncated syllabus (yellow mark portion), it has been observed that our students has introduced with the basic statistical knowledge like Primary and Secondary Data, Population and Sample and Construction of Frequency Distribution, Cumulative Frequency Distributions. Also they have achieved how to find out the basic statistics from the dataset like Arithmetic Mean (AM), Geometric Mean (GM), Harmonic Mean (HM), Mean Deviation (MD) and Standard Deviation (SD).

## **Semester-V Discipline Specific Elective Course (DSE)**

**Paper -1 Choose any one**

[a] Indian Economy-I or [b] Money and Banking

[a] Indian Economy-I

Chapter-I: India's Economic Structure:

Chapter-II: India's National Income

Chapter-III: India's Population Problem:

Chapter-IV: Agriculture:

Chapter-V: Land Reforms in India:

[b] Money and Banking

Chapter-I: Money:.

Chapter-II: Financial Institutions, Markets, Instruments and Financial Innovations:

Chapter-III: Interest Rates

Chapter-IV: Banking System:

Chapter-V: Central Banking and Monetary Policy:

**Course Outcome:** According to 'Semester-V Discipline Specific Elective Course (DSE) Paper -1 either [a] Indian Economy-I or [b] Money and Banking' students have gather the knowledge of the main features of less develop countries (LDCs), Causes of underdevelopment of the Indian economy, India's national income trends and feature, estimation and distribution, causes of low growth of national income, sectoral composition of India's national income, difficulties in measuring national income in India, theory of demographic transition, problem of India's overpopulation, causes of low productivity, new technology and green revolution and its effects, agricultural finance and marketing, land reforms in West Bengal, operation barga in West Bengal from Indian Economy-I. Also from money and banking students have gather the knowledge of the different sources of interest rate differentials in Indian banking system, changing role and structure role of financial markets and institutions, money and capital markets organization, structure and reforms in India, Functions, indicators and instruments of monetary control.

## **Semester-VI**

### **Discipline Specific Elective Course (DSE)**

**Paper - 2 Choose any one**

[a] Indian Economy-II or [b] Public Finance

[a] Indian Economy- II

Chapter-I: Industry:

Chapter-II: Industrial Labour:

Chapter-III: India's Monetary System:

**Chapter-IV: India's Foreign Trade:**  
**Chapter-V: India's Economic Planning:**

**[b] Public Finance**

**Chapter-I: Fiscal Functions:**  
**Chapter-II: Issues from Indian Public Finance:**  
**Chapter-III: Principal of Taxations**  
**Chapter-IV: Theory of Public Debt**

**Course Outcome:** According to 'Semester-VI, Discipline Specific Elective Course (DSE) Paper – 2, either [a] Indian Economy-II or [b] Public Finance' the students of economics have gather the knowledge of importance and problems of India's small-scale industries, role of cottage and small scale industry in India's economic development, industrial disputes and social security's in India, functions of the Reserve Bank of India, monetary policy or credit control policy of the RBI, features of Indian capital market etc. Also from public finance the students of economics achieved the knowledge of current issues of India's tax system, fiscal federalism in India, theory of public debt, internal versus external debt, burden of public debt, principles of taxation, benefit and ability to pay approach, direct and indirect taxation etc.

## **Semester-IV**

### **Skill Enhancement Course**

**Paper – 2 Choose any one**

**[i] Insurance Market and its Products or [ii] Tourism Management**

**[i] Insurance Market and its Products**

**Chapter-I: Introduction: Insurance:**  
**Chapter-II: Basic Principles of Insurance::**  
**Chapter-III: Classification and Importance::**  
**Chapter-IV: Claim Management in Insurance:**

**[ii] Tourism Management**

**Chapter-I: Definition of Tourism:**  
**Chapter-II: Measurement of Tourism:**  
**Chapter-III: Cultural Heritage of India:**  
**Chapter-IV: Special Interest Tourism:**  
**Chapter-V: Tourism Resources in West Bengal:**

**Course Outcome:** According to 'Semester-IV, Skill Enhancement Course, Paper – 2, either [i] Insurance Market and its Products or [ii] Tourism Management', students have achieved the knowledge of Meaning of Insurance, Evolution of Insurance, Nature, Functions, History of Insurance, Impact of privatization on insurance product diversification; IRDA Act, 1999, The Insurance (Amendment) Act, 2002 Principles of Insurance viz. Utmost good faith, Insurable interest, Indemnity, Subrogation, Contribution and Proxymity Cause Travel insurance within the country and abroad, Home insurance, Car insurance LIC, ICICI Prudential, Claims under various classes of insurance, Disputes, Arbitration and Litigation etc. Also from Tourism Management students have achieved the knowledge of definition of tourism, tourist, distinction between tourist and excursionist, forms of tourism, domestic tourism, international tourism, factors affecting the growth of tourism in India, tourism importance, application of economics in tourism, employment and income creation, archaeological sites of India, monuments, forts, palaces, religious sites in India, handicrafts in tourism, health tourism, eco-tourism, village tourism, positive and negative impacts of tourism, WBTD and its role in tourism development, Darjeeling, Dooars, Sundarban and Digha etc.

## **Generic Elective Courses (GE)**

**Paper -1 Choose any one**



## [a] Microeconomics or [b] Indian Economy-I or [c] Money and Banking

### [a] Microeconomics

**Chapter-I: Demand Analysis:** Law of Demand simply expresses the relationship between the quantity demanded of a commodity and its price. We know if price of the commodity increases then quantity of the commodity decreases. Price elasticity can be defined as the proportionate change in quantity demanded in response to a small change in its price, divided by the proportionate change in price.

**Chapter II: Consumption and Utility:** We know the Utility generally explain the capacity or the power of a commodity to satisfy a want. Suppose A person takes food, his hunger is satisfied. Marginal utility is the utility of one additional unit per unit of time. The Consumer purchases some units of the commodity to get some amount of utility he has to spend some amount of money.

**Chapter III: Theory of Production and Cost:** We know the Production function is a technical relationship between inputs and output. If we apply inputs and in return we get output.

The Cost relating to the short run is called short run cost and if it is related to the long run is called long run cost. We see two types of factors – fixed factor and variable factors. Hence the cost corresponding to fixed factor is called fixed cost and corresponding to the variable factor is called variable cost. So can explain we can produce in production process what amount cost is needed.

**Chapter IV: Perfect and Imperfect Competition:** Perfect competition is a market Situation in which there are many firms selling identical products and there is no restriction to enter into the market and there is free entry and free exists in the market. Price of the product is well known to each other.

Monopoly market is the market in which there is a single seller or the producer control the entire market, but there are large no of buyers. The seller always tries to maximize his profit and there may be existence of super normal profit.

**Chapter –V: Input Market:** we learned that when firms produce a good or service they do so by combining various inputs. These inputs, also known as factors of production, have a price.

### [b] Indian Economy-I

**Chapter:-I India's Economic Structure:** We get Economic structure is a term that describes the changing balance of output, trade, incomes and employment drawn from different economic sectors – ranging from primary (farming, fishing, mining etc) to secondary (manufacturing and construction industries) to tertiary and quaternary sectors (tourism, banking, software ..

**Chapter-II : India's National Income:** We know the National income means the value of goods and services produced by a country during a financial year. Thus, it is the net result of all economic activities of any country during a period of one year.

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**Chapter : V: Land Reform In India:** From this chapter we get the agricultural productivity is increases with the help of Land reform in india. Empirical observations shows that small sized farms tend to be more productive or efficient than large farms.

### [c] Money and Banking

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of modern economies. Financial markets create products that provide a return for those who have excess funds.

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**Chapter –IV: Banking system:** We know the Bank accounts are safe. our money will be protected from theft and fires. It's an easy way to save money and Bank accounts can help us access credit.

**Chapter –V: Central bank and Monetary Policy:** Central Bank of India, a public sector banking institution is one of the oldest and largest commercial banks in India. The Banks main business is taking deposits, lending money and making investments.

### Generic Elective Courses (GE)

Paper – 2 Choose any one

[a] Macroeconomics or [b] Indian Economy-II or [c] Public Finance

[a] Macroeconomics

**Chapter –I : National Income Accounting:** We get from this chapter National income means the value of goods and services produced by a country during a financial year. Thus, it is the net result of all economic activities of any country during a period of one year

**Chapter-II; Value of Money:** We know from this chapter Money is often defined in terms of the three functions or services that it provides. Money serves as a medium of exchange, as a store of value, and as a unit of account. Medium of exchange. Money's most important function is as a medium of exchange to facilitate transactions.

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**Chapter- IV: Keynesian Theory of Employment:** Keynes theory of employment, effective demand signifies the money spent on the consumption of goods and services and on investment. The total expenditure is equal to the national income, which is equivalent to the national output

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**Chapter-VI: Inflation:** When prices for energy, food, commodities, and other goods and services rise, the entire economy is affected. Rising prices, known as inflation,

### (B) Indian Economy

**Chapter –I Industry:** Now a days We are very much depends on Industry. The rapid development of capital goods industries promote the growth of agriculture, transport and communication. It also enables the country to produce a variety of consumer goods in large quantities and at low costs. It also eliminates our dependence on other countries for the supply of essential goods

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**Chapter –III Indias Monetary System:** We know the monetary policy of India refers to that policy which is concerned with the measures taken to regulate the volume of credit created by the banks. The main objectives of monetary policy are to achieve price stability, financial stability and adequate availability of credit for growth

**Chapter –IV: Indias Foreign Trade:** It is very important that Encourage sustained economic growth by providing access to raw materials, components, intermediates (goods used as inputs for the production of other goods), consumables and capital goods required for production. strengthen Indian agriculture, industry and services. generate employment.



**Chapter-V:India's Economic Planning:** From Planning we know the Economic planning in India aims at bringing about a rapid economic development in all sectors. Through development of the economy, the country aims at increasing national and per capita incomes. Thus, poverty will be removed and the standard of living will be improved.

#### [c] Public Finance

Form the public finance the students of economics achieved the knowledge of current issues of India's tax system, fiscal federalism in India, theory of public debt, internal versus external debt, burden of public debt, principles of taxation, benefit and ability to pay approach, direct and indirect taxation etc.

### Programme Specific Outcomes of Economics

Students will understand and demonstrate core micro-economic terms, concepts, and theories. They will be able to analyze data to solve complex economic problems and understand general economic concepts (supply & demand, comparative advantage, opportunity cost etc. Not only that they will understand micro-economic concepts utility, production, cost, has elasticity, monopoly, priced discrimination. Students will understand general economic concepts (demand & supply, comparative advantage, opportunity cost, etc and in macroeconomic sense they will realize the concepts of GDP, unemployment, aggregate demand/supply, rate of interest, function money, concept of National income. Another important parts are they will be able to describe how economic trade-offs and social values impact public/private policy and to explain the function of markets and prices as allocative mechanisms. They can explain how fiscal and monetary policies can be used to promote equity and to identify key macroeconomics indicators and measures of economic change, growth, development, comparative advantage and market failure. Students will be able to identify key economic problems and try to find out their solutions.

  
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**Kalipada Ghosh Tarai Mahavidyalaya**

**DEPARTMENT OF ENGLISH**

**Program Outcome, Program Specific Outcome and Course Outcome**

**Program Outcome:**

The English syllabus has been designed in such a way as to enhance the understanding and skill of the students. They are able to understand the language better as they learn about the very origin of English going right back to the root of everyday words. The syllabus enlightens the learners about the various foreign influences which shaped the English language. Students are able to appreciate the peculiar characteristics of the language and able to use it correctly while speaking or writing.

The various kinds of poetry included in the syllabus helps students to appreciate the rhythm and cadence of poetry and they also learn to apply various meters and rhetoric devices.

Appreciation of European Classical Literature along with literatures of other Indian and non-Indian languages help students to learn about other cultures and societies which in turn broadens their mind and horizons.

Students mostly develop an interest in creative writing or go for higher studies in the different universities. Some pursue careers in teaching and many opt for the administrative services.

The well-planned syllabus with emphasis on continuous evaluation including assignment, seminars, and projects help the students to speak and write with confidence in fluent in English and they also become better human beings as they learn about humanism which deepens their understanding of society as a whole.

**PROGRAM SPECIFIC OBJECTIVE FOR SEMESTER I, II, III, IV, V, & VI**

CORE COURSE: Papers help in exploring the writings of English literature and that of the world. Translations and popular literature add the variety of reading. Theories and criticisms provide wider range of interpretation and analysis of writings. Overall study of literature help in developing one's perspective of the world in general.

LCC: Develop technical writing skills.

GE: Acquaintance with the writings of Indian and European literature.

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07/04/2023



SEC: Develop writing and comprehension skills.

AECC: Understand learn and practice the basics of English communication.

DSC: Acquaintance with the writings relating to the individual and society through a collection of stories, poems and novels.

DSE: Acquaintance with literary theory and criticism and also acquire a taste for popular literature in English.

**Program Specific Objective for Semester I, II, III, IV, V & VI:**

PSO 1: Understanding the origin of English language and the various influences that shaped the language.

PSO 2: Acquaintance with the various literary types and rhetoric and prosody.

PSO 3: get to know about Classical European Literature.

PSO 4: Learn about Indian Classical Literature and Modern Writing in English.

PSO 5: Learn about American literature.

PSO 6: Understanding British poetry and drama from the 14<sup>th</sup> -17<sup>th</sup> Century.

**Core Course Outcome:**

Semester	Course	Course Outcome
I	<ul style="list-style-type: none"><li>English language: Overview &amp; Usage of Literary Types</li><li>European Classical Literature</li></ul>	<ul style="list-style-type: none"><li>Understanding the genesis and various influences that shaped the English language.</li><li>Get to know about classical (Greek) literature</li></ul>
II	<ul style="list-style-type: none"><li>Indian Classical Literature and Indian Writing in English</li></ul>	<ul style="list-style-type: none"><li>Learn about the Indian classics and trends in English writing in India.</li></ul>

	<ul style="list-style-type: none"> <li>British Literature: Old English 14<sup>th</sup> Century</li> </ul>	<ul style="list-style-type: none"> <li>Acquaintance with the earliest English literature and origin of various genres.</li> </ul>
III	<ul style="list-style-type: none"> <li>American literature</li> <li>British Poetry &amp; Drama: 14<sup>th</sup> -17<sup>th</sup> Century</li> </ul>	<ul style="list-style-type: none"> <li>Learning about American writings and the philosophies behind them</li> <li>Better understanding of British literature till the 17<sup>th</sup> century.</li> </ul>
IV	<ul style="list-style-type: none"> <li>British Poetry and Drama: 17<sup>th</sup> -18<sup>th</sup> century</li> <li>British literature 18<sup>th</sup> Century</li> <li>British Romantic Literature</li> <li>British literature 19<sup>th</sup> Century</li> </ul>	<ul style="list-style-type: none"> <li>Learning more about British literature.</li> </ul>

#### SEMESTER V:

COURSE	COURSE OUTCOME
CC 11: WOMEN'S WRITING	Reading the works of various women writers- poetry, novels, short stories- help gain a perspective of women's writing and gynocentric writings in English literature.
CC 12: EARLY 20 <sup>TH</sup> CENTURY BRITISH LITERATURE	Reading the early 20 <sup>th</sup> C British writings help to get acquainted with the modern era and modernist writings beginning from the World War I.
DSE 1: LITERARY THEORY AND CRITICISM	Theories and criticisms help understand the socio-political movements as well as its close relation to literature.
DSE 2: POPULAR LITERATURE	Study of Popular Literature help understand the concept of popular literature and the importance of it as a part of mainstream literature.
GE: SELECTIONS FROM INDIAN LITERATURE	Introduces Indian writers and their writings and help in understanding the Indian literature.
SEC: TEXT COMPREHENSION AND EDITING	The knowledge of comprehension and editing is skilled based knowledge that will help not only in gaining information about it but also shows the scope of literature in the field of editing and proof-reading.



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**SEMESTER VI:**

COURSE	COURSE OUTCOME
CC 13: MODERN EUROPEAN DRAMA	Learning about the trends and various themes of modern European drama help in wider understanding of literature of the modern times especially theatre and its role as a voice of the age.
CC14: POSTCOLONIAL LITERATURE	Learning the concept of postcolonialism and the writings of various writer all over the world, issues of colonialism, identity, gender, race and globalization help in the providing the larger function of literature.
DSE 3: INDIAN LITERATURE IN ENGLISH TRANSLATION: POEMS AND STORIES	Literature in translation widens the avenue of literature and provides a space in understanding the culture of various types. We also learn the importance of language better.
DSE4: PARTITION LITERATURE	Partition literature help in the understanding of the power of writings as it records the events of partition and its horrors. Gives a better historical picture.
GE: SELECTIONS FROM EUROPEAN LITERATURE	Learning about various European writings develop our understanding of the nature of literature and its varied themes.
SEC: TECHNICAL WRITING	The knowledge of composing helps us compose technical papers or projects better.

**Program Course Outcome:**


LCC	Develop technical writing skill.
SEC	Develop writing and comprehension skills.
GE	Acquaintance with selections from Indian and European literatures.
AECC	Understand, learn and practice the basics of English communication.
DSC	Acquaintance with the writings relating to the individual and society through a collection of stories, poems and novels.

Old Syllabus Part III Honours Course:

Honours Paper	Course	Course Outcome
Paper V	Historical and Literary Topics, Poetry, Novel and Literary Theory	Learn about the various movements in the literary sphere during the Victorian age by studying the poetry, novels of the age along with literary theory.
Paper VI	20 <sup>th</sup> Century Poetry, Drama, Novel, Short Story	Studying 20 <sup>th</sup> Century literary movements along with literature of the Modern age.
Paper VII	Other Literatures in English	Get acquainted with various writers writing in English-themes and styles.
Paper VIII	Greek Literature Indian English Literature	Study Western in Greek Drama. Study Indian writing in English.

Old Syllabus Part III General Course:

General Paper	Course	Course Outcome
Paper VII	Poetry, Drama, Novel by Indian Writers. Literary Types. Story Writing.	Acquaintance with Indian writing in English. Understanding some different genres of literature.

  
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07/06/2023



**DEPARTMENT OF ENVIRONMENTAL STUDIES**

S.no.	Topics	Course outcome
1	<b>Unit 1 :</b> Multidisciplinary nature of environmental studies	Students develop and acquire knowledge and conceptual understanding about the subject.
2	<b>Unit 2 :</b> Natural Resources : Renewable and non-renewable resources	Students develop an inquiring mind and curiosity about the assets of natural resources and appreciate the benefits of the natural resources.
3	<b>Unit 3 :</b> Ecosystems	Students acquire knowledge and conceptual understanding about the physical and biological components of the ecosystem and their interactions.
4	<b>Unit 4:</b> Biodiversity and its conservation	Students acquire knowledge and conceptual understanding about biodiversity and appreciate its values. They develop scientific inquiry for the threats to biodiversity and develop investigative measures to cope up the problems
5	<b>Unit 5:</b> Environmental Pollution	Students are enabled to understand the main ideas and concepts of environmental pollution and apply them to solve the problems due to overutilization of the resources.  Students develop an inquiring minds and curiosity about the proper management of urban and rural solid waste.
6	<b>Unit 6 :</b> Social Issues and the Environment	Students acquire knowledge and conceptual understanding about social issues and its management. They develop ethical values towards environment. They also develop skills of scientific inquiry to instigate remedial measures for restoration.  Students acquire knowledge and conceptual understanding about various legal provisions for safeguarding the environment. Students are enabled to understand the main ideas of issues related to enforcement of these laws.
7	<b>Unit 7 :</b> Human Population and the Environment	Students acquire knowledge and conceptual understanding about various aspects about Human Population and related problems.
8	PROJECTS	Students are provided opportunity to integrate academic knowledge with application skills at progressively higher levels of performance and responsibility.

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**DEPARTMENT OF ENVIRONMENTAL STUDIES**  
**Programme Specific Outcome of Subject-Environmental Studies**

Students develop an inquiring mind and curiosity about the **assets of natural resources** and appreciate the **benefits** of the natural resources. They acquire knowledge and conceptual understanding about **different components of the ecosystem** and their interactions. They know about **biodiversity and appreciate its values**. Students are enabled to understand the main ideas and concepts of **environmental pollution**. They also develop skills of scientific inquiry to **instigate remedial measures for restoration**. Students acquire knowledge about various **legal provisions for safeguarding the environment**. Students learn to **integrate academic knowledge with application skills** at progressively higher levels of performance and responsibility.

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## Program Specific Outcomes

**On Completion of the BA (Geography) Students are able to:**

1. Develop a strong foundation of Geotectonics, Geomorphology, Biogeography, Soil Geography and instrumentation techniques and their applications to examine and appreciate the inherent complexity of landscape systems at the micro level.
2. Conceptualise the basic atmospheric and climatic phenomena of the earth and their effect on man.
3. Develop advanced level concepts of Remote Sensing and Geographical Information System and their applications in present-day situation.
4. Understand the principles and applications of Hydrology and Oceanography to address water resource and environment related problems.
5. Conceptualise the Social, Cultural, Political, Settlement Geography and the ethical considerations associated with their environmental impact.
6. Make a knowledge base of the development of Geography by going through Geographical Thought.
7. Undertake an analytical approach to design and complete field work in the above areas following land use and questionnaire survey.
8. Be competent to acquire, analyze and interpret the statistical data to arrive at unbiased conclusions about problems and devise alternatives to existing procedures.
9. Work as a teacher in schools and high schools.
10. Serve as conservator in forest, Soil, Agriculture Departments.
11. Work in disaster and water resources management.
12. Serve in forest department as forest conservator.
13. Serve in cartographer in map making divisions of Government.
14. Work in NGOs.
15. Can Prepare for Competitive exams.

## COURSE OUTCOMES (CO) OF THE COURSE B.A HONOURS (CBCS)

### **GEOTECTONIC (GEO-H-DSC-1-01-TH, SEM-I)**

- CO1. Understand earth's tectonic and structural evolution.
- CO2. Gain knowledge about earth's interior.
- CO3. Develop an idea about concept of plate tectonics, and resultant landforms.
- CO4. Acquire knowledge about types of folds and faults and earthquakes, volcanoes and associated landforms.

### **PRACTICALS (GEO-H-DSC-1-01-PR, SEM-I)**

- CO1. Develop an idea about scale and draw different types of scale like linear, diagonal and vernier.
- CO2. Acquire knowledge different types of map projection.

### **GEOMORPHOLOGY (GEO-H-DSC-1-02-TH, SEM-I)**

- CO1. Develop an idea about geomorphology and different types of fundamental concepts.

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Bagdogra 08/06/2023

CO2. Explain different types of geomorphic processes like weathering and mass wasting and cycle of erosion.

CO3. Understand the processes of erosion, deposition and resulting landforms.

CO4. Acquire knowledge about slope forms and processes.

**PRACTICALS (GEO-H-DSC-1-02-PR, SEM-I)**

CO1. Gain knowledge about topographical maps and apply this knowledge in ground surface.

CO2. Identification of different types of rock and minerals.

**HUMAN GEOGRAPHY (GEO-H-DSC-2-03-TH, SEM-II)**

CO1. Gain knowledge about major themes of human geography.

CO2. Develop an idea about space and society.

CO3. Build an idea about population growth and distribution of population.

CO4. . Know about population –resource relationship.

**PRACTICALS (GEO-H-DSC-2-03-PR, SEM-II)**

CO1. Know about diagrammatic data presentation like line, bar and circle.

CO2. Develop an idea about different types of thematic mapping techniques.

**SETTLEMENT GEOGRAPHY (GEO-H-DSC-2-04-TH, SEM-II)**

CO1. Build an idea about urban and rural settlements, and its relationship with environment and also different theories related to settlement geography.

CO2. Know about classification and morphology of settlements.

CO3. Understand the trends and patterns of world urbanization.

CO4. Know about different theories of urban growth.

**PRACTICALS (GEO-H-DSC-2-04-PR, SEM-II)**

CO1. Brings direct interaction of different types of surveying instruments like Dumpy level and Theodolite with environment.

CO2. Develop an idea about different types of thematic mapping techniques.

**CLIMATOLOGY (GEO-H-DSC-3-05-TH, SEM-III)**

CO1. Learn the interaction between the atmosphere and the earth's surface.

CO2. Understand the importance of the atmospheric pressure and winds.

CO3. Understand how atmospheric moisture works.

CO4. Develop an idea about cyclones.

**PRACTICALS (GEO-H-DSC-3-05-PR, SEM-III)**

CO1. Learn to use of various meteorological instruments.

CO2. Gain knowledge about Indian daily weather report.

**STATISTICAL METHODS IN GEOGRAPHY (GEO-H-DSC-3-06-TH, SEM-III)**

CO1. Learn the significance of statistics in geography.

CO2. Understand the importance of use of data in geography

CO3. Know about different types of sampling.

CO4. Develop an idea about theoretical distribution.

**PRACTICALS (GEO-H-DSC-3-06-PR, SEM-III)**

CO1. Learn to use tabulation of data.

CO2. Gain knowledge about association and correlation.

**GEOGRAPHY OF INDIA (GEO-H-DSC-3-07-TH, SEM-III)**

CO1. They can know about their own countries land formation, climate and natural vegetation.

CO2. They understand the economic resources of India.

CO3. They understand the social distribution of population of their country.

CO4. Develop an idea about regionalisation of India.

**PRACTICALS (GEO-H-DSC-3-07-PR, SEM-III)**

CO1. Learn to draw monthly temperature and rainfall graphs.



CO2. Gain knowledge about measuring arithmetic growth rate of population and also measures of inequality.

**REMOTE SENSING (GEO-SEC-A-3-01-TH, SEM-III)**

CO1. They can know about remote sensing.

CO2. They understand the satellite remote sensing

CO3. They understand the image processing.

CO4. Develop an idea about satellite image interpretation.

**RURAL DEVELOPMENT (GEO-SEC-A-3-01-TH, SEM-III)**

CO1. They can know about concept, basic elements, and measures of level of rural development.

CO2. They understand the paradigms of rural development.

CO3. They understand the area based approach to rural development.

CO4. Develop an idea about target group approach to rural development.

CO5. Gain knowledge about rural governance.

**ECONOMIC GEOGRAPHY (GEO-H-DSC-4-08-TH, SEM-IV)**

CO1. Understand the concept of economic activity, factors affecting location of economic activity.

CO2. Gain knowledge about different types of primary activities.

CO3. Develop an idea about different types of secondary activities.

CO4. Acquire knowledge about different types of tertiary activities.

**PRACTICALS (GEO-H-DSC-4-08-PR, SEM-IV)**

CO1. They can know about transport network analysis.

CO2. Gain knowledge about representation of state wise variation in occupational structure and work participation rate using proportional circles and proportional divided circles and also composite index.

**REGIONAL PLANNING AND DEVELOPMENT (GEO-H-DSC-4-09-TH, SEM-IV)**

CO1. Gain knowledge about definition of region, evolution and types of regional planning.

CO2. Develop an idea about choice of a region for planning.

CO3. Build an idea about theories and models for regional planning.

CO4. . Know about measuring development indicators.

**PRACTICALS (GEO-H-DSC-4-09-PR, SEM-IV)**

CO1. They can know about delineation of formal regions by weighted index method and also delineation of functional regions by breaking point analysis.

CO2. Gain knowledge about measuring inequality by Location Quotient, and also measuring regional disparity by Sopher Index.

**FIELD WORK & RESEARCH METHODOLOGY (GEO-H-DSC-4-10-TH, SEM-IV)**

CO1. Learn the significance of field work in geographical studies.

CO2. Understand the meaning of field and identifying the case study.

CO3. Know about different types of field techniques.

CO4. Develop an idea about research problems.

**GEOGRAPHICAL INFORMATION SYSTEM (GEO-SEC-A-4-02-TH, SEM-IV)**

CO1. They can know about concept and components of Geographical Information System.

CO2. They understand the Global Positioning System.

CO3. They understand the GIS Data Structures.

CO4. Develop an idea about GIS Data Analysis.

CO5. Know about application of GIS.

**TOURISM MANAGEMENT (GEO-SEC-A-4-02-TH, SEM-IV)**

CO1. They can know about concepts, nature and scope, inter-relationships of tourism, recreation and leisure.

CO2. They understand about types of tourism.

- CO3. Know about recent trends of tourism.
- CO4. Develop an idea about tourism in India.
- CO5. Know about National Tourism Policy.

**ENVIRONMENTAL GEOGRAPHY (GEO-H-DSC-5-11-TH, SEM-V)**

- CO1. Gain knowledge about concept, scope of environmental geography and components of environment.
- CO2. Develop an idea about human-environment relationships.
- CO3. Build an idea about ecosystem.
- CO4. Know about environmental programmes and policies.

**PRACTICALS (GEO-H-DSC-5-11-PR, SEM-V)**

- CO1. They can know how prepare a questionnaire on the basis of perception survey on environmental problems.
- CO2. Gain knowledge about doing project on environmental problems of North Bengal.

**REMOTE SENSING AND GIS (GEO-H-DSC-5-12-TH, SEM-V)**

- CO1. They can know about concepts, components, development, platforms and types of remote sensing and GIS.
- CO2. They understand about Aerial photography and Satellite Remote Sensing.
- CO3. Know about GIS data structures.

- CO4. Develop an idea about interpretation and application of remote sensing and GIS.

**PRACTICALS (GEO-H-DSC-5-12-PR, SEM-V)**

- CO1. They can know about the interpretation of Air photographs and Satellite imagery.
- CO2. Gain knowledge about image processing, classification of georeferencing, editing and output, overlays.

**EVOLUTION OF GEOGRAPHICAL THOUGHTS (GEO-H-DSC-6-13-TH, SEM-VI)**

- CO1. Gain knowledge about development of geographical thought.
- CO2. Develop an idea about evolution of geographical thinking and disciplinary trends in Germany, France, Britain, and United States of America.
- CO3. Build an idea about between environmental determinism and possibilism, systematic and regional.
- CO4. Know about the trends of geographical thoughts.

**PRACTICALS (GEO-H-DSC-6-13-PR, SEM-VI)**

- CO1. They can know about the quantitative techniques in geography.
- CO2. Gain knowledge about crop combination by Weber, Rafiulla and Doi.

**DISASTER MANAGEMENT (GEO-H-DSC-6-14-TH, SEM-VI)**

- CO1. Understand the definition, classification of hazards and disasters
- CO2. Gain knowledge about approaches to hazard study.
- CO3. Develop an idea about factors, consequences and management of earthquake, landslide, flood and riverbank erosion.
- CO4. Acquire knowledge about human induced disaster.

**PRACTICALS (GEO-H-DSC-6-14-PR, SEM-VI)**

- CO1. They have to know how prepare a project report based on any one field based case study on flood, landslide, earthquake and human induced disaster.



## **(I+I+I) EXAMINATION SYSTEM**

### **COURSE OUTCOMES (CO) OF THE COURSE B.A HONOURS GEOGRAPHY**

#### **PART I**

##### **PHYSICAL GEOGRAPHY**

- CO1. Understand different theories of the earth.
- CO2. Develop history of geomorphic ideas of different schools.
- CO3. Gain knowledge about earth's interior.
- CO4. Develop an idea about concept of earth's movements and related topography.
- CO5. Acquire knowledge about different process of denudation.

##### **PHYSICAL GEOGRAPHY**

- CO1. Understand the processes of erosion, deposition and resulting landforms.
- CO2. Explain the development of drainage system in uniclinal and folded structure.
- CO3. Understand concept of normal cycle of erosion and its interruption.
- CO4. Develop an idea about types of coastal landforms.
- CO5. Acquire knowledge about hydrology.

##### **GEOGRAPHY OF RESOURCES**

- CO1. Develop an idea about resource.
- CO2. Understand the concept of different types of resources.
- CO3. Acquire knowledge about different types of power resources.
- CO4. Explain population - resource relationship and different types of population resources.

##### **PRACTICAL**

- CO1. Develop an idea about scale and draw different types of scale like linear, diagonal and vernier.
- CO2. Acquire knowledge different types of map projection.
- CO3. Gain knowledge about topographical maps and apply this knowledge in ground surface.
- CO4. Learn the use of various minor instruments like rotameter, Planimeter and Pantograph.

### **COURSE OUTCOMES (CO) OF THE COURSE B.A HONOURS GEOGRAPHY**

#### **PART II**

##### **GEOGRAPHY OF ECONOMIC ACTIVITIES**

- CO1. Understand different types of economics activities.
- CO2. Identify farming in humid tropics.
- CO3. Know about the various industrial occupations.

##### **POPULATION GEOGRAPHY**

- CO1. Gain knowledge different aspects of population geography.
- CO2. Develop an idea about the concept of Migration.

##### **SETTLEMENT & POLITICAL GEOGRAPHY**

- CO1. Build an idea about urban and rural settlements, and its relationship with environment and also different theories related to settlement geography.
- CO2. Know about political geography.

##### **PRACTICAL**

- CO1. Brings direct interaction of different types of surveying instruments like Prismatic Compass, Plane table, Dumpy level, Theodolite with environment.
- CO2. Gain knowledge about geological maps and drawing of sections and interpretations of the relief and structure of the geological maps.
- CO3. Identification of different types of rock and minerals.

**COURSE OUTCOMES (CO) OF THE COURSE B.A HONOURS GEOGRAPHY  
PART III**

**PAPER-IX (CLIMATOLOGY )**

CO1. Students will learn the process of interaction between the atmosphere and the earth's surface.

CO2. They will be able to understand the importance of the ozone layer and bad effect of green- house gasses moreover will be eligible to apply this for the solution of environmental problem.

CO3. They understand how the planetary and periodic wind and pressure belt related to each other. Also they understand how to develop the tropical cyclones, El Nino and La Nina.

CO4. Students can explain the important role of water to create condensation and precipitation.

**PAPER-X (PEDOLOGY & BIOGEOGRAPHY )**

CO1. They can know the soil formation processes, development and soil physical and chemical composition.

CO2. Understand the genetic soil classification and U.S.D.A. soil taxonomy.

CO3. Students can learn the scope and significance of biogeography. Also know, factors affecting the growth and distribution of natural vegetation.

CO4. They also gather knowledge about biome, ecotone and community, types and component parts of ecosystem, bio-energy cycle, food chain and trophic level. This can help them to predict the future change of biogeographical components.

CO5. They can illustrate the importance about bio-diversity and wetlands.

**PAPER-XI (GEOGRAPHY OF INDIA )**

CO1. They can know about their own countries land formation, climate and natural vegetation.

CO2. They understand the population problems in India. Access the population policies and reaction the countries.

CO3. They understand globalization and Indian economy. And also understand the regional distribution of resource.

**PAPER-XII (NATURE & METHODOLOGY IN GEOGRAPHY )**

CO1. Gain knowledge about the historical evolution of geographical thoughts.

CO2. Understand the philosophy of deterministic, possibilistic and ecological approach.

CO3. Know about man-environment relation, regional location and space.

CO4. Know about physical and socio economic survey, how to collect primary and secondary data, questionnaire. It's helped them to research work in the future.

**PAPER-XIII (SOCIAL & CULTURAL GEOGRAPHY )**

CO1. Evaluate the social issues such as- racism, cast conflict, social distance.

CO2. Understand the causes of social inequality and their impact on society.

CO3. Students can understand indicators of social well-being and quality of life.

CO4. Discuss about the social space, social groups and intra-urban mobility.

CO5. They can define the cultural region of the world.

CO6. Students can learn about rural settlement morphology, urban-industrial landscape.

CO7. Analysis the social set-up in Indian villages.

**PAPER-XIV (OPTIONAL PAPER- 1 )**

**POPULATION GEOGRAPHY**

CO1. Understand the nature of population. Know about composition of population, like- age, sex marital status, family, economic composition and language.

CO2. Analyze the global trend and patterns of population growth in developing countries, and migration patterns.

CO3. Evaluate the population growth theory and migration theories.



CO4. Understand the population policies in different countries.

#### **OPTIONAL PAPER- 2**

##### **URBAN GEOGRAPHY**

CO1. Students can explain the town and cities in India and World perspective.

CO2. Gain knowledge about the history of urbanization in the developed and developing countries.

CO3. They can understand the functional differences between rural and urban settlements.

CO4. Students can define the problems of urban area. And try to solve them.

CO5. They will know the characteristics of urban settlement.

CO6. To be able to identify the urban environmental problem and how to solve those problem.

#### **PAPER-XV**

##### **PRACTICAL**

CO1. Students learn to use of various meteorological instruments and also learn to interpret of the Indian daily weather report.

CO2. That's help students to predict the weather report in future.

CO3. They understand and gain knowledge about statistical techniques.

CO4. Students learn to use the pocket stereoscope and interpret the aerial photograph with the help of pocket stereoscope. Also develop their skill in remote sensing and G.I.S.

#### **PAPER-XVI**

##### **PRACTICAL**

CO1. Students learn to draw many cartography diagram and apply this is in different statistical data.

CO2. They can able to select the appropriate technique for graphical presentation of a data to their field work.

CO3. Their knowledge about primary and secondary data collection helps them to prepare their survey report.

### **COURSE OUTCOMES (CO) OF THE COURSE B.A GENERAL GEOGRAPHY**

#### **PART I**

##### **PAPER-I (PHYSICAL GEOGRAPHY )**

Co1. The students will be familiar with the earth's interior.

Co2. Develop an idea about earth movements and the related topography.

Co3. Acquire knowledge about different types of rock and their origin .Influence of the rocks on land form and topography.

Co4. Getting familiar with the concept of hydrology

Co5. Understanding the processes of erosion, deposition and resulting landforms.

#### **PAPER -II**

##### **Climatology and Biogeography**

Co1. Students will learn about the atmosphere and the climate, pressure belts, wind systems, monsoon and their importance, difference between climate and weather.

Co3. Students can learn the significance of biogeography. They will also get to know about the factors responsible for plant growth.

**PAPER-III  
PRACTICAL**

Co1. Developing an idea about scales and how to draw different types of scales; conversion of scales.

Co2. Forming a clear concept on map projections.

Co3. Topographical maps and its application in practical.

CO4. Getting familiar with underlying structures with the help of geological maps.

**PART II**

**PAPER-IV  
HUMAN GEOGRAPHY**

CO1. -The students will be aware of the scope and contents of human geography.

CO2. Man's adaptation in various environments.

CO3. This particular module aims to develop an idea about the world population distribution and the factors that lead to uneven distribution of the population. It also focuses on the problem that is likely to arise due to an increase in the world population.

CO4. - Different types of settlement and characteristics and their definitions.

CO5. scope and content of social geography; race characteristics and distribution ;factors and characteristics of underdevelopment.

**PAPER-V  
ECONOMIC GEOGRAPHY**

CO1. This module deals with the scope and content of economic geography; economic activities- primary, secondary, tertiary.

CO2. Focuses on the concept of agricultural geography; Cultivation and their association with different natural and human conditions of the following cereal crops: wheat, rice; plantation crops: rubber; agricultural systems of the world; commercial grazing –cattle and sheep rearing.

CO3. Definition of power resources; coal, petroleum and water

CO4. Discussing the factors behind the localization of industries; with special reference to the study of iron, steel and aluminum industry.

CO5. Definition and classification of resources and the infrastructural facilities required for resource development. Reference to resource conservation.

**PAPER-VI  
PRACTICAL**

CO1. To learn graphically about the enlargement and reduction of maps.

CO2. Learning about chain surveying and prismatic surveying.

CO3. Getting to know superficially about remote sensing and aerial photo interpretation with the help of pocket stereoscope.

CO4. Necessity of field report in practical geography; collection of data and how to prepare a report from the data collected.

**PART III  
PAPER-VII  
REGIONAL GEOGRAPHY**

CO1. The module focuses on the regional geography of India.

a. Physical relief

b. Drainage

c. Climate

d. Soil

e. Natural vegetation.

Their characteristics and distribution; deforestation and conservation of forest.

CO2. Also focuses on agriculture, power resources and industries of India.



CO3. Familiarizing the students with different concept of population geography like growth, distribution and migration. Also making them aware of the different ethnic groups residing in India (santhals ,naga and the bhils)

**PAPER-VIII**

**PRACTICAL**

CO1. Lessons on different statistical methods used in practical geography e.g. frequency polygon, cumulative frequency, mean, median and mode etc.

CO2. Lessons on cartograms like pie graph, bar graph, and age-sex pyramid etc.

CO3. Lessons on meteorological instruments like maximum and minimum thermometer, rain gauge, dry and wet bulb thermometer.

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KALIPADA GHOSH TARAI MAHAVIDYALAYA  
DEPARTMENT OF HINDI

B.A. HINDI HONS(1+1+1) and B.A. GENERAL  
&  
CBCS SEMESTER I,II,III,IV,V&VI

*Program Specific Outcomes*

1. Understanding the basic concept and subject of Hindi and its origin.
2. To know more about the importance of subject Hindi and its Branches.
3. Understanding the various aspects of Hindi literature with a process to reach method and giving new mode and direction.
4. Making an attempt in areas and theory such as vocabulary and vice versa.
5. Understanding the literature more in broader areas than being confined to subject.
6. To know about Hindi literature, its root cause, perspectives and methods.
7. Elaborating and Understanding philosophical method of Hindi literature.
8. Evaluating the concept of Hindi from past to present and making the society closer through literature.

Course Outcomes

Basic Concepts and Perspectives in Hindi

1. Understanding the nature, scope and origin of Hindi literature.
2. To know more about Hindi literature and useful contribution in different level past to present.
3. To assist students in preparing for SSC, Banking sector, Govt. undertaking etc.
4. Raising awareness of Hindi knowledge to the society.
5. Benefits of getting employment opportunities such as the Hindi Officer, Translator, Manager, Teacher and Lecturer and so on.
6. Last but not the least Hindi Languages brings the society, people more closely together, thereby making the society and nation stronger.
7. UG students can opt for any job expert TGT job.
8. PG students can opt for any job including PGT job.
9. Diploma students can opt for job in Media House, Central Government and Head undertaking as Translator.

Department of Hindi  
Kalipada Ghosh Tarai Mahavidyalaya  
Bagdogra, Darjeeling, WB

Dingh  
16/06/2023

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16/06/2023



CBCS SEMESTER I,II,III, IV,V&VI (HONOURS)

SEMESTER -I

Course Name Course Outcome

Hindi Sahityakaaltihasa Understanding the history of Hindi Literature and Language.

Hindi Kavita Ability to understand the development of Hindi Language and Literature of Aadikal and Madhyakaal

SEMESTER -II

Course Name Course Outcome

Hindi Sahityakaaltihasa Understanding the History of Hindi Literature and Language.  
(AdhunikKaal)

Hindi Kavita Ability to understand the Development of Hindi Language and Literature of Chaayavaad.(Chaayavaad)

SEMESTER -III

Course Name Course Outcome

BhashaVigyaanAurTo understand Hindi Language and Linguistics.

Hindi Bhasha

Hindi Kavita To Understand the development of Modern Hindi Poetry.  
(Chaayavaadottar)

SEMESTER -IV

Course Name Course Outcome

Hindi Natak and Ekanki To understand the development of Plays and Act.

Hindi NibandhTo understand the development of Essay.

Hindi AlochanaTounderstand the development of Criticism.

AnuvaadSidhantTo understand Translation Theories.

**SEMESTER -V**

**Course Name Course Outcome**

Hindi Story Ability to understand the development of Hindi Story.

Hindi Novel To know the trend issue of novel in present time

AshmitamoolakVimarshTo understand the underdeveloped issue of Community as social aspect.

PremchandTo know the current trends and issues in Novel of Munshipremchad.

**SEMESTER -VI**

**Course Name Course Outcome**

BhartiyaKavyashastraTo understand the development and background of Indian Poetics.

PashchyastKavyashastraTo understand the development and background of Western Poetics.

ChayavaadTo understand the development of Hindi literature in this period

RashtriyaKavyadharaTo understand the development of RashtriyaKavyadhara

**CBCS SEMESTER I,II,III,IV,V&VI (PROGRAMME)**

**SMESTER -I**

**Course code and Title Course Outcome**

DSC-1A HindiSahityaKaltihis (sampurn) Understanding the History of Hindi Literatureand Language.

LCC-1 Hindi Bhashaand Sahitya To Understand the different field of Hindi Literature and Language.

**SMESTER -II**

**Course code and Title Course Outcome**

DSC2A Madhyakalin Hindi Kavita Ability to understand the Development of Language and Literature of Hindi Poetry in Medivial Period.



AECC-2 Hindi Vyakaran and Sampreshan To Understand the Grammmar of Hindi Language and concepts of communication in Hindi.

### **SMESTER –III**

#### **Course code and Title Course Outcome**

DSC-3A Aadhunik Hindi Kavita Ability to understand the Development of Language and Literature of Hindi Poetry in Modern Period.

DSC-3B Chayavadottar Hindi Kavita Ability to understand the Development of Language and Literature of Hindi Poetry after Chayaavaad.

SEC-1 Hindi BhashaShikshan/ To Understand the skills of Hindi Language Teaching.

Vigyapan :avadharanaevamsvaaru To Understand the concepts of Advertising.

LCC-1 HindiBhashaaurSampreshan Understanding the Hindi Language and concepts of communication in Hindi.

### **SMESTER –IV**

#### **Course code and Title Course Outcome**

DSC-4A Hindi GhadyaShaitya Ability to Understand the different types of prose in Hindi Literature.

DSC- 4B HindiNibandh To understand the development of Essay.

SEC-1 Anuvaad / Rachanatmaklehan Understanding the concepts of Translation in hindi Language / To understand the different aspects of creative writing in Hindi Language and Literature.

### **SMESTER –V**

#### **Course code and Title Course Outcome**

DSE- 5A Prayojanparak Hindi / Kabirdas To understand the concepts of Functional Hindi In the different

Fields / To Understand the literature of poet Kabirdas

SEC 2 BhashaShikshan To Understand the skills of Hindi Language Teaching.

### **SMESTER –VI**

#### **Course code and Title Course Outcome**

DSE-6A HindiRekhachitra/ Ability to understand the concepts of Sketch literature in Hindi./

Hindi Sansmaran Ability to understand the concepts of Memoir literature in Hindi.

GE-2 Pashtya Darshnik Chintan To understand the development of Western philosophical thought.

evam Hindi Sahitya

SEC -2 Anuvaad Vigyan/To understand the translation theories.

Sanbhashan Kala To understand skills of speech.

### OLD SYLLABUS B.A.HINDI HONOURS AND GENERAL (1+1+1)SYSTEM

#### PART I,II AND III

##### Part I

PAPER	COURSE	COURSE OUTCOMES
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I	HINDI SAHITYA KA	1.Understand the History
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ITIHAS of Hindi literature and language.

II	HINDI POETRY	1.Ability to understand the development
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##### Part II

(Madhyakalin) of medieval poetry.

III	MODERN POETRY	1.Understand the development of
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Modern poetry.

IV	NOVEL AND STORY	1.To know the trend issue of novel
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##### Part III Hindi story

V	PLAY AND ESSAY	1.To understand the development of Play and essay.
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VI	LINGUISTIC and -	1.Understand the development
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PRAYOJANMOOLAK Hindi language and linguistics.

HINDI	2.To understand the scope of Hindi
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In different fields.

VII KAVYASHASTRA  
of Hindi literature.

1.To understand the development, Background and growth

VIII KATHA SAHITYA OR

1.To know the current trends and issues

JANSANCHAR (SPL.STUDY)

Novel and Hindi story

(For Honours only)

2.1To understand the development of media In present situation.

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## **Department of History**

### **Programme Specific Outcome (PSO)**

History cannot be un-lived as the stories of the dead are never dead forever. History haunts more to those who refuse to learn and it gives wings to those who want to fly. History helps in making the present better and the future beautiful.

The Department of History, K G T Mahavidhyalaya, Darjeeling offers two courses – Honours and Programme. The intensity and the width of the prescribed knowledge are different otherwise the approaches of the B.A. Honours and B.A. Programme students are the same. History is in demand among the students as that is a popular stream in the job market. In most of the exams, questions are asked from the Indian culture, philosophy, art, architecture, etc. But the guardians prefer this subject to make the GenX acquainted with the culture of Indian as the cultural crisis is considered of the most common reasons for an upstart in society.

Teaching and the study of History influences the people and society in many ways.

#### **P.S.O.1.**

History helps to understand multi-cultural India. It helps a person to be a better citizen and a good Indian who appreciates the differences as the colours of the rainbow. A person can't be an Indian in a true sense without approving the regional variations without agreeing with them. Agreeing to disagree brings harmony, a beautiful sense of Indian history.

#### **P.S.O.2.**

Rise and fall, war and truce, bravery and cruelty, inspiration and denigration, principality and empire, civilisation and culture, assimilation and disintegration, ideals and ideology, and so on help to understand the social dynamics of history for becoming more humane.

#### **P.S.O.3.**

Conflict of thoughts in a positive manner gives birth to thesis, antithesis and synthesis. India has remained a fertile land for conflict of ideas so peers, saints, fakirs etc with divergent spiritual philosophies survived in the same period and the kings who couldn't tolerate the opponent preferred wars. India is a land of philosophies than wars so the people are accustomed to live with disagreement also.

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#### **P.S.O.4.**

Indian history has experienced different social currents always. The leaders have always looked for the middle path and many of them propagated one-sided ideologies but we have noticed fewer conflicts in India. The privileged and the deprived classes have come together also for fighting against the third force. Studying and interpreting history this way helps to know the functioning of historical development.

#### **P.S.O.5.**

India is a land of philosophy but the scientific temper was always there. Spiritualism of the highest order was in practice but at the same time astronomy, astrology, medicines, trigonometry etc were at their zenith in comparison to the contemporary world. We find a fantastic mixture of inferences and logic here so the scientific study was never lost despite the rise of dogmas and bigotries.

#### **P.S.O.6.**

"Facts are pious, but historians are biased" and nowadays they seem more biased as they are patrons of different schools of historiography. The colonial school was countered by the nationalist school. But the subaltern historiography made the study of history more people-oriented. The study of history with the existence of different schools of historiographies opens a new horizon of logic and understanding the currents of social dynamics.

#### **P.S.O.7.**

The discovery and rediscovery of India provide a historical background for propagating the idea 'Basudev Kutumbakam', 'Viswaguru', 'Where the Mind is Without Fear', 'Aham Brhmasmi' etc.

Studying the history of India makes one understand better the people, the nation and nature and be a better human being. Philosophically rich India can reach to the world again and again "...which has taught the world both tolerance and universal acceptance" (Vivekanand).

We have witnessed the emerging and merging of trends in different aspects of Indian culture. The study of history makes us aware of the uninterrupted evolution of civilisation and culture. History helps in becoming a global citizen and making the globe a village with a multiplicity of ideas but without complexities.

● **COURSE OUTCOME:**

SEMESTER	COURSE	COURSE OUTCOME
SEM-1	*HISTORY OF ANCIENT INDIA.  *SOCIAL FORMATION AND CULTURAL PATTERNS OF THE ANCIENT WORLD.	History of ancient india and world. This course includes two papers for Honours course i.e.1.History of ancient India, Its beginning, background and development and 2) history of Ancient World. It helps to understand students origin and development of Indian history.
SEM-2	*HISTORY OF INDIA II.  *SOCIAL FORMATION AND CULTURAL PATTERNS OF THE MEDIEVAL WORLD.	ancient India and ancient Roman Empire • It covers two papers for Honours course i.e.  Understanding Indian culture and dynastic rules in India. Special focus was given on dynastic rules, kingdom, and empire building.  2. Another paper highlighted the history of Mighty Roman Empire and its Society.
SEM-3	*RISE OF MODERN WEST.  *HISTORY OF INDIA II (700-1206).  *HISTORY OF INDIA IV(1206-1550).  *INDIAN HERITAGE.	it covers three honours paper and one SEC paper.  Honours papers mainly focus on early medieval India and medieval Europe. SEC paper helps students understand about Indian heritage and culture. Primary goal of this paper is to evaluate the importance of Archives, libraries and museum
SEM-4	*RISE OF MODERN WEST II.  *HISTORY OF INDIA V (1550-1605).	It also covers three honours paper and one SEC paper. honours paper talks about Mughal rule in india , Islamic architecture, heritage, and cultural syntax of the two main important religions of the subcontinent. Another paper highlighted on Medieval Eupore . Special importance is given on epidemic like Plague. This will helps students how epidemic changes the social economic



	<p>*HISTORY OF INDIA VI (1605-1750).</p> <p>*ART APPRECIATION: AN INTRODUCTION TO INDIAN ART.</p>	<p>structures of the society. On the other hand SEC paper focuses on tangible heritage and intangible heritage in India.</p>
SEM-5	<p>*HISTORY OF INDIA VII (1750-1857).</p> <p>*HISTORY OF MODERN EUROPE I (1600-1780).</p> <p>*HISTORY OF NORTH BENGAL.</p> <p>*HISTORY OF FAR EAST.</p>	<p>It covers two honours paper and two DSE papers. Honours papers discuss about medieval and pre modern history of the world. Special focus were given to war history and religious history so students can understand the concept of war and how it's changed the world. DSE papers talks about of far east and china. From there student can learn about society culture and dynastic rule established in japan and china.</p>
SEM-6	<p>*HISTORY OF INDIA VIII (1857-1950)</p> <p>*HISTORY OF MODERN EUROPE II (1780-1939)</p> <p>*HISTORY OF AFRICA (1500-1960).</p> <p>*HISTORY OF LATIN AMERICA(1500-1960)</p>	<p>This portion contains two CC papers and and two DSE papers. CC papers contain contemporary history of the world. Here students can understand about new world order, how international monetary system works and importance UNO( UNITED NATIONS ORGANISATION). DSE papers talks about the history of Latin America and Africa. From this portion students will understand about history beyond subcontinent. How other nations works and their history.</p>

**COURSE OUTCOME INCLUDE:**

**DSC-** Help to understand Indian culture, history, heritage, linguistics, monuments, architecture etc .

**SEC:** Help to understand Indian culture and heritage.

**GE:** Help to understand Indian history from the beginning to the independence of India.

**OLD SYLLABUS****PART III HONOURS AND GENERAL**

HONS. PAPER	COURSE	COURSE OUTCOME
V	HISTORY OF MEDIEVAL EUROPE.	This Paper mainly focuses on early medieval India and medieval Europe.
VI	HISTORY OF MODERN EUROPE.	This Paper discuss about medieval and pre modern history of the world. Special focus were given to war history and religious history so students can understand the concept of war and how its changed the world
VII	HISTORY OF CHINA AND JAPAN.	This Paper talks about of far east and china. From there student can learn about society culture and dynastic rule established in japan and china.
VIII	CONTEMPORARY HISTORY OF THE WORLD.	This Paper contains contemporary history of the world. Here students can understand about new world order, how international monetary system works and importance UNO( UNITED NATIONS ORGANISATION).
GEN. PAPER	COURSE	COURSE OUTCOME
VIII	HISTORY OF INDIA	Help to understand Indian history from the beginning to the independence of India.

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Department of Nepali

Kalipada Ghosh Tarai Mahavidhyalaya  
Darjeeling

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**2.6: Programme Outcome, Programme Specific Outcome and Course Outcomes.**

• **Programme Outcome:**

2.6.1: The Dept. of Nepali, K G T Mahavidhyalaya, Darjeeling offers two programmes – Honours and General, Students after passing out the Honours programme generally prefer for Higher Education and get admission in Post Graduate programme offered by the affiliating university (i.e. North Bengal University) and other universities (Sikkim University, Banaras Hindu University). Students passing out the general programme leave the institution with developed skill to search for suitable jobs through competitive examination, preferably teaching posts in schools - Primary, Secondary and Higher Secondary, Translator post in higher administrative offices, clerical posts and other jobs in private firms, administrative posts at Central and State levels.

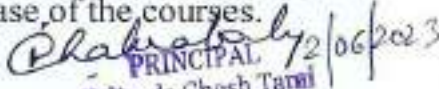
The courses for Honours and General Programme have been designed in such a way that these enhance the understanding, skill and capability of the students. So that the confidence grew in them to enter into academic fields and job market.

The introduction of CBCS system has enhanced the mobilities of the learners as the course have been designed with interdisciplinary thrust. Besides the CBCS system has enabled the students to be more class oriented thereby become with new areas that have been included the courses and also makes their academic attainment more relevant socially.

2.6.2: The programme outcomes, programme specific outcome and course outcomes are evaluated with well thought out plan that helps students to go for continuous evaluation process. The outcomes are measured continuously throughout the semester and the modes of evaluating measures include exposure of students to class test, project works, books, articles review field visit and preparation of report.

Course outcome are also very encouraging as the students are made to go different kinds of tests on regular basis that enhances their knowledge base of the courses.

  
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In this way growing in them a comprehensive of the course taught by the respective faculties.

The method of measurement have been designed in such a way the these have been able to develop critical thinking in the learners, to improve the communication and good sprit for being citizen and responsible citizen.

- **Programme Specific Outcomes:**

Programme Specific Outcomes include-

**P.S.O.1.** Helps to understand the History of Nepali literature, Its beginning, background, trends, influences of different National and International events in literature.

**P.S.O.2.** Understanding of different trends of poetry i.e. war, romantic and modern, post-modern literature.

**P.S.O.3.** Helps to understand different school of thought, Its influence in Nepali Literature.

**P.S.O.4.** Helps to know general linguistics, history of Nepali Language.

**P.S.O.5.** Helps to understand shorts stories based on tea garden labours, life style, backgrounds, reality portrayed in the Novel, Fiction and Story.

**P.S.O.6.** Helps to introduce Nepali language and its scientific study.

**P.S.O.7.**Helps to understand Modern trends of Nepali fiction.

**P.S.O.8.** To know the emerging trends of Indian Nepali Drama, its organisation, theatre and various perspective of contemporary form of Arts.

- **Course Outcomes:**

SEMESTER	COURSE	COURSE OUTCOMES
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SEM -1	<ul style="list-style-type: none"> <li>History of Nepali Literature</li> <li>Nepali Poetry</li> </ul>	This course includes two papers for Honours course i.e. 1) History of Nepali literature, Its beginning, background and development and 2) Nepali Poetry and its trends. It helps to understand students origin and development of Nepali Literature.
SEM -2	<ul style="list-style-type: none"> <li>Indian Poetics</li> <li>School of Literary Theory</li> </ul>	It covers two papers for Honours course i.e. 1) Poetics, It helps to understand different poetic theory of Eastern Literature(Sanskrit Literature) 2)Schools of Literary Theory, It helps to understand different school of thought, Its influence in Nepali Literature.
SEM -3	<ul style="list-style-type: none"> <li>Linguistics</li> <li>Nepali Shorts Story</li> <li>Nepali Noval</li> </ul>	In this course introduce three papers i.e., 1) Linguistics, It helps to introduce language and its scientific study. 2) Nepali Shorts Story, it helps to understand modern trend of Nepali Shorts Story and 3) Nepali Novel, it also helps to understand Modern trends of Nepali fiction.
SEM-4	<ul style="list-style-type: none"> <li>Nepali Eassy</li> <li>Nepali Language</li> <li>Nepali Poetry</li> </ul>	This course includes three papers i.e. 1) Nepali Eassy, It helps to know the modern Nepali Eassy and its trends. 2) Nepali Language, It introduce Nepali Language as modern aryan language and its origin, and 3) Contemporary Nepali Poetry, It helps to understand the Contemporary concept and its influences in different trends of Nepali poetry.
SEM-5	<ul style="list-style-type: none"> <li>Nepali Criticism</li> <li>Nepali Theatre</li> </ul>	In this course include two papers i.e., 1) Nepali Criticism, It helps to know the Criticism, Critics and their contribution to the development of Literature.2) Nepali Theatre (Drama), It helps to understand the emerging trends of Indian Nepali Drama, its organisation, theatre and various perspective of contemporary form of Arts.
SEM-6	<ul style="list-style-type: none"> <li>Nepali Prabandha Kavya</li> <li>folklore</li> </ul>	In this course include 1) Nepali Prabandha Kavya, It introduce the origin, structure and history of Nepali Prabandha kavya and 2) Nepali Folklore, It helps to know the folk literature and its influences.

### Course Outcome Include:

**DSC** – Help to understand the importance of literature in human life as an agent to reform theory of literature, that dialect which we speak, mandate of Nepali Language, Standardisation form of Nepali Language.

**AECC** – Help to know Nepali Language and folk literature.

**SEC** – Help to develop the skills of report writing, dialogue writing, advertise drafting, letter writing in Nepali Language.

**GE** - Helps to understand different school of thought, Its influence in Nepali Literature.

**LCC** – Help to understand techniques and principles of language, theories in second language acquisition.

## Old Syllabus

### Part III Honours and General

Hons.Paper	Course	Course Outcome
V	Linguistic (Bhasha Vijjyan)	1. Understand the basic concept of Linguistics 2. To Know the Scientific study of Language 3. Analyze the data of Language 4. To Know the evolution of Language
VI	Contemporary Nepali Poetry	1. To Know the Contemporary issue and trends of Nepali poetry 2. To Know the content and form of contemporary poetry 3. To understand the emerging trends of Contemporary Nepali Poetry.
VII	History of Nepali Literature	1. To Know the origin, background and growth of Nepali Literature. 2. To understand the social and cultural aspect of Nepali Literature. 3. To Know the trends and issues of Nepali Literature.
VIII	Folklore	1. Its origin, background and influences on oral literature. 2. It helps to understand the myth, creation of myth and its functions. 3. To Know the folk poetry, folktales, fairytales etc.
Gen.Paper	Course	Course Outcome
VIII	Nepali Language and its Origin	1. Help to understand techniques and principles of language, theories in second language acquisition. 2. Help to develop the skills of report writing, dialogue writing, advertise drafting, letter writing in Nepali Language.

  
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**PROGRAM SPECIFIC**  
**OUTCOMES DEPARTMENT OF**  
**PHILOSOPHY**

1. **PSO1- INDIAN PHILOSOPHY**: Indian philosophy was developed in the civilisations of the Indian subcontinent. It is deeply connected with the spiritual side of the life and connected with realization of truth. That is why, "Darsana" means "Vision", moreover the instrument of vision. It always emphasized the immediate, direct and intuitive vision of Reality.
2. **PSO2- INDIAN LOGIC**: Indian logic introduces a vast explanation of Indian reasoning system. It developed a justifiable way of knowledge and their value. Major discussions between false knowledge and true knowledge have been organized here.
3. **PSO3- WESTERN PHILOSOPHY**: This program presents a brief introduction of western philosophers and their notable works. It introduces metaphysics, epistemology, empiricism, Rationalism and so on. Total structure of this programme helps to understand and improve different isms of western philosophical thought.
4. **PSO4- WESTERN LOGIC**: How to differentiate between correct reasoning and incorrect reasoning is the key concept of logic. It is simplify validity of knowledge on the basis of different logical method like inductive method, deductive method and so on. In this program Western Logic explains an introductory and advance level of formal and informal logic.
5. **PSO5- ETHICS**: Basic definition and different type of ethical terms are elaborated here. This section explains different dimension of human behavioural action and their value. Ethics only deals with voluntary action. It helps us to understand different notions of human behaviour.
6. **PSO6- APPLIED ETHICS**: Ethics mainly deals with theoretical issues on the other side; Applied Ethics introduces a different dimension of our practical actives and their values.
7. **PSO7- PSYCHOLOGY**: Main interest of this section is to inform about mental state and their relation with brain. It also deals with animal brain and their gesture.
8. **PSO8- CONTEMPORARY INDIAN PHILOSOPHY**: It mainly introduces Indian modern thinker and their rational works on how to enrich our knowledge and thinking process.

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12/06/2023

*Phakraborty*  
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Mahavidyalaya  
Bardogra 12/06/2023

9. **PSO9- PHILOSOPHY OF RELIGION**: Main interest of this course is to develop a logical ground of religion and God. It discusses the definition of religion and its logical value on the historical, anthropological background. It also tries to justify different arguments about existence of God.
10. **PSO10- SOCIAL AND POLITICAL PHILOSOPHY**: This programme introduces definition and value of society and state. It helps to develop philosophical stand point on social and political structure.
11. **PSO11- SKILL ENHANCEMENT COURSE**: This program is introduced in two different ways- one is Basics of Counselling and another is Critical Thinking. Critical thinking explains the unbiased reasoning and rational thinking. It expands our thinking evolution with justification.
- Basics of counselling mainly designed with different aspect of mental state. That helps to understand human behaviour and their logical background. Also introduces basic key term about counselling.



## COURSE OUTCOME

1. **CO1: SEMESTER – I**: This course mainly deals with two honours papers. These are Indian Philosophy and Western Logic. Mainly we teach preliminary chapters of these two papers. Introductory chapter of six philosophical schools help to know the primary knowledge about Indian philosophy. After completing this course students will know about Different shades of knowledge like metaphysics, epistemology, logic, and ethics. Indian philosophy helps the human being to understand the value of life. It always says that every man is connected only with his own Karma, independent of its result. On the other hand, western Logic mainly introduces about reasoning, argument, deductive, inductive method of knowledge. It helps to improve students reasoning capacity.
2. **CO2: SEMESTER – II**: Western philosophy and ethics are the main topic of this course. Students enrich their knowledge of primary introduction about western philosopher like Socrates, Plato, Aristotle, Descartes Spinoza, Leibnitz and primary concept of western ethics and Indian ethics from this course. After completing the course, students can understand western philosophers' lifestyle and their contribution about knowledge. Also they can understand different types of ethical norms and they are able to compare it on the basis of Indian and western notion.
3. **CO3: SEMESTER – III**: In this course we teach four papers. These are Indian philosophy, Western Philosophy, Western Logic and Basics of Counselling. We introduce more specific chapters of six philosophical schools in Indian philosophy. In western philosophy mainly explain empiricist philosopher's primary interpretation and their theoretical analysis about knowledge. Another paper Western logic deals with more specific chapter which helps students to improve thinking and reasoning capacity. It helps them to justify knowledge in a different way.  
  
Basics of counselling are mainly introduced under skill enhancement course. Its aim is to improve student's mental ability. After completing this course student can be able to understand others mind and his own mind with analysis. They can understand mental health and also characteristics of mental stress and be able to handle it.
4. **CO4: SEMESTER – IV**: This course introduces four papers. Psychology, Philosophy of Religion, Socio-Political Philosophy and Critical Thinking are the key paper of this course. Psychology helps us to know mainly mental activities. It also introduces human brain and animal brain system, their behavioural changes with the help of introspection, experimental and

*Vivekananda Hons.*

observation method of psychology. On the other side philosophy of religion explains different aspects of religious definition, their historical background, origin and also inspect philosophical interpretation underlying in God's concept. This paper helps students to improve informative criteria of different religion and more specifically improve logical ground of existence of God. Introductory chapter of socio-political philosophy helps to know about social and political aspect on the basis of philosophical norms. Students gain social and political motives, they can justify social and political structure in a different perspective. The main objective of Critical thinking paper mainly discussed under skill enhancement course is to increase student's thinking capacity.

5. **CO5: SEMESTER – V:** Tarkasamgraha and Analytic Philosophy are the main paper of this course. Tarkasamgraha mainly explain Indian Epistemology & logic. That helps to understand Indian epistemological characteristics and Indian logical value. Analytical philosophy mainly introduces different classification of western epistemological terms. It helps to understand meaning and definition of different terms and sentences which are used in western epistemology. It also deals with knowledge and its meaning and testability.
6. **CO6: SEMESTER – VI:** Analytic Philosophy, Applied Ethics, Introduction to Feminist Philosophy or Phenomenology & Existentialism and Contemporary Indian Philosophy or Aesthetics are introduced details in this course. Analytic Philosophy explains different chapters of Bertrand Russell's "The Problems of philosophy". Students can achieve more specified discussion about different philosophical problems. Applied ethics helps them to understand ethics on the practical ground. Students can understand different practical scenario that are held in our society. They can be able to understand ethical stand point in such cases like deforestation, Euthanasia, Suicide, Abortion, Discrimination on the basis of sex etc.

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**Department of Physics**  
**Kalipada Ghosh Tarai Mahavidyalaya**  
**Bagdogra**

**PROGRAMME SPECIFIC OUTCOMES**

After successfully completing 3 years B.Sc. (Program Course/General Course) with Physics as a subject, the students are expected to have the following outcomes:

**PSO1. Domain Knowledge:** Students are expected to acquire a core knowledge of the subject with conceptual understanding of different major topics such as Classical Mechanics, General Properties of Matter, Electricity and Magnetism, Wave and Optics, Thermal Physics, Electronics, Modern Physics, Solid State Physics, Quantum Mechanics, Special Theory of Relativity, Conventional and Non-conventional Energy Sources, etc.

**PSO2. Problem solving Skills:** Students will be able to find a suitable methodology for solving a physical/numerical problem using their theoretical knowledge and skills.

**PSO3. Mathematical Skills:** Students will be efficient in mathematical concepts as mathematical tools are needed for solving problems which is very much required for a proper understanding of Physics. They are also expected to convert a physical description into a mathematical formulation.

**PSO4. Application of Acquired Knowledge:** Students will be able to apply the knowledge of Physics to practical problems of regular life by understanding the working principles of different machines, engines, electronic instruments, electrical wiring etc.

**PSO5. Laboratory skills:** Students will be able to perform laboratory experiments, run instruments, make circuits, record data, plot graphs, analyze them and draw valid conclusions from them.

**PSO6. Computer Programming skills:** Students will be able to do computer programming for solving physical and numerical problems using the language C.

**PSO7. Foundation for future research works:** Experimental skills, knowledge and concepts of Physical theories and computer programming skills build up the background for future research works in Physics.

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**COURSE OUTCOMES**

*Koyel Bhattacharya*  
07/06/2023  


### Outcomes of Courses Taught in CBCS Syllabus (Programme/GE Course)

Semester	Courses Taught	Course Outcomes
SEM 1	Discipline Specific Core (DSC) 1 : "Mechanics"	<ol style="list-style-type: none"> <li>1. Idea of vector algebra and ability of solving problems related to vector quantities having both magnitude and direction.</li> <li>2. Understanding of the 1<sup>st</sup> and 2<sup>nd</sup> order homogeneous Differential Equation and their solutions.</li> <li>3. Understanding of laws of motion (both linear and rotational motions), basic mechanical principles such as energy and momentum conservation principles, collision dynamics, motion of a rocket etc.</li> <li>4. Idea of oscillatory motion, differential equation of Simple Harmonic Motion and its solution, Damped vibration.</li> <li>5. Knowledge of gravitation, central force, Kepler's laws of planetary motion.</li> <li>6. Concepts of properties of solid such as elasticity.</li> <li>7. Understanding of the effects of velocity of an object being close to that of light in the context of special theory of relativity.</li> <li>8. Data collection, data analysis (both quantitatively and qualitatively) and its graphical representation (whenever required) in different experimental methods.</li> </ol>
SEM 2	Discipline Specific Core (DSC) 2 : "Electricity and Magnetism"	<ol style="list-style-type: none"> <li>1. Idea of vector calculus and ability of solving problems related to vector quantities having both magnitude and direction.</li> <li>2. Concept of electrostatic field and potential due to a point charge, a charge distribution and an electric dipole; Gauss' theorem and its application in determining electric field.</li> <li>3. Understanding of Dielectric and its properties; idea of parallel plate, spherical and cylindrical capacitors.</li> <li>4. Concept of the interrelationship between current electricity and magnetism; the origin of magnetic field in the presence of electric current, Biot-Savart's law and its application.</li> <li>5. Understanding of the magnetic properties of the materials.</li> <li>6. Idea of electromagnetic induction, Faraday's law, self and mutual inductance.</li> <li>7. Knowledge of Maxwell's electromagnetic field equations and their applications.</li> <li>8. Understanding of the propagation of electromagnetic waves.</li> <li>9. Data collection, data analysis (both quantitatively and qualitatively) and its graphical representation (whenever required) in different experimental methods.</li> </ol>
SEM 3	Discipline Specific Core (DSC) 3 : "Thermal Physics and Statistical Mechanics"	<ol style="list-style-type: none"> <li>1. Concept of the distribution of velocities among different molecules of a gas and how to explain different properties such as viscosity, conductivity and diffusion from that knowledge.</li> <li>2. Ability to calculate root mean square velocity, average velocity and most probable velocity from velocity distribution formula.</li> <li>3. Concept of temperature, specific heat, degrees of freedom.</li> <li>4. Idea of black body radiation-energy distribution among different wavelengths using both classical and semi-classical approach.</li> </ol>



		<ol style="list-style-type: none"> <li>5. Understanding of the fundamental concepts of thermodynamic properties of matter like internal energy, enthalpy, entropy, temperature, pressure and specific volume. These concepts are then used to explore free energy, heat, and the fundamental behaviour of heat engines.</li> <li>6. Idea of laws of thermodynamics and ability to explain different thermal properties of gas using them.</li> <li>7. Being familiar with partial differential equations and ability to solve different problems of thermal physics using them.</li> <li>8. Concept of classical and quantum statistics and their applications.</li> <li>9. Data collection, data analysis (both quantitatively and qualitatively) and its graphical representation (whenever required) in different experimental methods.</li> </ol>
SEM 4	Discipline Specific Core (DSC) 4: Waves and Optics	<ol style="list-style-type: none"> <li>1. Developing the concept of wave motion- both longitudinal wave and transverse wave.</li> <li>2. Idea of group velocity and phase velocity and the understanding of different phenomena due to superposition of wave.</li> <li>3. Familiar with different terms related to "Acoustics",</li> <li>4. Concepts of properties of fluid such as surface tension, viscosity.</li> <li>5. Clear idea of the working principle of different types of pumps for production of high vacuum and how different gauges can be used to measure low pressure.</li> <li>6. Thorough knowledge about the different phenomenon of physical optics such as Interference, Diffraction and Polarization in the context of electromagnetic wave theory of light.</li> <li>7. Data collection, data analysis (both quantitatively and qualitatively) and its graphical representation (whenever required) in different experimental methods.</li> </ol>
SEM 5	Discipline Specific Elective (DSE)1: Elements of Modern Physics	<ol style="list-style-type: none"> <li>1. Clear understanding of the foundations and background of quantum mechanics, classical to quantum mechanical transition in terms of explaining physical observations of particle behavior which cannot be explained by classical mechanics such as the energy distribution of black body radiation among different wavelengths, photoelectric effect, Compton effect etc.</li> <li>2. Ability to use differential equations to solve elementary quantum mechanical problems such as 1-D infinitely rigid box, Step potential, Rectangular potential barrier etc.</li> <li>3. Concepts of wave-particle duality, matter waves and uncertainty principle.</li> <li>4. Idea of wave function and its physical interpretation</li> <li>5. Understanding of the structure of atom, description according to different models and their drawbacks.</li> <li>6. Knowledge of different terms associated with nucleus and its general properties.</li> <li>7. Understanding of different nuclear phenomena such as</li> </ol>

		<p>nuclear disintegration and radioactivity, etc.</p> <ol style="list-style-type: none"> <li>8. Concept of the totally different type of forces that exist in the nucleus and the physics of the nucleus of an atom.</li> <li>9. Idea of nuclear fission, nuclear fusion and nuclear reactor.</li> </ol>
SEM 5	Skill Enhancement Course (SEC)1: Electrical Circuits and Network Skills	<ol style="list-style-type: none"> <li>1. Study of basic electricity principles, concept of EMF, voltage, current, resistance. Study of different circuit elements.</li> <li>2. Concept of direct current and alternating current, AC and DC sources.</li> <li>3. Analysis of AC And DC circuits. Concept of Electrical power.</li> <li>4. Concept of transformer. How AC voltage is increased or decreased by transformers.</li> <li>5. Concept of rectifiers i.e. how AC voltage is converted into DC.</li> <li>6. Concept of transient response of current with DC source i.e. Series LR, CR circuits. Growth and decay of current and charge. Series LCR circuit with AC source. Concept of impedance, reactance etc.</li> </ol>
SEM 6	Discipline Specific Elective (DSE)2: Solid State Physics	<ol style="list-style-type: none"> <li>1. Clear idea of crystalline and amorphous solids. Concept of crystal structures. How crystal structures are analyzed by using X-Ray.</li> <li>2. Concept of metal, insulator and semiconductors.</li> <li>3. How heat and electricity conduct through metals and also the electrical conduction through semiconductor.</li> <li>4. Concept of specific heat of solid and how it is affected when temperature of solid is increased.</li> <li>5. We have learned that solids have both dielectric and magnetic properties. Study of these properties in detail.</li> <li>6. Metals can behave as superconductor when temperature of metals is decreased beyond a certain value i.e. concept of superconductivity.</li> </ol>
SEM 6	Skill Enhancement Course (SEC)2: Renewable Energy and Energy Harvesting	<ol style="list-style-type: none"> <li>1. Idea about different conventional energy sources and their limitations or demerits.</li> <li>2. Understanding of the basics of how different non-conventional and renewable energy technologies such as solar, wind, geothermal, sea-wave, small hydro resources etc. work and how those sustainable, natural and environment-friendly green energy sources can be utilized for generating electricity etc.</li> </ol>



## Outcomes of Courses Taught in (1+1+1 System) Old Syllabus (General Course)

Part I/II/III	Courses Taught	Course Outcomes
Part I	Paper-1: Mechanics and Oscillations, General Properties of Matter, Waves and Acoustics	<p><b>Mechanics and Oscillations :</b></p> <ol style="list-style-type: none"> <li>1. Idea of vector algebra and vector calculus and ability of solving problems related to vector quantities having both magnitude and direction.</li> <li>2. Understanding of laws of motion (both linear and rotational motions), basic mechanical principles such as energy and momentum conservation principles, collision dynamics, motion of a rocket, dynamics of rigid bodies, moment of inertia etc.</li> <li>3. Knowledge of gravitation, central force, Kepler's laws of planetary motion.</li> <li>4. Idea of oscillatory motion, differential equation of Simple Harmonic Motion and its solution, damped and forced vibration.</li> </ol> <p><b>General Properties of Matter :</b></p> <ol style="list-style-type: none"> <li>1. Concepts of properties of solid and fluid such as elasticity, surface tension, viscosity.</li> </ol> <p><b>Waves and Acoustics :</b></p> <ol style="list-style-type: none"> <li>1. Developing the concept of wave motion- both longitudinal wave and transverse wave.</li> <li>2. Idea of group velocity and phase velocity and the understanding of different phenomena due to superposition of wave.</li> <li>3. Familiar with different terms related to "Acoustics".</li> </ol>
	Paper-2 : Heat and Thermodynamics, Optics, Magnetism	<p><b>Heat and Thermodynamics :</b></p> <ol style="list-style-type: none"> <li>1. Concept of the distribution of velocities among different molecules of a gas and how to explain different properties such as viscosity, conductivity and diffusion from that knowledge.</li> <li>2. Ability to calculate root mean square velocity, average velocity and most probable velocity from velocity distribution formula.</li> <li>3. Concept of temperature, specific heat, degrees of freedom.</li> <li>4. Study of real gases. Understanding of thermal conduction process.</li> <li>5. Idea of black body radiation-energy distribution among different wavelengths using both classical and semi-classical approach.</li> <li>6. Understanding of the fundamental concepts of thermodynamic properties of matter like internal energy, enthalpy, entropy, temperature, pressure and specific volume. These concepts are then used to explore different thermodynamic processes, free energy and the fundamental behaviour of heat engines and refrigerators.</li> <li>7. Idea of laws of thermodynamics and ability to explain different thermal properties of gas using</li> </ol>

		<p>them.</p> <p>8. Being familiar with partial differential equations and ability to solve different problems of thermal physics using them.</p> <p><b>Optics :</b></p> <ol style="list-style-type: none"> <li>1. Introduction to various designs of optical systems and aberrations. Thorough knowledge about the image forming systems with emphasis on the human eye, the telescope and the microscope.</li> <li>2. Thorough knowledge about the different phenomenon of physical optics such as Interference, Diffraction and Polarization in the context of electromagnetic wave theory of light.</li> </ol> <p><b>Magnetism :</b></p> <ol style="list-style-type: none"> <li>1. Study of the action of magnetic field on a magnet.</li> <li>2. Concept of magnetic potential and field due to magnetic dipole and magnetic shell</li> <li>3. Understanding of the magnetic properties of the materials and different magnetic substances.</li> </ol>
	Paper-3 : Practical	<ol style="list-style-type: none"> <li>1. Data collection, data analysis (both quantitatively and qualitatively) and its graphical representation (whenever required) in different experimental methods related to Mechanics, General properties of matter, Sound, Thermal Physics and Optics.</li> </ol>
Part II	Paper- 4 : Electrostatics, Current Electricity, Electronics-I	<p><b>Electrostatics</b></p> <ol style="list-style-type: none"> <li>1. Concept of electrostatic field and potential due to a point charge, a charge distribution and an electric dipole; Gauss' theorem and its application in determining electric field.</li> <li>2. Understanding of Dielectric and its properties; idea of parallel plate, spherical and cylindrical capacitors.</li> </ol> <p><b>Current Electricity</b></p> <ol style="list-style-type: none"> <li>1. Concept of the interrelationship between current electricity and magnetism; the origin of magnetic field in the presence of electric current, Biot-Savart's law and its application.</li> <li>2. Idea of electromagnetic induction, Faraday's law, self and mutual inductance.</li> <li>3. Knowledge of the behavior of alternating current in different circuit combinations, resonance and Q-factor, working principle of transformer.</li> <li>4. Concept of the laws of thermoelectricity.</li> <li>5. Knowledge of Maxwell's electromagnetic field equations and their applications.</li> </ol> <p><b>Electronics-I</b></p> <ol style="list-style-type: none"> <li>1. Concept of different semiconductor devices such as diode, rectifier, Zener diode and transistor with their applications.</li> <li>2. Concept of digital electronics: binary and decimal number system, logic gates.</li> </ol>



<p>Paper- 5 : Special Theory of Relativity, Atomic and Nuclear Physics, Quantum Mechanics and Solid State Physics</p>	<p><b>Special Theory of Relativity</b></p> <ol style="list-style-type: none"> <li>1. Understanding of the effects of velocity of an object being close to that of light in the context of special theory of relativity.</li> </ol> <p><b>Atomic and Nuclear Physics</b></p> <ol style="list-style-type: none"> <li>1. Idea of how to determine specific charge of electron and positive ray particles.</li> <li>2. Understanding of the structure of atom, description according to different models and their drawbacks.</li> <li>3. Concept of quantum numbers and Pauli Exclusion Principle.</li> <li>4. Concept of the totally different type of forces that exist in the nucleus and the physics of the nucleus of an atom.</li> <li>5. Knowledge of different terms associated with nucleus and its general properties.</li> <li>6. Understanding of the models that describe a nucleus, different nuclear phenomena, nuclear disintegration, nuclear reactions and radioactivity, etc.</li> <li>7. Clear technical knowledge of various nuclear detectors and counters.</li> <li>8. Idea of nuclear fission, nuclear fusion and nuclear reactor.</li> </ol> <p><b>Quantum Mechanics and Solid State Physics</b></p> <ol style="list-style-type: none"> <li>1. Clear understanding of the foundations and background of quantum mechanics, classical to quantum mechanical transition in terms of explaining physical observations of particle behavior which cannot be explained by classical mechanics such as the energy distribution of black body radiation among different wavelengths, photoelectric effect, Compton effect and Raman effect.</li> <li>2. Ability to use differential equations to solve elementary quantum mechanical problems.</li> <li>3. Concepts of wave-particle duality, matter waves and uncertainty principle.</li> <li>4. Idea of wave function and its physical interpretation.</li> <li>5. Concept of the difference between crystalline and amorphous solids and clear idea of crystal structure, periodicity in crystals and X-ray diffraction by the crystal.</li> <li>6. Knowledge of the magnetic properties of matter.</li> <li>7. Understanding of the semiconductor physics and idea of different semiconductor devices.</li> </ol>	
<p>Paper- 6 : Practical</p>	<ol style="list-style-type: none"> <li>1. Data collection, data analysis (both quantitatively and qualitatively) and its graphical representation (whenever required) in different experimental methods related to Electricity, Magnetism and</li> </ol>	

		Electronics.
Part III	Paper-7 : Electronics-II, Machine and Energy Sources, Communications and Computers	<p><b>Electronics-II</b></p> <ol style="list-style-type: none"> <li>1. Study of OPAMP and its applications.</li> <li>2. Knowledge of feedback principle and oscillator.</li> <li>3. Concept of digital electronics: adder, subtractor, multiplexer, encoder, decoder flip-flop etc.</li> <li>4. Technical knowledge of different electronic instruments such as CRO, digital multimeter etc.</li> </ol> <p><b>Machine and Energy Sources</b></p> <ol style="list-style-type: none"> <li>1. Clear idea of the working principle of different types of pumps for production of high vacuum and how different gauges can be used to measure low pressure.</li> <li>2. Understanding of the working principle of different heat engines and calculation of their efficiency.</li> <li>3. Idea about different conventional energy sources and production of electrical power from them.</li> <li>4. Understanding of the basics of how different non-conventional and renewable energy technology such as solar, wind, geothermal, sea-wave, biomass etc. works and how those sustainable green energy sources can be utilized for generating electricity, producing biofuel etc.</li> </ol> <p><b>Communications and Computers</b></p> <ol style="list-style-type: none"> <li>1. Clear understanding of the propagation and transmission of electromagnetic waves, propagation of waves through ionosphere, satellite communication,</li> <li>2. Modulation and demodulation: necessity, uses and advantages. Concept of types of Modulation.</li> <li>3. Idea of transmission of electromagnetic waves through material media such as coaxial cable, optical fiber etc.</li> <li>4. Concept of optical fiber: Principle and use in communication.</li> <li>5. Idea of Satellite and Microwave communication.</li> <li>6. Idea of computer fundamentals and concepts of different operating systems.</li> <li>7. Concept of programming in C language.</li> </ol>
	Paper- 8 : Practical	<ol style="list-style-type: none"> <li>1. Data collection, data analysis (both quantitatively and qualitatively) and its graphical representation (whenever required) in different experimental methods related to Optics and Electronics.</li> </ol>

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67/06/2023

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DEPARTMENT OF POLITICAL SCIENCE  
KALIPADA GHOSH TARAI MAHAVIDYALAYA  
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PROGRAMME SPECIFIC OUTCOMES

After successful completion of 3 years of B.A (Hons. Course /Program course / GE Course) with political Science as a subject, the students are expected to have the following outcomes:

**PSO1** Students are expected to have basic knowledge of the discipline like politics and political science, its relation with other social sciences, the idea of state, government, society, associations sovereignty and theories regarding the origin of the state, functions of the state and the core concepts like freedom, liberty, equality, justice and rights make the readers grasp over the ever present and changing dimensions of those concepts. These concepts are discussed in such a way that the practical bearing of those concepts may easily be related.

**PSO2** Students will be able to understand the core area of Public Administration and its importance as separate discipline, its classical, neo classical and contemporary theories along with the major approaches in Public Administration and its implications.

**PSO3** Students will be able to get a clear picture about the Indian Constitution, different organs of the government, its composition and functions. It is expected that they will be able to make a comparison between the constitutional structure of UK, USA, PRC, France and Russia.

**PSO4** Students will be able to have the idea of western and Indian political thinkers in the realm of political philosophy. They will be able to know the evolutionary history of political thought starting from Plato to Marx along with the contributions of Indian political thinkers.

**PSO5** Students are surely exposed to the very basic idea of evolution of international relations and important components like national power, balance of power, bipolarity, unipolarity, colonization and ecocolonisation and the like. Besides event like cold war, new cold war and post cold war would help in understanding the major trends and shifts in international politics.

**PSO6** The learners can develop an extensive insight on the basic components of sociological aspects of politics and its social bases. Besides the concepts like sociological basis of power, political culture, political socialization, political communication, political participation and political development will enrich the understanding of those conceptual parameters in the Indian context.

**PSO7** The learners are exposed to legal and judicial system and practices in India, there by injecting in them the basics of getting legal redressal through the judicial organs.

**PSO8** The learners will be able to develop an extensive insight by knowing Feminism as a new dimension in the field of Political Science. They will be able to know the causes of subjugation of women, patriarchy and the remedial measures that stretched into the forms like liberal, Marxist and radical.

**PSO9** The core concept of different ideologies, its meaning, nature and development strengthen the understanding of the readers and it would lead to develop their own mental makeup and they would be able to realize what should be followed.

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Kalipada Ghosh Tarai Mahavidyalaya  
Bagdogra, Darjeeling  
Sankar Das  
10/06/2023

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## COURSE OUTCOMES

Course outcome Taught in CBCS syllabus (B.A program / B.A hons. /GE courses)

semester	Course	Course out come
1	CC:101 Understanding Political Science	<ul style="list-style-type: none"> <li>• Knowledge of the meaning, nature and scope of political science</li> <li>• Idea of the theories of political science</li> <li>• Understanding the relationship between political science with other social studies.</li> <li>• Knowledge of the origin and the functions of the state</li> <li>• Understanding the concept of right, liberty, justice, and equality and their interrelationship</li> </ul>
	CC 102. Perspectives of Public Administration	<ul style="list-style-type: none"> <li>• Knowledge of the meaning, dimension, and significance of public and private administration</li> <li>• Understanding the classical theories of public administration.</li> <li>• Idea of the major approaches in public administration,</li> <li>• Knowledge of the concept of public policy, the process of formulation, implementation, and evaluation</li> </ul>
2	CC:203 Indian government and Politics	<ul style="list-style-type: none"> <li>• Knowledge of the process of framing of Indian constitution, philosophy of constitution, features of the constitution</li> <li>• Understanding the fundamental rights and directive principles of state policy and the procedure of amendment of the constitution</li> <li>• Idea of the functions and the position of executives of union and the state and the emergency provisions of India</li> <li>• Acquire the knowledge of compositions, functions, power and positions of legislature of union and the state</li> <li>• Idea of the composition and jurisdiction of judiciary</li> <li>• Understanding the relationship between union and state regarding legislative, administrative and financial powers</li> <li>• Understanding the types of parties, the nature and new trends of political parties</li> </ul>
	CC :204 Western Political Thought	<ul style="list-style-type: none"> <li>• Knowledge of the different ideologies of western political thinkers like Plato, Aristotle, Machiavelli, Bodin, Hobbes, Locke, Rousseau, Bentham, J.S.Mill and Marx</li> <li>• Understanding the theories of justice and the concept of philosopher king given by Plato, theory of revolution and state classification given by Aristotle, concept of sovereignty given by Bodin, different opinion about social contract theories of Hobbes, Locke, Rousseau, concept of utilitarianism given by Bentham, liberty concept given by Mill and the views of Karl Marx regarding dialectical materialism, classless stateless society and surplus value</li> </ul>
3	CC: 305 Comparative Politics	<ul style="list-style-type: none"> <li>• Understanding the nature and scope of comparative politics</li> <li>• Knowledge of the approaches of comparative politics and the major governing principles</li> <li>• Knowledge of the comparative study of executive, legislature and judiciary of different states</li> <li>• Idea of the comparative study of party system of U.K, U.S.A and PRC</li> </ul>



	CC:306 Public policy and Administration	<ul style="list-style-type: none"> <li>• Knowledge of the concept, definition, characteristics and different models of public policy</li> <li>• Idea of the concept, significance of budget, various approaches and types of budget</li> <li>• Understand public service delivery and the concept of social welfare and the approaches of social welfare</li> </ul>
	CC:307 Nationalism in India	<ul style="list-style-type: none"> <li>• Knowledge of the approaches to the study of nationalism in India</li> <li>• Idea of the major social reformation movements in 19<sup>th</sup> century</li> <li>• Understanding different phases of nationalist movement, mass mobilization and social movements</li> <li>• Knowledge of how the partition and independence has been achieved</li> </ul>
4	CC 408: Introduction to international relation	<ul style="list-style-type: none"> <li>• To know origin and growth of international relations</li> <li>• Understand the basic concepts</li> <li>• Examine the major theories of IR and aiming at explaining international problems</li> <li>• Knowledge of the contemporary global issues and international organizations</li> </ul>
	CC 409: Political sociology	<ul style="list-style-type: none"> <li>• Analyze the relationship between state, society and politics</li> <li>• Knowledge of the various social groups and their influence on political behavior</li> <li>• Understand different political issues which have direct influence on society</li> </ul>
	CC 410: Political Theory	<ul style="list-style-type: none"> <li>• Understand the basic values like freedom, equality and justice</li> <li>• Knowledge of the human right and various rights of citizenship</li> <li>• Understand the basic of obligation to the state</li> <li>• Idea if the values of multiculturalism and unity in diversity</li> </ul>
5	CC511 Understanding Global Politics	<ul style="list-style-type: none"> <li>• Concept of the sovereign state system and evolution of the state system along with the core concept of sovereignty.</li> <li>• Idea of the global economy, Bretton Woods Institution and WTO, transnational economic actors, identity and culture.</li> <li>• Analysis of the driving forces which makes the world apart like global inequalities, violence, conflict, war and terrorism.</li> <li>• Understanding the need to bring the world together with a special review of global environment.</li> <li>• Concept of global civil society.</li> </ul>
	CC 512: Indian political thought	<ul style="list-style-type: none"> <li>• A detail discussion on ancient Indian political thought, its main features with contribution of Kautilya.</li> <li>• Study of medieval political thought with features.</li> <li>• Analysis of birth of modernity in India with special reference to Rammohun and Syed Ahmed Khan.</li> <li>• Ideas of nationalism given by Bankimchandra, Tilak and Rabindranath.</li> <li>• Concept of alternative trends in political ideas focusing on the contributions of B.R.Ambedkar on social justice, M.N. Roy on radical humanism and Narendra Deva on socialism.</li> </ul>
	DSE501A: Party system in India	<ul style="list-style-type: none"> <li>• Understanding the meaning, kinds, features and characteristics of political parties and its emerging trends.</li> <li>• Analysis of the organizational structure, ideologies, policies and nature of mass support of major national political parties like INC, BJP, CPIM, BSP, AITMC and their electoral performances.</li> </ul>

		<ul style="list-style-type: none"> <li>Analysis of the reasons behind the growth of regional political parties, its impact on national politics and different coalitions at centre.</li> </ul>
	DSE 502B : International Organizations	<ul style="list-style-type: none"> <li>Study of the emergence of UNO and its charter with its organs.</li> <li>Study of General Assembly and United Nation Development Programme</li> <li>Study of Security Council, its composition and functions, evaluating its role in maintaining world peace, along with India's contribution.</li> <li>Study of composition and functions of International Court of Justice, IMF and European Union.</li> <li>Study of composition and functions of SAARC, ASEAN and WTO and analysis of their role as international organizations.</li> </ul>
6	CC613 : India's Foreign Policy in a Globalized World	<ul style="list-style-type: none"> <li>Understanding of India's foreign policy, its determinants, its ideological roots and evolution.</li> <li>Analysis of India's relation with USA USSR/Russia and China</li> <li>Examining India's regional strategies and its role as a big brother in South Asia</li> <li>Concept of India's negotiating style and strategies in the field of trade environment and security regimes.</li> <li>Understanding India's role in the contemporary multipolar world.</li> </ul>
	CC614 : Political Ideologies :	<ul style="list-style-type: none"> <li>Idea of Liberalism with its characteristics and development</li> <li>Concept of theories of Democracy, and how these theories [like Elite Theory, Pluralist theory and Marxist Theory] are different from each other.</li> <li>Concept of Marxism, Marxian interpretation of history, theory of social and political change and the theory of revolution.</li> <li>Idea of Socialism and Fascism, its emergence, meaning features and development.</li> </ul>
	DSE 603A : India and Her Neighbours	<ul style="list-style-type: none"> <li>Indo Pak relation, their colonial legacies, geographical and strategic importance of these two countries their demographic and socio cultural composition, natural resources along with the nuclear policy of India and Pakistan, Kashmir issue and other areas of cooperation and conflict.</li> <li>Examination of Indo Bangladesh relationship, their colonial legacies, geographical and strategic importance, demographic and socio cultural composition including the areas of cooperation and conflict, special emphasis on refugee problem and Ganga water issue.</li> <li>Analysis of India's relationship with Sri Lanka their geographical and strategic importance, their demography and socio cultural composition, their natural resources including the areas of cooperation and conflict with special focus on Tamil question</li> <li>Concept of India's historical relationship with Nepal, geographical and strategic importance of these two countries along with their demography and socio cultural composition and areas of cooperation and conflict.</li> </ul>
	DSE 604A : Grass root Democracy in India	<ul style="list-style-type: none"> <li>Analysis of historical background of PRI in India after independence.</li> </ul>



		<ul style="list-style-type: none"> <li>• Concept of Gramsabha, Panchayat Samiti and Zila Parishad ,their composition and functions.</li> <li>• Evaluation of Democratic Decentralisation in India.</li> </ul>
	SEC1: Public opinion and survey research	<ul style="list-style-type: none"> <li>• Idea of the concept and definition of public opinion, knowledge of the characteristics of public opinion</li> <li>• Knowledge of sample, need of sample and idea of sample design and the types of sampling</li> <li>• Understand the process of survey research, different types of research and forms of interview</li> <li>• Concept of quantitative data analysis, correlation research, causation and prediction, descriptive and inferential statistics</li> </ul>
	SEC2: Democratic and legal awareness	<ul style="list-style-type: none"> <li>• Understand the legal system in India</li> <li>• Ideas of constitution, fundamental rights, duties, and other rights</li> <li>• Ideas of the laws relating to criminal jurisdiction</li> <li>• Knowledge of the consumer rights, cyber crimes and personal laws in India, practical application of laws</li> </ul>
	GE1: Reading Gandhi	<ul style="list-style-type: none"> <li>• Knowledge of the concept of Gandhi's hind Swaraj and Sarvodaya</li> <li>• Understanding the nationalism and different thoughts of Gandhi</li> <li>• Understanding Gandhi's legacy regarding anti racism movement and pacifist movement</li> <li>• Concept of the new trend of Gandhi's ideology called gandhigiri</li> </ul>
	GE2: Feminism : Theory and Practice	<ul style="list-style-type: none"> <li>• Understand approaches to patriarchy</li> <li>• Understand historical background of feminism</li> <li>• Knowledge of the socialist feminism, women's work and labour</li> <li>• Idea of the Indian feminism, family concept, women's rights</li> </ul>

**N.B All the DSC courses are included in CC courses**

*Srinanda Dasgupta*

(1+1+1) syllabus

Part 1

<p>Paper 1: Political theory</p>	<ul style="list-style-type: none"> <li>• Understand the meaning of politics and differentiate it with political science. Also can understand various approaches of political science like behavioral, system, traditional, Marxist, modern and empirical.</li> <li>• Student can analyze the theories of state and the basics concept like sovereignty, liberty, equality, law and justice.</li> <li>• Determine nationalism; understand meaning and features of third world nationalism, imperialism, and neo-colonialism.</li> </ul>
<p>Paper 2: Comparative constitution and government</p>	<ul style="list-style-type: none"> <li>• Understand the various types of governments and importance of constitution of different countries.</li> <li>• Analyze and compare the constitution of U.K, Russia or Switzerland.</li> <li>• Understand the executive and legislature of U.K.</li> <li>• Come across the party system of U.K and understand about the direct democracy of Switzerland.</li> </ul>
<p>Paper 3: Government and politics in India</p>	<ul style="list-style-type: none"> <li>• Understand the background and the importance of the constitution and preamble as well as the fundamental duties and directives principles.</li> <li>• Determine Indian federalism and come to know about the union state relation in recent times.</li> <li>• Understand the importance and the functions of union executive especially president, vice president, prime minister, and council of minister.</li> <li>• Understand the activities of union legislature, relation between two houses, functions of the speaker and law making process.</li> <li>• Come to know about the governor, chief minister and council of minister, relation between of governor and council of ministers and understand about the composition and functions of the state legislature</li> </ul>
<p>Part 2</p>	



Paper1: Political Theory	<ul style="list-style-type: none"> <li>• Understand class and class struggle as well as the concept of revolution of Marxist theory.</li> <li>• Understand the features and meaning of welfare state.</li> <li>• Analyze the concept of democratic socialism.</li> <li>• Understand activities of political parties and interest groups.</li> </ul>
Paper2: Comparative constitution and government	<ul style="list-style-type: none"> <li>• Come to know the constitution, executive and legislature of USA and PRC.</li> <li>• Understand the party system of USA and PRC.</li> <li>• Analyze the significance of 1949 revolution.</li> <li>• Examine the judiciary system of USA and PRC.</li> </ul>
Paper 3: Government and politics in India	<ul style="list-style-type: none"> <li>• Understand the judiciary system and amendment procedure of India.</li> <li>• Analyze the functions and composition of election commission.</li> <li>• Idea of the provision of Scs, Sts, and Obcs.</li> <li>• Understand the composition and functions of local self government especially of West Bengal.</li> <li>• Come across the features of party system.</li> <li>• Understand caste religion, regionalism and women participation in politics.</li> </ul>
<b>Part3</b>	
Group A	<ul style="list-style-type: none"> <li>• Understand basic characteristics of Indian foreign policy and INDO-Pak relation</li> <li>• Analyze regional cooperation SAARC</li> <li>• Examine human rights in India</li> <li>• Understand concept and meaning of globalization</li> </ul>
Group B	<ul style="list-style-type: none"> <li>• Understand purposes and principles of UNO, various organs, peace-keeping role, achievements, and failure</li> </ul>
Group C	<ul style="list-style-type: none"> <li>• Youth parliament</li> <li>• Field study</li> </ul>

Seminars Gangru  
19/06/2023

Department Of Sanskrit  
Kalipada Ghosh Tarai Mahavidyalay  
Darjeeling

**Programme Outcome, Programme Specific Outcome and course outcome**

• **Programme Outcome :**

The Dept. Of Sanskrit KGT Mahavidyalaya Darjeeling offers one programmes – General only. Students passing out the general programme leave the institution with developed skill to search for suitable jobs through competitive examination, preferable teaching post in schools – Primary, Secondary and Higher Secondary,

The courses for General programme have been designed in such a way that these enhance the understanding, skill and capability of the students. So that the confidence grew in them to enter into academic fields and job market.

The introduction of CBCS system has enhanced the mobilities of the learners as the course have been designed with interdisciplinary thrust. Besides the CBCS system has enabled the students to be more class oriented thereby become with new areas that have been included the courses and also makes their academic attainment more relevant socially.

The programme outcomes, programme specific outcome and course outcomes are evaluated with well thought out plan that helps students to go for continuous evaluation process. The outcomes are measured continuously throughout the semester and the modes of evaluating measures include exposure of students to class test, project works books, articles review field visit and preparation of report.

Course Outcome are also very encouraging as the students are made to go different kinds of test on regular basis that enhance their knowledge base of the course. In this way growing in them a comprehensive of the course taught by the respective faculties.

The method of measurement have been designed in such a way the these have been able to develop critical thinking in the learners, improve the communication and good spirit for being citizen and responsible citizen.

• **Course Outcome**

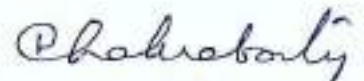
**Semester I**

Sanskrit Drama and General Grammar :

- Drama gives students theatre experience.
- This exposes students to application level of study of language.

Sanskrit Grammar and Comprehension Test

  
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Bagdogra  
9/10/2023



- Learning the Sanskrit Grammar they clearly communicate in Sanskrit.
- They can write and speak correctly.
- They gain the knowledge of sandhi, samasa, karaka etc.

## Semester II

### Sanskrit Poetry

- The students would know about Sanskrit Poetry kavya.
- Improve their knowledge and conversation skill.

## Semester III

### Sanskrit prose

- Identify and describe distinct literary characteristics of poetic forms.
- Effectively communicate ideas related to the poetic work during class and group activities.

### Niti Literature

- They can gain various moral values

### Translation

- Learning the proper Grammar they express their thoughts and idea.
- Can learn the process and techniques of translation.

## Semester – IV

### Rajdharma & Brahmatatta

- To help the students know the basic rules of king.
- Students can able to know value of Kathopanisada

### Yoga and Upanishad

- Learner gains Comprehension of the selected portion of yoga sutras of Patanjali.
- To help the students know about the importance of yoga Philosophy and the theory of salvation.
- Understand the ideas expressed through the uponishadik language of Ishoponishad branch of Sukloyajurveda.

- Students would be able to assimilate the spirit of the uponishads, which would be helpful in building character of the students.

#### History of scientific and Technical Literature in Sanskrit

- Students would be aware of the need to maintain a balance between nature and society.
- Students would be aware of the possibility of drawing necessary knowledge of Ayurveda to augment modern healing practices.

### Semester – V

#### Translation and

#### Computer Application

- Learning the proper Grammar they express their thoughts and idea.
  - Can learn the process and techniques of translation.
  - Students can gain various knowledge of computer.
- #### Kavya & Chanda
- The students would know about Sanskrit Poetry kavya.
  - To build strong foundation in poetic literature.
  - It gives holistic and comprehensive understanding of the subject.
  - To help the students understand about classical metres.


#### Basic Sanskrit Grammar

- Learning the Sanskrit Grammar they clearly communicate in Sanskrit
- They can write and speak correctly.
- They can gain the knowledge of sandhi samasa and karaka etc.

#### History of Sanskrit Literature

Students will be able to know –

- Different branches of Sanskrit Literature.

 30/06/2023



- The author and their works in those branches.

Drama

Students –

- Gain a good acquaintance with the classical Sanskrit Drama,
- Drama gives students theatre experience.

### Semester – VI

Yoga & Upanisada

- To demonstrate the deep Philosophical understanding of self and society.
- It gives holistic and comprehensive understanding of the subject.
- To able to comprehend and analyze the significance of disciplined life.

Literally criticism and kavya

- Students will be able to identify the merits and demerits of poetry.
- Improve their knowledge and conversation skills.
- To educate about definition, utility, purpose, classification of ancient poetry.

History of Scientific and Technical Literature in Sanskrit.

- Students would be aware of the need to maintain a balance between nature and society.
- Students would be aware of the possibility of drawing necessary knowledge of Ayurveda to augment modern healing practices.

Translation & Comprehension Test

- Learning the proper Grammar they express their thoughts and idea.
- Can learn the process and techniques of translation.
- Comprehend the universal ethical values embodied in the Sanskrit Literature.

### **Course Outcome**

Students -

- Will be able to identify the merits and demerits of poetry.
- Be able to gain knowledge of various standard in poetry. Makes out the nature of words and their meanings.
- Will be encouraged to study more about the yogic text.
- Gain practical benefits in terms of improved health and sound mind.

- Get awareness and deep knowledge of poems and poets.
- To analyze the poetic perspective, freedom and license.

### **B.A old part III(third year) General course**

Programme Specific Outcome

Part I – Paper I

Unit I – Chhandomanjari

- To help the students understand about classical metres.

Unit II – Svapnabhasvadattam

- Students can evaluate and interpret of a topic.

Unit III – Declension and Conjunction

- Learning the proper grammar they express their thoughts and ideas.
- They can write speak correctly.

Paper II-Drama & Principles of Paninian Grammar

Unit I – Drama

Students -

- Gain a good acquaintance with the classical Sanskrit Drama.

Unit II – Laghusiddhantokoumudi – Karaka

- Students get training in the advanced theories of karaka.
- The ability to understand the complexities of syntax and semantics of Sanskrit.
- The ability to apply grammatical rules in examples

Paper III History of Sanskrit Literature

Students will be able to know –

- Different branches of Sanskrit Literature.
- The authors and their works in those branches.

Part – II

Paper IV –

Unit I-Laghusiddhantakaumudi

Students get –



- Acquaintanceship with the basic structure of Paninian grammar.
- An insight to the simple derivative style adopted in the laghusiddhantakaumudi.
- The ability to apply grammatical rules in examples.
- The ability to Derive word forms with the application of grammatical rules.

#### Unit II – Hitopodesa

- Students can read various fable in Hitopodesa
- They can gain moral value of mitralabha.

#### Unit III – Translation

- Learning the proper Grammar they express their thoughts and idea.
- Can learn the process and techniques of translation.

#### Unit IV Chanakyaniti

- To make the students a moral character

#### Paper V

##### Unit I-Raghubamsa Canto I

Learner will be given to –

- Understand the selected portion of the masterpiece of Kalidasa.
- Have an acquaintance with the classical Sanskrit Poetry.
- Comprehend the universal ethical values embodied in the Sanskrit Literature.

##### Unit II – Vacya

- Students can write and reading properly in Sanskrit.

##### Unit III Translation

- Learning the proper Grammar they express their thoughts and idea

##### Unit IV – Comprehension Test

- Comprehend the universal ethical values embodied in the Sanskrit Literature.

#### Paper VI Rajdharma and Brahmatatta

##### Unit I – Ishoponisada

- Students can gain value of uponisada

##### Unit II Manusambhita

- To help the students know the basic rules of king.

##### Part III

#### Paper VII

##### Unit I - :Sahityadarpana Chapter x

- The fundamental ideas of Sanskrit Aesthetics and literary criticism.
- Different schools of Aesthetics and literary criticism developed based on the Natyashastra of Bharatmuni.
- Students would know the beginning of the Alamkar school.

Unit II - : Mahabharata Udyogaparva

- Students can gain various knowledge from Mahabharata.
- To help the students know about the importance of Mahabharata.

Unit III - : General acquaintance with Sanskrit works on social scientific and Technical Literature.

- Students would be aware of the need to maintain a balance between nature and society.
- Students would be aware of the possibility of drawing necessary knowledge of Ayurveda to augment modern healing practices.

Unit IV - :Letter Writing

- Students will be able to write Devanagari scripts.
- Students would be able to write a letter in Sanskrit & their language – skill will be developed.

#### Programme Specific Outcome

- Advanced Knowledge of ancient Indian Philosophy Literature and history.
- Command over Devanagari script which provide them the paleographical knowledge to read out the script of modern languages like Hindi.
- Recognize different value systems including your own understand the moral dimensions of your decisions and accept responsibility and also to develop a scientific approach towards analysis of modern texts.

07/04/2023  
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KGTM Sagdora

Prakabati  
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Sagdora  
9/6/2023



**B. A. Honours & Programme Course in Sociology under CBCS, University of North Bengal -Session 2022-2023**

**Programme Objectives of Sociology**

Sociology provides initial knowledge about society, social processes, social relationships and interactions. It acquaints an individual to understand social life by inculcating values, morals and ideals. It gives knowledge about various social groups and societies such as rural, urban and tribal groups. Sociology also aims to provide a comprehensive knowledge about recent changes and development taking place in society.

The programme offers basic and advanced theoretical and methodological knowledge of Sociology, thereby enhancing logical and analytical skills of the students.

**Program Outcomes (PO)**

The course offers to address a variety of outcomes such as:

- \*Providing theoretical and methodological sociological knowledge to students to understand human behavior, social processes.
- \*Enhancing the critical and logical thinking and expression among the students.
- \*Greater employability in various public and private sectors such as - Teaching, Research, NGOs, Private sectors, and MNCs.

**Overall Course Objectives (CO)**

The Under Graduate Programme in Sociology is designed to provide advanced sociological knowledge, perspectives and skills to all the learners. This course is designed to provide basic and advanced theoretical as well as methodological knowledge of sociology for application. The course has been designed in such a way that it offers students to choose between various options in the syllabus.

This course is designed in a way to enable students to apply sociological knowledge in the fields such as; Teaching and research, Public Policy making, public sectors and private sectors.

The programme, apart from enhancing theoretically knowledge, enriches the students to analyze the social reality by using empirical knowledge to analyze and compare contemporary social issues with different theoretical and methodological perspectives.

**Overall Course Outcomes:**

This course is designed such way that offers multiple employment opportunities to the learners in the fields of

  
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Teachings and research, NGOs, Corporate and Governmental sectors.

This course helps students to opt for a career in academics thereby qualifying NET/SET and Competitive Exams such as MPSC/UPSC, Social Welfare Departments and others.

The sociological knowledge, thus provided to students would be beneficial in the social reconstruction. Since the course is aimed to enhance the rational, critical and logical understanding of the students, it will further help the policy makers to initiate strategies for social development.

Program Specific outcome (PSOs)	Program outcome (POs)
Course: BA SOCIOLOGY (Honours Programme)	Program outcome (POs)
POS 1: Introduction to Sociology - I	The students are able understand origin and development of sociology and its scientific nature and its relationship with other social sciences and its branches. The basic concepts like social structure, function, values and role and status .It also helps to understand social control agencies and their influences and culture, its elements and socialization processes. The course is intended to introduce the students to a sociological way of thinking. It also provides a foundation for the other more detailed and specialized courses in sociology.
POS-2: India Society-I	This paper introduces the processes and modes of construction of knowledge of India. Further, it aims to draw attention to the key concepts and institutions which are useful for the understanding of Indian society.  This paper aims at acquainting the students with the conceptual framework of Indian social system. It will further enable the students to understand the dynamics of social institutions. Besides, the enlighten with the knowledge of theoretical as well as methodological perspectives of studying Indian Society.
POS-3: Introduction to Sociology -II	This course aims to provide a general introduction to sociological thought. The focus is on studying from the original texts to give the students a flavour of how over a period of time thinkers have conceptualized various aspects of society. This paper also provides a foundation for thinkers in the other papers. The objective of the paper is to give an analytical and cognitive approach which will provide students to acquaint with classical, modern and Indian sociological thinkers
POS-4: Indian Society-II	to draw attention to the variety of ideas and debates about India. Further, it critically engages with the multiple socio-political forces and ideologies which shape the terrain of the nation. This course aims at providing a theoretical knowledge on social change and development. It will enable the students to understand the processes of change and development in society.
POS-5: Rethinking Development	This paper examines the ideas of development from a sociological perspective. It introduces students to different approaches to understanding development and traces the trajectory of Indian experience with development from an interdisciplinary perspective.  This paper aims at acquainting the students with the conceptual meaning of



	sociology of development. Further it enables the students to understand the scope, models, and aspects of social, economic development, Human Development, gender issues along with socioeconomic planning.
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POS -6:Sociology of Religion	The course lays primacy to the understanding of the importance of religion in society. Drawing heavily from classical writings on the subject it reinforces importance of the positions developed in these texts. Implicitly numerous interconnections can be attempted between various themes, manifestly the overarching concern of the paper is to follow up the linkage between social and religious issues. It introduces critical sociological through and its impact on society
POS- 7:Society and Gender	This course introduces gender as a critical sociological lens of enquiry in relation to various social fields It also interrogates the categories of gender, sex, sexuality, gender role, inequalities, theories of feminism and initiatives taken for development
POS-8: Rural Sociology	Rural sociology is a specialised branch of sociology. It analyses the nature and dynamics of village society and rural areas. In the context of India rural sociology occupies a unique position. This paper is designed to bring out the distinctive features, their structures, changing features, rural problems and development programmes in rural society in India.
POS -9:Sociology of Kinship	This course aims to introduce general principles of kinship and marriage by reference to key terms and theoretical statements substantiated by ethnographies. The course looks at the trajectories and new directions in kinship studies
POS-10: Social Stratification	This course introduces students to sociological study of social inequalities. It acquaints students with principal theoretical perspectives on and diverse forms of social inequalities in articulation with each other. This course discusses major sociological approaches to the study of social stratification and inequality. It introduces the students with concepts of social stratification social inequality, with an emphasis on the major dimensions and forms of stratification in India and global society. The course will equip the students various social and, economic and structural stratification in global society.
POS-11: Sociological Thinkers –I & POS-13: Sociological Thinkers-II	The course introduces the students to the classics in the making of the discipline of sociology through selected texts by the major classical sociological thinkers. It introduces and equips the students to post-classical sociological thinking through some original texts.
POS -12:Sociological Research Methods –I & POS -14:Research Methods -II	<p>This course is a general introduction to the methodologies of sociological research methods. It will provide the student with some elementary knowledge of the complexities and philosophical underpinnings of research.</p> <p>It is followed by introductory course on how research is actually done. With emphasis on formulating research design, methods of data collection, and data analysis, it will provide students with some elementary knowledge on how to conduct both, quantitative and qualitative research. This course prepares the students to undertake field survey, data analysis and interpretation</p>



POS-15:DSE-Urban sociology	This course provides an exposure to key theoretical perspectives for understanding urban life in historical , ecological concerns and contemporary contexts. It also reflects on some concerns of urban living while narrating the subjective experiences of urban communities. With case studies from India and other parts of the world this course will help students relate to the complexities of urban living.
POS-16:DSE—Agrarian sociology	This course explores the traditions of enquiry and key substantive issues like caste and agrarian structure, gender and agrarian realities and agrarian crisis and agrarian movements in agrarian sociology. It is comparative in nature but pays attention to Indian themes. It also introduces emerging global agrarian concerns.
POS-17:DSE-Field Work	This paper aims to equip students with empirical field data collection, analysis and writing analytical and standard dissertation or research report in sociology. The students apply sociological research theories and tools for analysis of society. For the purpose of data collection students require to undertake a field visit to neighboring /area/ village/ town individually or in a group for 10 days for empirical data collection.
POS-18:DSE-India Sociological Traditions	Traditions in Indian Sociology can be traced with the formal teaching of sociology as a subject in Bombay University way back in 1914 while the existence of sociology in India and “Sociology of India “have been largely debated in terms of whether it has been influenced by western philosophy, is there a need for indigenization etc. sociologists in India primarily been engaged with issue of tradition and modernity, caste, tribe, and gender. This paper primarily provides perspectives of key Indian Sociologists on some of these issues, themes and perspectives.
POS-19: GE-Gender and violence	Gendered violence is routine and spectacular, structural as well as situated. This course attempts to provide an understanding of the logic of that violence, awareness of its most common and tries to equip the students with a sociologically informed basis for making pragmatic, ethical and effective choices while resisting or intervening in the context of gendered violence.
POS-20: GE-Sociology of Education	This course intends to familiarize the students with perspectives on the social meaning of education and the relationship between education and society. This includes issues of knowledge, comprehension, empowerment and contestation to sites and practices of education
POS-21: GE Population and Society	This course provides a critical understanding of the interface between population and society. It analyses the role of fertility, mortality and migration on the composition, size, and structure of population. The course addresses the issue of domestic and international population movements and their economic, political and social implications

POS-22: GE Sociology of Work	The course introduces the idea that though work and production have been integral to societies through time, the origin and spread of industrialization made a distinct rupture to that link. This rupture can also be seen mirrored in the coming of sociology as a discipline that considered work as central to the study of society. It familiarizes the students with different types and problems of workers in the changing nature of work, problems of security and risks and hazards facing the workers.
POS-23 SEC-Sociology of Media	The purpose of this paper is to introduce the students to certain major themes of outlining the interconnections between media and society. The focus specifically is on the transmission and reception of media content and thus the various sections in this paper study the production, control and reception of media and its representations
POS-24: SEC- Visual sociology	This course focuses on doing sociology through forms other than the written in particular Visual object; Visual sociology is an area of sociology concerned with the visual dimensions of social life. It is the use of sociological imagination to tell a story visually about social phenomena such as gender, social status, cultural forms and other social interactions in spatial contexts. Students learn to create sociological portraits, to study sociological landscapes, to do studies on social traumas and to study signs and representations. Students utilize digital cameras and other recording technology to collect

Paper - DSCP Programme	Objective
DSC -1 Introduction to Sociology	<p>The course is intended to introduce the students to a sociological way of thinking. It also provides a foundation for the other more detailed and specialized courses in sociology.</p> <p>Outcome: Skill to look at social reality and its change from differential perspectives. Development of Sociology as Discipline and basic concepts in Sociology.</p>
DSC – 2 Sociology of India	<p>This paper aims to provide an outline of the institutions and processes of Indian society. The central objective is to encourage students to view the Indian reality through a sociological lens.</p> <p>Outcome: Using sociological methods to study Indian Society, a critical view on Indian Social structure and looking upon Indian social organisation as a dynamic phenomenon is gained.</p>
DSC –3Sociological theories	<p>This course introduces the students to the classical sociological thinkers. It further helps the students to have an idea about how their thought and work has shaped the discipline of Sociology.</p> <p>Outcome: Ability to develop foundational knowledge of the discipline and</p>



to know Classical perspectives to understand society. Difference between scientific and non-scientific knowledge.

DSC – 4 Techniques of Social Research

This course aims to enhance the skills of students to understand and use techniques employed by social scientists to investigate social phenomena. With emphasis on formulating research design, methods of data collection, and data analysis, it will provide students with some elementary knowledge on how to conduct both, quantitative and qualitative research. The focus is on understanding through suggested exercises.

Outcome: Ability to undertake social scientific research with a specific research design and data collection tools and techniques. Ability to exercise ethics in research and to unify acquired knowledge through inductive and deductive methods. It also helps to carry out research useful for policy formulation and in the process creating Knowledge.

DSE – 01 a. Religion and Society	This course acquaints the student with a sociological understanding of religion. It examines some forms of religions in India and its role in modern society.	<p>Knowledge about the theories and concepts about Religion.</p> <p>Knowledge about the interrelationship between Religion and society , Religious organisation, ideas on the issues of secularism and communalism in India.</p> <ol style="list-style-type: none"> <li>1. Understanding Religion.</li> <li>2. Religion in India: Fundamental Doctrine, Features and Influence.</li> <li>3. Secularism and Communalism</li> </ol>



		<p>in India.</p> <p>4. Knowledge about different theories on religion.</p> <p>1. Knowledge about cultural diversities, and different religion in India.</p>
<p>DSE – 01      b. Marriage, Family and Kinship</p>	<p>This course aims to highlight and critically examine contemporary concerns in the fields of marriage, family and kinship. It considers theoretical issues and ethnographies with particular emphasis on diversity of practices.</p> <p>Outcome: Ability to understand and explain the social institutions – family, marriage and kinship.</p> <p>Ability to draw a comparative perspective about how these institutions function in the West and in India.</p>	

  
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<p>DSE – 02 a. Social Stratification</p>	<p>The course introduces the students about the various ideas of social inequality and their sociological study. The different forms and institutional manifestations of social stratification are explored here both theoretically and through case studies.</p> <p>Outcome: Knowledge about theories and forms of Social Stratifications. Knowledge about concepts of gender, poverty and social mobility in the study of Social Stratifications Social Stratification.</p>
<p>DSE – 02 b. Gender and Sexuality</p>	<p>This course aims to introduce students to a basic understanding of gender by interrogating the categories of gender, sex and sexuality. The complexity of gender relations in contemporary societies are further explored by looking in the areas of work and family.</p> <p>Outcome: Ability to interpret gender relations and to explain the problems faced by the women of different categories</p>

  
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 Bagdogra

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Kalipada Ghosh Tarai Mahavidyalaya

Department of Chemistry

Course Outcome (CBCS, session 22-23)

**Semester 1** Course floated: Atomic structure, Bonding, General organic chemistry and aliphatic hydrocarbons . The followings are the part of this course and the respective outcomes (in bulleted text)

<u>Course content</u>	<u>Outcome</u>
Atomic Structure, Chemical Bonding and Molecular Structure	<ul style="list-style-type: none"><li>• Bohr's Theory And Its Limitations, Origin Of Hydrogen Spectrum</li><li>• dualbehaviour of matter and radiation, deBroglie's relation, Heisenberg Uncertainty principle. Hydrogen atom spectra.</li><li>• Need of a new approach to Atomic structure.</li><li>• Time independent Schrodinger equation and meaning of various terms in it.</li><li>• Significance of Quantum numbers</li></ul>
Chemical Bonding and Molecular Structure: Ionic Bonding	<ul style="list-style-type: none"><li>• General characteristics of ionic bonding. Energy considerations in ionic bonding, lattice</li><li>• energy and solvation energy and their importance in the context of stability and solubility of ionic compounds.</li><li>• Statement of Born-Landé equation for calculation of lattice energy, Born-Haber cycle and its applications</li><li>• polarizing power and polarizability. Fajan's rules, ionic character in covalent compounds</li><li>• bond moment, dipole moment and percentage ionic character.</li></ul>
Covalent Bonding	<ul style="list-style-type: none"><li>• Shapes of some inorganic molecules and ions on the basis of VSEPR and hybridization</li><li>• suitable examples of linear, trigonal planar, square planar, tetrahedral, trigonal bipyramidal and octahedral arrangements.</li></ul>

Head of Department  
Department of Chemistry  
Kalipada Ghosh Tarai Mahavidyalaya  
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Bagdogra 2/6/2023

	<ul style="list-style-type: none"> <li>• Concept of resonance and resonating structures in various inorganic and organic compounds</li> </ul>
<b>M.O. Theory</b>	<ul style="list-style-type: none"> <li>• LACO theory and its aspects</li> <li>• Bonding, Anti-bonding and Non-bonding orbitals</li> <li>• MO treatment of Homonuclear molecules: <math>H_2</math>, <math>He_2</math>, <math>O_2</math>, <math>F_2</math>, <math>N_2</math>, <math>Be_2</math></li> </ul>
<b>Fundamentals of Organic Chemistry</b>	<ul style="list-style-type: none"> <li>• Physical Effects, Electronic Displacements: Inductive Effect, Electromeric Effect, Resonance and Hyperconjugation.</li> <li>• Cleavage of Bonds: Homolysis and Heterolysis.</li> <li>• Structure, shape and reactivity of organic molecules</li> <li>• Reactive Intermediates: Carbocations, Carbanions and free radicals.</li> <li>• Strength of organic acids and bases: Comparative study with emphasis on factors affecting pK values.</li> <li>• Aromaticity: Benzenoids and Hückel's rule.</li> </ul>
<b>Stereochemistry</b>	<ul style="list-style-type: none"> <li>• Conformations with respect to ethane, butane and cyclohexane.</li> <li>• Projection of 3D molecules on 2D: Interconversion of Wedge Formula, Newmann, Sawhorse and Fischer representations.</li> <li>• Concept of chirality Configuration: Geometrical and Optical isomerism; Enantiomerism, Diastereomerism and Meso compounds. Threo and erythro; D and L; cis - trans nomenclature; CIP Rules: R/S (for upto 2 chiral carbon atoms) and E / Z Nomenclature (for upto two C=C systems).</li> </ul>
<b>Alkanes:</b>	<ul style="list-style-type: none"> <li>• Preparation: Catalytic hydrogenation, Wurtz reaction, Kolbe's synthesis, from Grignard reagent.</li> <li>• Reactions: Free radical Substitution: Halogenation.</li> </ul>
<b>Alkenes:</b>	<ul style="list-style-type: none"> <li>• Preparation: Elimination reactions: Dehydration of alkenes and dehydrohalogenation of alkyl halides (Saytzeff's rule); cis alkenes (Partial catalytic hydrogenation) and trans alkenes (Birch reduction).</li> </ul>



<p><u>Alkynes:</u></p>	<ul style="list-style-type: none"> <li>• Reactions: cis-addition (alk. <math>\text{KMnO}_4</math>) and trans-addition (bromine), Addition of HX (Markownikoff's and anti-Markownikoff's addition), Hydration, Ozonolysis, oxymecuration-demercuration, Hydroboration-oxidation.</li> <li>• Preparation: Acetylene from <math>\text{CaC}_2</math> and conversion into higher alkynes; by dehalogenation of tetra halides and dehydrohalogenation of vicinal-dihalides.</li> <li>• <b>Reactions:</b> formation of metal acetylides, addition of bromine and alkaline <math>\text{KMnO}_4</math>, ozonolysis and oxidation with hot alk. <math>\text{KMnO}_4</math>.</li> </ul>
<p><u>Chromatographic separation and purification of organic compounds</u></p>	<ul style="list-style-type: none"> <li>• Separation of mixtures by Chromatography: Measure the <math>R_f</math> value in each case</li> <li>• Identification and separation the components of a given mixture of two amino acids and carbohydrates by paper chromatography .</li> </ul>

**Semester 2** Course floated: Chemical energetic, Equillbria, and Functional group organic chemistry

The followings are the part of this course and the respective outcomes ( in bulleted text)

<p><u>Thermodynamics</u></p>	<ul style="list-style-type: none"> <li>• Basic Definitions and mathematical background.</li> <li>• First Law, Enthalpy Functions, Relation between <math>C_p</math> and <math>C_v</math>, Joule-Thomson Experiment,</li> <li>• Inversion of Temperature, Adiabatic Changes in State, Enthalpies of Chemical Changes</li> <li>• Important principles and definitions of thermochemistry. Hess's Law: mathematical problems</li> <li>• The Second Law ,Carnot Cycle and its efficiency. Variation of enthalpy of a reaction with temperature – Kirchhoff's equation.</li> <li>• Statement of Third Law of thermodynamics . Entropy</li> </ul>
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<b>Chemical Equilibria</b>	<ul style="list-style-type: none"> <li>Free energy change in a chemical reaction. Thermodynamic derivation of the law of chemical equilibrium.</li> <li>Le Chatelier's principle and dependence of pressure, temperature and volume on system.</li> <li>Relationships between <math>K_p</math>, <math>K_c</math> and <math>K_x</math> for reactions involving ideal gases</li> </ul>
<b>Ionic Equilibria</b>	<ul style="list-style-type: none"> <li>Strong, moderate and weak electrolytes, degree of ionization,</li> <li>Factors affecting degree of ionization, ionization constant and ionic product of water.</li> <li>pH scale and numericals</li> <li>common ion effect. Salt hydrolysis- calculation of hydrolysis constant, degree of hydrolysis</li> <li>pH for different salts.</li> </ul>
<b>Aromatic hydrocarbons</b>	<ul style="list-style-type: none"> <li>Buffer solutions. Solubility and solubility product of sparingly soluble salts – applications of</li> <li>solubility product principle.</li> </ul>
<b>Aromatic hydrocarbons</b>	<ul style="list-style-type: none"> <li>Preparation of substituted benzene derivatives</li> <li>Electrophilic substitution: nitration, halogenation and sulphonation. Friedel-Craft's alkylation and acylation.</li> <li>Side chain oxidation of alkyl benzenes</li> </ul>
<b>Alkyl Halides</b>  <b>Aryl Halides</b>	<ul style="list-style-type: none"> <li>Types of Nucleophilic Substitution (<math>S_N1</math>, <math>S_N2</math> and <math>S_Ni</math>) reactions.</li> <li>Preparation: from alkenes and alcohols.</li> <li>Reactions: hydrolysis, nitrite &amp; nitro formation, nitrile &amp; isonitrile formation. Williamson's ether synthesis: Elimination vs substitution.</li> <li>Preparation of aryl halides from phenol, Sandmeyer &amp; Gattermann reactions.</li> <li>Aromatic nucleophilic substitution</li> <li>Benzyne Mechanism: <math>KNH_2/NH_3</math> (or <math>NaNH_2/NH_3</math>)</li> <li>Reactivity and Relative strength of C-Halogen bond in alkyl, allyl, benzyl, vinyl and aryl halides.</li> </ul>
<b>Alcohols</b>	<ul style="list-style-type: none"> <li>Preparation: Preparation of 1o, 2o and 3o alcohols: using Grignard reagent, Ester hydrolysis, Reduction of aldehydes,</li> </ul>



	<p>ketones, carboxylic acid and esters.</p> <ul style="list-style-type: none"> <li>• Reactions: With sodium, HX (Lucas test), esterification,</li> <li>• Oxidation (with PCC, alk. KMnO<sub>4</sub>, acidic dichromate, conc. HNO<sub>3</sub>). Oppeneauer oxidation.</li> <li>• Diols: Oxidation of diols. Pinacol-Pinacolone rearrangement.</li> </ul>
<u>Phenols</u>	<ul style="list-style-type: none"> <li>• Preparation: Cumenehydroperoxide method, from diazonium salts.</li> <li>• Reactions: Electrophilic substitution: Nitration, halogenation and sulphonation. Reimer- Tiemann Reaction, Gattermann-Koch Reaction, Houben-Hoesch Condensation, Schotten – Baumann Reaction.</li> </ul>
<u>Aldehydes and ketones</u>	<ul style="list-style-type: none"> <li>• Chemistry of formaldehyde, acetaldehyde, acetone and benzaldehyde.</li> <li>• Preparation: from acid chlorides and from nitriles.</li> <li>• Reactions Reaction with HCN, ROH, NaHSO<sub>3</sub>, NH<sub>2</sub>-G derivatives. Iodoform test. Aldol Condensation, Cannizzaro's reaction, Wittig reaction, Benzoin condensation. Clemensen reduction and Wolff Kishner reduction. Meerwein-Pondorff -Verley reduction.</li> </ul>

**Semester 3** Course floated: Solutions Phase Equilibria, Conductance, Electrochemistry & Functional groups Organic Chemistry –II

The followings are the part of this course and the respective outcomes (in bulleted text)

Course content	Outcome
<u>Solution Chemistry</u>	<ul style="list-style-type: none"> <li>• Thermodynamics of ideal solutions: Ideal solutions and Raoult's law, deviations from</li> <li>• Raoult's law, non-ideal solutions.</li> <li>• Vapour pressure-composition and temperature-composition curves of ideal and non-ideal solutions.</li> <li>• Distillation of solutions. Lever rule. Azeotropes.</li> <li>• Nernst distribution law and its applications</li> </ul>
<u>Phase equilibria</u>	<ul style="list-style-type: none"> <li>• Phases, components and degrees of freedom of a system, criteria of phase equilibrium.</li> <li>• Gibbs Phase Rule. Derivation of Clausius-Clapeyron equation and its importance in phase equilibria.</li> <li>• Phase diagrams of one-component system (water) and two component systems involving eutectics, congruent and incongruent melting points (Pb-Ag, FeCl<sub>3</sub>-H<sub>2</sub>O and Na-K only)</li> </ul>
<u>Conductance</u>	<ul style="list-style-type: none"> <li>• Conductivity, equivalent and molar conductivity and their variation with dilution for weak and strong electrolytes.</li> <li>• Kohlrausch law of independent migration of ions. Applications of conductance measurements</li> <li>• determination of degree of ionization of weak electrolyte, solubility and solubility products of sparingly soluble salts,</li> <li>• Ionic product of water, hydrolysis constant of a salt, conductometric titrations (only acid base).</li> </ul>
<u>Electrochemistry</u>	<ul style="list-style-type: none"> <li>• Reversible and irreversible cells. Concept of EMF of a cell.</li> <li>• Nernst equation and its importance. Types of electrodes.</li> <li>• Standard electrode potential.</li> </ul>



	<p>Electrochemical series.</p> <ul style="list-style-type: none"> <li>• Calculation of thermodynamic properties (of a reversible cell): <math>\Delta G</math>, <math>\Delta H</math> and <math>\Delta S</math> and equilibrium constant from EMF data.</li> <li>• Potentiometric titrations -qualitative treatment (acid-base and oxidation-reduction only).</li> </ul>
<p><u>Carboxylic acids and their derivatives: The students would learn from this part of the course about</u></p>	<ul style="list-style-type: none"> <li>• Preparation of Carboxylic acids</li> <li>• Acidic and Alkaline hydrolysis of esters and reactions</li> <li>• Preparation: Acid chlorides, Anhydrides, Esters and Amides from acids and their interconversion.</li> </ul>
<p><u>Amines and Diazonium salts: This part gives the knowledge about</u></p>	<ul style="list-style-type: none"> <li>• Aliphatic and Aromatic amines and their preparation from alkyl halides, Gabriel's Phthalimide synthesis, Hofmann Bromamide reaction.</li> <li>• Elimination reactions and degradation.</li> <li>• Electrophilic substitution of aromatic amines.</li> </ul>
<p><u>Amino acids, peptides and proteins</u></p>	<ul style="list-style-type: none"> <li>• Preparation and properties of Amino Acids: Zwitterion, Isoelectric point and Electrophoresis.</li> <li>• Reactions of Amino acids: ester of <math>-\text{COOH}</math> group, acetylation of <math>-\text{NH}_2</math> group, complexation with <math>\text{Cu}^{2+}</math> ions, ninhydrin test.</li> <li>• Primary, Secondary, Tertiary and Quaternary Structure of proteins.</li> <li>• Determination of Primary structure of Peptides by degradation Edmann degradation (N-terminal) and C-terminal (thiohydantoin and with carboxypeptidase enzyme).</li> <li>• Peptide synthetic strategies in solution</li> <li>• Solid-phase peptide synthesis.</li> </ul>
<p><u>Carbohydrates</u></p>	<ul style="list-style-type: none"> <li>• Classification of carbohydrates</li> <li>• Structures: Open chain and cyclic forms</li> <li>• Determination of configuration of monosaccharides</li> <li>• Reactions: Mutarotation, ascending and descending in monosaccharides.</li> <li>• Chemistry of sucrose, cellobiose, maltose, lactose and polysaccharides like starch</li> </ul>

	and cellulose
<b>Pharmaceutical Chemistry (Skill Enhancement Course)</b>	<ul style="list-style-type: none"> <li>• The Classification of drugs and their discovery, design and development and therapeutic uses;</li> <li>• Basic Retrosynthetic approach.</li> <li>• Synthesis of the representative drugs of the following classes: analgesics agents, antipyretic agents, anti-inflammatory agents (Aspirin, paracetamol, Ibuprofen); Antimalarials: Chloroquine (with synthesis), antibiotics; antibacterial and antifungal agents, Central Nervous System agents, HIV-AIDS related drugs : AZT- Zidovudine.</li> <li>• Medicinal values of natural products: curcumin (haldi), azadirachtin (neem), vitamin C and antacid (ranitidine).</li> <li>• Antibiotics; Penicillin, Cephalosporin, Chloramycetin and Streptomycin</li> </ul>

**Semester 4 Course floated: Transition Metals & Coordination Chemistry, States of Matter & Chemical Kinetics**

<b>Transition Elements (3d series)</b>	<ul style="list-style-type: none"> <li>• General group trends</li> <li>• special reference to electronic configuration, variable valency, colour, magnetic properties, and ability to form complexes.</li> <li>• Lanthanoids and actinoids:</li> <li>• Electronic configurations, oxidation states, colour, magnetic properties</li> <li>• Lanthanide contraction.</li> </ul>
<b>Coordination Chemistry</b>	<ul style="list-style-type: none"> <li>• Valence Bond Theory (VBT): Inner and outer orbital complexes of Fe, Co, Ni and Cu</li> <li>• Structural and stereoisomerism in complexes with coordination numbers 4 and 6.</li> <li>• Drawbacks of VBT.</li> <li>• IUPAC system of nomenclature</li> </ul>
<b>Crystal Field Theory</b>	<ul style="list-style-type: none"> <li>• Crystal field effect, octahedral symmetry. Crystal field stabilization energy (CFSE)</li> <li>• Crystal field effects for weak and strong fields.</li> </ul>

	<ul style="list-style-type: none"> <li>• Tetrahedral symmetry. Factors affecting the magnitude of <math>\Delta_o</math>.</li> <li>• Spectrochemical series.</li> <li>• Comparison of CFSE for <math>D_{4h}</math> and <math>T_d</math> complexes</li> <li>• Jahn-Teller distortion</li> </ul>
<u>Gases</u>	<ul style="list-style-type: none"> <li>• Postulates of Kinetic Theory of Gases and derivation of the kinetic gas equation.</li> <li>• Deviation of real gases from ideal behavior, compressibility factor, causes of deviation.</li> <li>• van der Waals equation of state for real gases.</li> <li>• What is Boyle temperature and what is its significance</li> <li>• Critical phenomena, critical constants and their calculation from van der Waals equation.</li> <li>• Significance of Andrews isotherms</li> <li>• Maxwell Boltzmann distribution laws of molecular velocities and molecular energies and their importance. Temperature dependence of these distributions. Most probable, average and root mean square velocities.</li> <li>• Collision of gas molecules: Collision cross section, collision number, collision frequency, collision diameter and mean free path of molecules. Viscosity of gases and effect of temperature and pressure on coefficient of viscosity</li> </ul>
<u>Liquids</u>	<ul style="list-style-type: none"> <li>• Surface tension and its determination using stalagmometer.</li> <li>• Viscosity of a liquid and determination of coefficient of viscosity using Ostwald viscometer.</li> <li>• Effect of temperature on surface tension and coefficient of viscosity of a liquid</li> </ul>
<u>Solids</u>	<ul style="list-style-type: none"> <li>• Forms of solids.</li> <li>• Symmetry elements, unit cells, crystal systems</li> <li>• Bravais lattice types and identification of lattice planes.</li> <li>• Laws of Crystallography . Miller indices.</li> <li>• X-Ray diffraction by crystals, Bragg's law.</li> </ul>



	<p>Structures of NaCl, KCl and CsCl</p> <ul style="list-style-type: none"> <li>Defects in crystals. Glasses and liquid crystals.</li> </ul>
<b>Chemical Kinetics</b>	<ul style="list-style-type: none"> <li>The concept of reaction rates.</li> <li>Effect of temperature, pressure, catalyst and other factors on reaction rates.</li> <li>Order and molecularity of a reaction.</li> <li>Derivation of integrated rate equations for zero, first and second order reactions (both for equal and unequal concentrations of reactants).</li> <li>Half-life of a reaction.</li> <li>General methods for determination of order of a reaction.</li> <li>Concept of activation energy and its calculation from Arrhenius equation.</li> <li>Theories of Reaction Rates: Collision theory and Activated Complex theory of bimolecular reactions. Comparison of the two theories</li> </ul>
<b>Green Chemistry (Skill Enhancement Course)</b>	<ul style="list-style-type: none"> <li>What is Green Chemistry?</li> <li>Twelve principles of Green Chemistry</li> <li>Atom economy,</li> <li>Reducing toxicity</li> <li>What are green solvents and their uses, Green catalytic methods</li> <li>Alternative sources of energy: uses of microwave, sonication</li> <li>Green energy and sustainability</li> <li>Surfactants for carbon dioxide – Replacing smog producing and ozone depleting solvents with CO<sub>2</sub> for precision cleaning and dry cleaning of garments.</li> <li>Designing of environmentally safe marine antifoulant.</li> <li>Rightfit pigment: Synthetic azo pigments to replace toxic organic and inorganic pigments.</li> <li>An efficient, green synthesis of a compostable and widely applicable plastic (poly lactic acid) made from corn.</li> <li>Preparation and characterization of biodiesel from vegetable oil.</li> </ul>

## Semester V

Course title: Inorganic materials of Industrial Importance

Course content	Outcome
<u>Glass</u>	<ul style="list-style-type: none"><li>• Glassy state and its properties</li><li>• Classification (silicate and non-silicate glasses).</li><li>• Manufacture and processing of glass.</li><li>• Composition and properties of the following types of glasses: Soda lime glass, lead glass, armoured glass, safety glass, borosilicate glass, fluorosilicate, coloured glass, photosensitive glass</li></ul>
<u>Ceramics</u>	<ul style="list-style-type: none"><li>• Important clays and feldspar</li><li>• ceramic : Their types and manufacture.</li><li>• High technology ceramics and their applications.</li><li>• superconducting and semiconducting oxides. Fullerenes carbon nanotubes and carbon fibre.</li></ul>
<u>Cements:</u>	<ul style="list-style-type: none"><li>• Classification of cement.</li><li>• Ingredients and their role.</li><li>• Manufacture of cement and the setting process, Quick setting cements.</li></ul>
<u>Fertilizers:</u>	<ul style="list-style-type: none"><li>• Different types of fertilizers.</li><li>• Manufacture of the following fertilizers: Urea, ammonium nitrate, calcium ammonium nitrate, ammonium phosphates; polyphosphate, superphosphate, compound and mixed fertilizers, potassium chloride, potassium sulphate.</li></ul>
<u>Surface Coatings:</u>	<ul style="list-style-type: none"><li>• Corrosion</li><li>• Objectives of coatings surfaces</li><li>• classification of surface coatings</li><li>• Paints and pigments-formulation, composition and related properties</li><li>• Oil paint, Vehicle, modified oils, Pigments, toners and lakes pigments, Fillers, Thinners, Enamels, emulsifying agents.</li></ul>

	<ul style="list-style-type: none"> <li>Special paints (Heat retardant, Fire retardant, Eco-friendly paint, Plastic paint), Dyes, Wax polishing, Water and Oil paints, additives, Metallic coatings (electrolytic and electroless), metal spraying and anodizing</li> </ul>
<b>Batteries:</b>	<ul style="list-style-type: none"> <li>Primary and secondary batteries,</li> <li>Battery components and their role,</li> <li>Characteristics of Battery.</li> <li>Working of following batteries: Pb acid, Li-Battery, Solid state electrolyte battery, Fuel cells, Solar cell and polymer cell.</li> </ul>
<b>Alloys:</b>	<ul style="list-style-type: none"> <li>Classification of alloys,</li> <li>Ferrous and non-ferrous alloys,</li> <li>Specific properties of elements in alloys. Manufacture of Steel (removal of silicon decarbonization, demanganization, desulphurization dephosphorisation) and surface treatment (argon treatment, heat treatment, nitriding, carburizing).</li> <li>Composition and properties of different types of steels.</li> </ul>
<b>Catalysis:</b>	<ul style="list-style-type: none"> <li>General principles and properties of catalysts,</li> <li>Homogenous catalysis (catalytic steps and examples)</li> <li>Heterogenous catalysis (catalytic steps and examples) and their industrial applications</li> <li>Deactivation or regeneration of catalysts. Phase transfer catalysts, application of zeolites as catalysts</li> </ul>



## Semester VI

Course DSE 2

Course title: Industrial chemicals and environment

Course content	Outcome
<u>Industrial gases and inorganic chemicals</u>	<ul style="list-style-type: none"><li>• Large scale productions, storage and handling hazards:</li><li>• of gases like: oxygen, chlorine, fluorine, inert gases, CO, phosgene</li><li>• chemicals like: mineral acids, bases and salts</li><li>• Reagents: Oxidising agents viz dichromate, permanganate</li></ul>
<u>Energy and environment</u>	<ul style="list-style-type: none"><li>• Environment and its segments</li><li>• Pollutions: Air, water, Land</li><li>• Ecology</li><li>• Ozone depletion and green house effect</li><li>• Water purification processes</li><li>• Industrial effluents</li><li>• Treatment</li><li>• Sludge disposal</li><li>• Industrial water management</li><li>• Industrial water and domestic water</li><li>• pH of water, maintenance</li><li>• salt effects</li><li>• Solubility product and application</li></ul>

**Old syllabus B.Sc. (Part III, 1+1+1, system, non CBCS)**

**Course : Industrial Chemistry**

<b><u>Course content</u></b>	<b><u>Outcomes</u></b>
<b><u>Gaseous Fuels</u></b>	Manufacture and uses of <ul style="list-style-type: none"><li>• Producer gas</li><li>• Water-Gas</li><li>• Light petroleum gas</li><li>• Bio-gases</li></ul>
<b><u>Liquid Fuels</u></b>	<ul style="list-style-type: none"><li>• Crude oil refining</li><li>• Gasolene</li><li>• Diesel oil</li><li>• Octane number and Cetane number</li><li>• Anti-knock compounds</li></ul>
<b><u>Non conventional sources of Energy</u></b>	Elementary ideas and applications of <ul style="list-style-type: none"><li>• Solar energy</li><li>• Wind energy</li><li>• Geothermal energy</li></ul>
<b><u>Paints and Pigments</u></b>	<ul style="list-style-type: none"><li>• Properties of Paints</li><li>• Pigments: Organic and Inorganic</li><li>• Methods of preparation of</li><li>• Ultramarine blue</li><li>• Zinc oxide</li></ul>
<b><u>Ceramics</u></b>	<ul style="list-style-type: none"><li>• Chemical composition of ceramics</li><li>• Glazing</li><li>• Manufacture of Glazed porcelain</li></ul>
<b><u>Pesticides and Insecticides</u></b>	<ul style="list-style-type: none"><li>• Different classes of Insecticides</li><li>• Organophosphorous Insecticides</li><li>• Carbamate Insecticides</li><li>• Pyrethroid Insecticides</li><li>• Level of toxicity of the different classes of Insecticides</li><li>• Applications in Tea, Mango, Pine apple and Tobacco industries</li></ul>
<b><u>Oils and Fats</u></b>	Oils and Fats, differences Natural and synthetic fats Trans fat and its effects on health Saponification value and its significance Iodine value
<b><u>Polymers</u></b>	<ul style="list-style-type: none"><li>• Polymer, what is?</li><li>• Monomer, Oligomer, Homopolymer, Co polymer.</li><li>• Polymerisation: Addition, Condensation,</li></ul>

	<p>Cationic, Anionic, Free radical.</p> <ul style="list-style-type: none"> <li>• Biodegradable Polymers: Natural and synthetic.</li> <li>• Synthesis and uses of Polyethylene, PVC and Polyurethan.</li> </ul>
<b><u>Cement</u></b>	<ul style="list-style-type: none"> <li>• Composition of Cement</li> <li>• Manufacture and uses of cement</li> <li>• Chemical reactions involved in setting of cement</li> </ul>
<b><u>Electroplating Techniques</u></b>	<ul style="list-style-type: none"> <li>• Theories of Electroplating</li> <li>• Galvanization</li> <li>• Application of Electroplating and uses</li> </ul>

**PSO (Program specific outcome, CBCS)**





- It gives a clear picture of Green solvents and teaches the students to use water and ionic liquids as an alternative and safer solvents.
- It addresses the Green Industrial processes increasingly used avoiding toxic hazardous organic solvents.
- The practical part includes microwave assisted organic synthesis and synthesis of biodiesel from cheap vegetable oil and teaches the students to work with environmentally friendly approaches in organic synthesis.

Thus with DSC s and SEC s, the students would be aware of judicious use of chemistry in nature and be responsible towards society and environment.

### PSO (Program specific outcome, Non CBCS Old syllabus, 1+1+1 system)

The PSO s of this Course of Chemistry of B.Sc. Part III (Gen) are as follows:

- It provides a basic knowledge of Chemistry involved in Industrial processes. It gives a basic knowledge of
- Conventional and Nonconventional sources of Energy and their impacts on environment.
- Chemistry of paints and pigments, environmentally safe and unsafe pigments.
- Insecticides, toxicity levels, harmful effects of synthetic insecticides and their uses. The bio-friendly insecticides and their uses.
- The chemistry of Lipids, the more safer oils and fats and possible health hazards of hydrogenated oils and fats.
- Basic concepts of polymers and their synthesis. Harmful effects of using polymers and biodegradable polymers as alternatives.
- The basic chemistry of cement
- Chemistry behind and uses of Electroplating industries.
- Students learn to
  - Prepare toilet soap in the laboratory from cheap oil in a cost effective way.
  - Estimate the amount of Ferrous and Ferric Iron, Copper (II) in a solution / tap water

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Department of Mathematics  
Kalipada Ghosh Tarai Mahavidyalaya  
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**2.6: Programme Outcome, Programme Specific Outcome, and  
Course Outcomes.**

**Programme Outcomes:**

**2.6.1:** The Dept. Of Nepali, KGT Mahavidyalaya offers two programmes- Honours and General. The Bachelor's Degree in Mathematics is awarded to the students by the University of North Bengal on the basis of knowledge, understanding, skills, attitudes, values and academic achievement sought to be acquired by learners at the end of the programmes. Hence, the learning outcomes of Mathematics for this course are aimed at facilitating the learners to acquire these attributes, keeping in view of their preferences and aspirations for knowledge of Mathematics. The key areas of study in Mathematics are Differential and Integral Calculas, Algebra, Geometry, Differential equations, Vector algebra and analysis, Metric Spaces and Topology, Mechanics and C-Programming.

Bachelor's degree in Mathematics is the culmination of in-depth knowledge of Algebra, Calculas, Geometry, Differential Equations and several other branches of Mathematics. This also leads to study of related areas like Computer Science, Financial Mathematics, Statistics and many more. Thus, this programme helps learners in building a solid foundation for higher studies in Mathematics. The skills and knowledge gained has intrinsic beauty, which also leads to proficiency in analytical reasoning. This can be utilised in modelling and solving real life problems. Students undergoing this programme learn to logically questions assertions, to recognise patterns and to distinguish between essential and irrelevant aspects of problems.

**2.6.2:** The programme outcome outcomes, programme specific outcomes and course outcomes are evaluated with well thought out plan that helps students to go for continuous evaluation process. The outcomes are measured continuously throughout the semester and the modes of evaluating measures include exposure of students to class tests, project works and seminars.

Students completing these programmes will be able to present Mathematics clearly and precisely, make vague ideas precise by formulating them in language of Mathematics,

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Bagdogra  
16/06/2023



describe mathematical ideas from multiple perspectives and explain fundamental concepts of Mathematics to non-mathematicians. Completion of these programmes will also enable the learners to join teaching professions in primary and secondary schools. These programmes will also help students to enhance their employability for government jobs, jobs in banking, insurance and investment sectors, data analyst jobs and jobs in various other public and private enterprises.

### **Programme Specific Outcomes:**

Programme Specific Outcomes include:-

**PSO1:** Think in a critical manner.

**PSO2:** Familiarize the students with suitable tools of mathematical analysis to handle issues and problems in Mathematics and related sciences.

**PSO3:** Acquire good knowledge and understanding to solve specific theoretical and applied problems in advanced areas of Mathematics and Statistics.

**PSO4:** Provide students sufficient knowledge and skills enabling them to undertake further studies in Mathematics and its allied areas on multiple disciplines concerned with Mathematics.

**PSO5:** Encourage the students to develop a range of generic skills helpful in employment, internships and social activists.

### **Course Outcomes For Honours :**

<b>SEMESTER</b>	<b>COURSE</b>	<b>COURSE OUTCOMES</b>
SEM-1	<b>MATH11 HCC-I:</b> Calculus, Geometry and Differential Equations	i) Learn higher order differentiation under the light of Leibnitz rule. ii) Understanding the notions of points of inflection related to concavity and convexity of curves, envelopes of family of curves, asymptotes of curves. iii) Learn tracing of curves both in Cartesian and polar co-ordinate

	<p><b>MATH11 HCC-II: Algebra</b></p>	<p>system.</p> <p>iv) Learn properties of some geometrical objects with respect to two dimensional as well as three dimensional co-ordinate system.</p> <p>v) Understanding classification of conics through general second degree equation.</p> <p>vi) Discuss nature of solutions of ordinary differential equations. Study exactness first order differential equations.</p> <p>i) Learn De Moivre's theorem and its applications regarding complex numbers.</p> <p>ii) Study about the nature of roots of polynomial equations. Applications of Descartes rule of sign, Cardon's and Ferrari's method.</p> <p>iii) Study cardinality of sets, Well-ordering properties of positive integers, division algorithm, congruence relation between integers, principle of mathematical induction etc.</p> <p>iv) Learn Cayley-Hamilton theorem to find eigen values of matrices.</p> <p>v) Study linear transformations and relation between matrices and linear transformation.</p> <p>vi) Understanding rank of matrices and its application to observe solutions of system of linear equations.</p>
<p>SEM-2</p>	<p><b>MATH21 HCC-III: Real Analysis</b></p>	<p>i) Understand many properties of the real line <math>\mathbb{R}</math> and learn to define sequence in terms of functions from <math>\mathbb{R}</math> to a subset of <math>\mathbb{R}</math>.</p> <p>ii) Recognize bounded, convergent, divergent, Cauchy and monotonic sequences and to calculate their limit superior, limit inferior and</p>

	<p><b>MATH21 HCC-IV: Differential Equations and Vector Calculas</b></p>	<p>iii) the limit of a bounded sequence. Apply the ratio, root, alternating series and limit comparison tests for convergence and absolute convergence of infinite series of real numbers.</p> <p>i) Learn various techniques of getting exact solutions of solvable first order differential equations and linear differential equations of higher order. Learn some method to solve partial differential equations.</p> <p>ii) Know power series method for higher order linear differential equations.</p> <p>iii) Study the method of solving of system of linear differential equations and learn phase plane analysis.</p>
<p>SEM-3</p>	<p><b>MATH31 HCC-V: Theory of Real Functions and Introduction To Metric Space</b></p> <p><b>MATH31 HCC-VI: Group Theory 1</b></p>	<p>i) Calculate the limit and examine the continuity of a function at a point.</p> <p>ii) Understand the consequences of various mean value theorems for differentiable functions.</p> <p>iii) Understand several standard concepts of metric spaces and their properties like openness, closedness, completeness.</p> <p>i) Recognize the mathematical objects called groups.</p> <p>ii) Explain the significance of the notions of cosets, normal subgroups etc.</p> <p>iii) Analyze consequences of Lagrange's theorem.</p> <p>iv) Learn about structure preserving maps between groups and their consequences.</p>



	<p><b>MATH31 HCC-VII:</b> Riemann Integration and Series of Functions</p> <p><b>MATH34 SE-I:</b>( Logic and Sets) or (C++)</p>	<p>i) Learn some properties of Riemann integrable functions, and the applications of the fundamental theorems of integration.</p> <p>i) Understand Boolean algebra and Boolean functions, logic gates, switching circuits and their applications.</p> <p>ii) Understand and apply the programming concepts of C++ which is important for mathematical investigation and problem solving.</p>
SEM-4	<p><b>MATH41 HCC-VIII:</b> Multivariate Calculus</p> <p><b>MATH11 HCC-II:</b> Ring Theory and Linear Algebra 1</p> <p><b>MATH41 HCC-X:</b> Metric Spaces and Complex Analysis</p>	<p>i) Learn conceptual variations while advancing from one variable to several variables in calculus.</p> <p>ii) Inter-relationship amongst the line, double and triple integral formulations.</p> <p>iii) Realize importance of Green and Stoke's theorems in other branches of Mathematics, viz., Vector calculus.</p> <p>i) Know the fundamental concepts in ring theory such as concepts of ideals, quotient rings, integral domains and fields.</p> <p>ii) Understand the concepts of vector spaces, subspaces, bases, dimension and their properties.</p> <p>iii) Learn the notion of rank of matrices and its application to solve system of linear equations.</p> <p>i) Understand continuity, uniform continuity, connectedness, compactness in metric spaces.</p> <p>ii) Learn fixed point property,</p>

		<p>Banach fixed point theorem and its application.</p> <p>iii) Visualize complex numbers and stereographic projection of complex plane.</p> <p>iv) Learn the notion of analytic functions and its consequences.</p> <p>i) Foundations and basics of Graph Theory and Linux.</p>
SEM-5	<p><b>MATH44 SE-II: (Graph Theory) or (Operating System-Linux)</b></p> <p>MATH51 HCC-XI: Group Theory-II</p> <p>MATH52 HCC-XII: Numerical Methods+Lab</p>	<p>i) Study Automorphism and its properties.</p> <p>ii) Know the fundamental theorem of finite abelian groups through external direct product.</p> <p>iii) Introduction to Group actions and its applications.</p> <p>iv) Discussions on some important finite groups like p-groups, Sylow p-groups. Study of Sylow's theorems and their consequences.</p> <p>i) Introduction to numerical analysis. Representation of real numbers, Machine Numbers - floating point and fixed point. Sources of Errors, Rounding of numbers, significant digits and Error Propagation in machine arithmetic operations. Numerical Algorithms - stability and convergence.</p> <p>ii) Approximation: Classes of approximating functions, Types of approximations- polynomial approximation, The Weierstrass polynomial approximation theorem (statement only). Interpolation: Lagrange and Newton's methods. Error bounds. Finite difference operators. Newton (Gregory) forward and backward difference interpolation. Central Interpolation: Stirling's and Bessel's formulas. Different interpolation zones, Error estimation.</p> <p>iii) Numerical Integration: Newton Cotes formula, Trapezoidal rule, Simpson's 1/3-rd rule, Simpson's 3/8-th rule, Composite trapezoidal rule, composite Simpson's 1/3-rd rule. Gaussian quadrature formula.</p> <p>iv) Transcendental and polynomial equations: Bisection method, Secant method, Regula-falsi method, fixed point iteration, Newton-Raphson method. Condition of convergence (if any), Order of convergence, Rate of convergence of these methods.</p> <p>v) System of linear algebraic equations: Direct</p>

		<p>methods: Gaussian elimination and Gauss Jordan methods, Pivoting strategies. Iterative methods: Gauss Jacobi method, Gauss Seidel method and their convergence analysis. LU decomposition method</p> <p>vi) Ordinary differential equations: Single-step difference equation methods- error, convergence. The method of successive approximations (Picard), Euler's method, the modified Euler method, Runge-Kutta methods of orders two and four.</p> <p>vii) For any of the CAS (Computer aided software), students are introduced to Data types-simple data types, floating data types, character data types, arithmetic operators and operator precedence, variables and constant declarations, expressions, input/output, relational operators, logical operators and logical expressions, control statements and loop statements, Arrays. The students become expert in solving different numerical problems (listed below) by using computer programming techniques of C/ C++</p> <ul style="list-style-type: none"> <li>• Calculate the sum <math>1+\frac{1}{2}+\frac{1}{3}+\dots+\frac{1}{N}</math></li> <li>• Enter 100 integers into an array and sort them in an ascending order.</li> <li>• Solution of transcendental and algebraic equations by:       <ol style="list-style-type: none"> <li>i) Bisection method</li> <li>ii) Newton Raphson method</li> <li>iii) Secant method.</li> <li>iv) Regula Falsi method.</li> </ol> </li> <li>• Solution of system of linear equations       <ol style="list-style-type: none"> <li>i) LU decomposition method</li> <li>ii) Gaussian elimination method</li> <li>iii) Gauss-Jacobi method</li> <li>iv) Gauss-Seidel method</li> </ol> </li> <li>• Interpolation       <ol style="list-style-type: none"> <li>i) Lagrange Interpolation</li> <li>ii) Newton's Interpolations</li> </ol> </li> <li>• Numerical Integration       <ol style="list-style-type: none"> <li>i) Trapezoidal Rule</li> <li>ii) Simpson's one third rule</li> <li>iii) Weddle's Rule</li> <li>iv) Gauss Quadrature</li> </ol> </li> <li>• Solution of ordinary       <ol style="list-style-type: none"> <li>i) Euler method</li> <li>ii) Modified Euler method</li> <li>iii) Runge Kutta method</li> </ol> </li> </ul>
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	<p>MATH52 DSE-I: (Probability &amp; Statistics) or (Linear Programming)</p>	<p>Probability and Statistics:          After completion of this course, the students will be able to understand &amp; apply the concepts of probability &amp; statistics covered in the following Units:          i) Sample space, probability axioms, real random variables (discrete and continuous), cumulative distribution function, probability mass/density functions, mathematical expectation, moments, moment generating function, characteristic function, discrete distributions: uniform, binomial, Poisson, geometric, negative binomial, continuous distributions: uniform, normal, exponential.          ii) Joint cumulative distribution function and its properties, joint probability density functions, marginal and conditional distributions, expectation of function of two random variables, conditional expectations, independent random variables, bivariate normal distribution, correlation coefficient, joint moment generating function (jmgf) and calculation of covariance (from jmgf), linear regression for two variables.          iii) Chebyshev's inequality, statement and interpretation of (weak) law of large numbers and strong law of large numbers. Central limit theorem for independent and identically distributed random variables with finite variance, Markov chains, Chapman-Kolmogorov equations, classification of states.          iv) Random Samples, Sampling Distributions, Estimation of parameters, Testing of hypothesis.</p> <p>LPP: After completion of this unit of the course, the students will be able to Formulate the LPP, Conceptualize the feasible region, Solve the LPP using different methods &amp; understand the importance of LPP in daily life. In details, the student will be able to understand and visualize the followings:          i) Introduction to linear programming problem. Theory of simplex method, graphical solution, convex sets, optimality and unboundedness, the simplex algorithm, simplex method in tableau format, introduction to artificial variables, two-phase method. Big-M method and their comparison.          ii) Duality, formulation of the dual problem, primal-dual relationships, economic</p>
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	<p>MATH52 DSE-II: (Number Theory) or (Mechanics)</p>	<p>interpretation of the dual. Transportation problem and its mathematical formulation, northwest-corner method, least cost method and Vogel approximation method for determination of starting basic solution, algorithm for solving transportation problem, assignment problem and its mathematical formulation, Hungarian method for solving assignment problem.</p> <p>iii) Game theory: formulation of two person zero sum games, solving two person zero sum games, games with mixed strategies, graphical solution procedure, linear programming solution of games.</p> <p>Number Theory: On successful completion of the course students will be able to develop conceptual understanding of the followings</p> <p>i) Diophantine equation, Gaussian integers, Euclidean Algorithm for gcd, linear representation of gcd, primes and factorizations, consequences of unique prime factorization, linear Diophantine equation.</p> <p>ii) Congruence arithmetic, inverse mod p, Fermat's little Theorem, congruence theorem of Wilson and Lagrange, inverse mod k, quadratic, Diophantine equations. Gaussian integers, Divisibility and primes in <math>\mathbb{Z}[i]</math> and <math>\mathbb{Z}</math>. Conjugates, division in <math>\mathbb{Z}[i]</math>, Fermat's two square theorem, Pythagorean triples.</p> <p>iii) Linear congruence, Chinese remainder theorem, Euler's criterion, Legendre symbol, quadratic reciprocity.</p> <p>Mechanics: On successful completion of the course students will be able to develop conceptual understanding of the followings</p> <p>i) Co-planar forces. Astatic equilibrium. Friction. Equilibrium of a particle on a rough curve. Virtual work. Forces in three dimensions. General conditions of equilibrium. Centre of gravity for different bodies. Stable and unstable equilibrium.</p> <p>ii) Equations of motion referred to a set of rotating axes. Motion of a projectile in a resisting medium. Stability of nearly circular orbits. Motion under the inverse square law. Slightly disturbed orbits. Motion of artificial satellites. Motion of a particle in three dimensions. Motion on a smooth sphere, cone</p>
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	<p>MATH62 DSE-III: (Point set topology) or (Boolean algebra &amp; Automata theory)</p>	<p>order linear equations as hyperbolic, parabolic or elliptic. Reduction of second order linear equations to canonical forms.</p> <p>iii) The Cauchy problem, Cauchy-Kowalewskaya theorem, Cauchy problem of an infinite string. Initial boundary value problems. Semi-infinite string with a fixed end, semi-infinite string with a free end. Equations with non-homogeneous boundary conditions. Non-homogeneous wave equation. Method of separation of variables, solving the vibrating string problem. Solving the heat conduction problem</p> <p>iv) Central force. Constrained motion, varying mass, tangent and normal components of acceleration, modelling ballistics and planetary motion, Kepler's second law.</p> <p>Point set topology: This course is about</p> <p>i) Countable and Uncountable Sets, Schroeder-Bernstein Theorem, Cantor's Theorem. Cardinal numbers and cardinal arithmetic. Continuum Hypothesis, Zorns Lemma, Axiom of Choice. Wellordered sets, Hausdorff's maximal principle. Ordinal numbers.</p> <p>ii) Topological spaces, basis and Sub basis for a topology, subspace topology, interior points, limit points, derived set, boundary of a set, closed sets, closure and interior of a set. Continuous functions, open maps, closed maps and homeomorphisms. Product topology, quotient topology, metric topology, Baire category theorem.</p> <p>iii) Connectedness. Distinguishing topological spaces via connectedness, intermediate value theorem, path connectedness, compact spaces, compact subspaces of the real line, limit point compactness.</p> <p>Boolean algebra &amp; Automata theory: This course is about</p> <p>i) Definition, examples and basic properties of ordered sets, maps between ordered sets, duality principle, lattices as ordered sets, lattices as algebraic structures, sublattices, products and homomorphisms.</p> <p>ii) Definition, examples and properties of modular and distributive lattices, Boolean algebra, Boolean polynomials, minimal and maximal forms of Boolean polynomials, Quinn-McCluskey method, Karnaugh diagrams, Logic</p>
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	<p>MATH62 DSE-IV: (Differential geometry) or (Theory of equations)</p>	<p>gates, switching circuits and applications of switching circuits.</p> <p>iii) Introduction: Alphabets, strings and languages. Finite automata and regular languages: deterministic and non deterministic finite automata, regular expressions, regular languages and their relationship with finite automata, pumping lemma and closure properties of regular languages.</p> <p>iv) Context free grammars and pushdown automata: context free grammars (CFG), parse trees, ambiguities in grammars and languages, pushdown automaton (PDA) and the language accepted by PDA, deterministic PDA, Non deterministic PDA, properties of context free languages, normal forms, pumping lemma, closure properties, decision properties.</p> <p>v) Turing Machines: Turing machine as a model of computation, programming with a Turing machine, variants of Turing machine and their equivalence.</p> <p>Differential geometry: This course deals with:</p> <p>i) Theory of space curves: Space curves. Planer curves, curvature, torsion and Serret-Frenet formula. Osculating circles, osculating circles and spheres. Existence of space curves. Evolutes and involutes of curves.</p> <p>ii) Theory of surfaces: Parametric curves on surfaces. Direction coefficients. First and second Fundamental forms. Principal and Gaussian curvatures. Lines of curvature, Euler's theorem. Rodrigue's formula. Conjugate and asymptotic lines.</p> <p>iii) Developables: Developable associated with space curves and curves on surfaces. Minimal surfaces. Geodesics: Canonical geodesic equations. Nature of geodesics on a surface of revolution. Clairaut's theorem. Normal property of geodesics. Torsion of a geodesic. Geodesic curvature. Gauss-Bonnet theorem.</p> <p>Theory of equations: This course deals with</p> <p>i) General properties of polynomials, Graphical representation of a polynomial, maximum and minimum values of a polynomials, General properties of equations, Descarte's rule of signs positive and negative rule, Relation between the roots and the coefficients of equations.</p> <p>ii) Symmetric functions. Applications of symmetric function of the roots. Transformation</p>
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		<p>of equations. Solutions of reciprocal and binomial equations. Algebraic solutions of the cubic and biquadratic. Properties of the derived functions.</p> <p>iii) Symmetric functions of the roots, Newton's theorem on the sums of powers of roots, homogeneous products, limits of the roots of equations.</p> <p>iv) Separation of the roots of equations, Strum's theorem. Applications of Strum's theorem, conditions for reality of the roots of an equation. Solution of numerical equations.</p>
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### Course Outcomes For BSc General:

SEMESTER	COURSE	COURSE OUTCOMES
SEM-I	<b>MATP11DSC, PAPER-1:</b> Calculus and Geometry	<ul style="list-style-type: none"> <li>i) Learn higher order differentiation under the light of Leibnitz rule.</li> <li>ii) Understanding the notions of points of inflection related to concavity and convexity of curves, envelopes of family of curves, asymptotes of curves.</li> <li>iii) Learn tracing of curves both in Cartesian and polar co-ordinate system.</li> <li>iv) Learn properties of some geometrical objects with respect to two dimensional as well as three dimensional co-ordinate system.</li> <li>v) Understanding classification of conics through general second degree equation.</li> </ul>
SEM-II	<b>MATP24DSC, PAPER-2:</b> Algebra	<ul style="list-style-type: none"> <li>i) Learn De Moivre's theorem and its applications regarding complex numbers.</li> <li>ii) Study about the nature of roots of polynomial equations. Applications of Descartes rule of sign, Cardon's and Ferrari's method.</li> <li>iii) Study cardinality of sets, Well-ordering properties of positive integers, division algorithm,</li> </ul>







	<p><b>MATP53SEC SEM 5 Paper 1: Probability and Statistics</b></p>	<p>permutation groups and quaternion groups (through matrices), elementary properties of groups.</p> <p>ii) Subgroups and examples of subgroups, centralizer, normalizer, center of a group, product of two subgroups.</p> <p>iii) Properties of cyclic groups, classification of subgroups of cyclic groups. Cycle notation for permutations, properties of permutations, even and odd permutations, alternating group, properties of cosets, Lagrange's theorem and consequences including Fermat's Little theorem.</p> <p>iv) Vector spaces, subspaces, algebra of subspaces, quotient spaces, linear combination of vectors, linear span, linear independence, basis and dimension, dimension of subspaces.</p> <p>v) Linear transformations, null space, range, rank and nullity of a linear transformation, matrix representation of a linear transformation, algebra of linear transformations. Isomorphisms.</p> <p>i) Sample space, probability axioms, real random variables (discrete and continuous), cumulative distribution function, probability mass/density functions, mathematical expectation, moments, moment generating function, characteristic function, discrete distributions: uniform, binomial, Poisson, geometric, negative binomial, continuous distributions: uniform, normal, exponential.</p> <p>ii) Joint cumulative distribution function and its properties, joint probability density functions, marginal and conditional distributions, expectation of function of two random variables, conditional expectations, independent random variables, bivariate normal distribution, correlation coefficient, joint moment generating function (jmgf) and calculation of covariance (from jmgf), linear regression for two variables.</p> <p>iii) Chebyshev's Inequality, statement and</p>
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	<p><b>MATP53SEC SEM 5 Paper 1 : Differential Geometry</b></p>	<p>interpretation of (weak) law of large numbers and strong law of large numbers. Central limit theorem for independent and identically distributed random variables with finite variance.</p> <p>i) Theory of space curves: Space curves. Planer curves, curvature, torsion and Serret-Frenet formula. Osculating circles, osculating circles and spheres. Existence of space curves. Evolutes and involutes of curves.</p> <p>ii) Theory of surfaces: Parametric curves on surfaces. Direction coefficients. First and second Fundamental forms. Principal and Gaussian curvatures. Lines of curvature, Euler's theorem. Rodrigue's formula. Conjugate and asymptotic lines. Developable associated with space curves and curves on surfaces. Minimal surfaces. Geodesics.</p>
<p>SEM-6</p>	<p><b>MATP62DSE Paper 2 : Metric Spaces and Complex Analysis</b></p>	<p>i) Metric spaces: Definition and examples. Open and closed balls, neighbourhood, open set, interior of a set. Limit point of a set, closed set, diameter of a set, subspaces, dense sets, separable spaces. Sequences in metric spaces, Cauchy sequences. Complete metric spaces, Cantor's theorem.</p> <p>ii) Limits, limits involving the point at infinity, continuity. Properties of complex numbers, regions in the complex plane, functions of complex variable, mappings. Derivatives, differentiation formulas, Cauchy-Riemann equations, sufficient conditions for differentiability.</p> <p>iii) Analytic functions, examples of analytic functions, exponential function, logarithmic function, trigonometric function, derivatives of functions, and definite integrals of functions. Contours, Contour integrals and its examples, upper bounds for moduli of contour integrals. Cauchy- Goursat theorem, Cauchy integral formula.</p> <p>iv) Liouville's theorem and the</p>

	<p><b>MATP62DSE Paper 2 :Linear Programming</b></p>	<p>fundamental theorem of algebra. Convergence of sequences and series, Taylor series and its examples.</p> <p>i) Introduction to linear programming problem. Theory of simplex method, graphical solution, convex sets, optimality and unboundedness, the simplex algorithm, simplex method in tableau format, introduction to artificial variables, two-phase method. Big-M method and their comparison.</p> <p>ii) Duality, formulation of the dual problem, primal-dual relationships, economic interpretation of the dual. Transportation problem and its mathematical formulation, northwest-corner method, least cost method and Vogel approximation method for determination of starting basic solution, algorithm for solving transportation problem, assignment problem and its mathematical formulation, Hungarian method for solving assignment problem.</p> <p>iii) Game theory: formulation of two person zero sum games, solving two person zero sum games, games with mixed strategies, graphical solution procedure, linear programming solution of games.</p>
	<p><b>MATP63SEC SEM 6 Paper 2 : Graph Theory</b></p>	<p>i) Definition, examples and basic properties of graphs, pseudo graphs, complete graphs, bipartite graphs, isomorphism of graphs. Trees and forests, paths and cycles.</p> <p>ii) Eulerian circuits, Eulerian graph, semi-Eulerian graph, theorems, Hamiltonian cycles, theorems Representation of a graph by matrix, the adjacency matrix, incidence matrix, weighted graph.</p> <p>iii) Travelling salesman's problem, shortest path, Tree and their properties, spanning tree.</p>

	<p><b>MATP63SEC SEM 6 Paper 2: Boolean Algebra and Automata Theory</b></p>	<p>i) Definition, examples and basic properties of ordered sets, maps between ordered sets, duality principle, lattices as ordered sets, lattices as algebraic structures, sublattices, products and homomorphisms.</p> <p>ii) Definition, examples and properties of modular and distributive lattices, Boolean algebra, Boolean polynomials, minimal and maximal forms of Boolean polynomials, Quinn-McCluskey method, Karnaugh diagrams, Logic gates, switching circuits and applications of switching circuits.</p> <p>iii) Introduction: Alphabets, strings and languages. Finite automata and regular languages: deterministic and non deterministic finite automata, regular expressions, regular languages and their relationship with finite automata, pumping lemma and closure properties of regular languages.</p>
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**Programme Outcomes of Old Syllabus For General Course :**

Part/Year	Course	Course Outcomes
PART-I	Paper-1: Classical Algebra, Modern Algebra,	<p>i) Learn De Moivre's theorem and its applications regarding complex numbers.</p> <p>ii) Study about the nature of roots of polynomial equations. Applications of Descartes rule of sign, Cardon's and Ferrari's method.</p>



	<p><b>Paper-2: Analytical Geometry O Two Dimension and Three Dimension</b></p> <p><b>Paper-3: Differential Calculas</b></p>	<p>iii) Recognize the mathematical objects called groups.</p> <p>iv) Explain the significance of the notions of cosets, normal subgroups etc.</p> <p>i) Learn tracing of curves both in Cartesian and polar co-ordinate system.</p> <p>ii) Learn properties of some geometrical objects with respect to two dimensional as well as three dimensional co-ordinate system.</p> <p>iii) Understanding classification of conics through general second degree equation.</p> <p>i) Assimilate the notions of limit of a sequence and convergence of a series of real numbers.</p> <p>ii) Calculate the limit and examine the continuity of a function at a point.</p> <p>iii) Understand the consequences of various mean value theorems for differentiable functions.</p> <p>iv) Sketch curves in Cartesian and polar coordinate system.</p>
PART-II	<b>Paper-4: Integral Calculas and ODE</b>	<p>i) Learn to solve some special type of integration, reduction formulae of some integral.</p> <p>ii) Study Beta and Gamma functions with applications.</p> <p>iii) Apply the ratio, root, alternating series and limit comparison tests</p>

	<p><b>Paper-5: Numerical Analysis and Linear Programming Problem</b></p>	<p>for convergence and absolute convergence of infinite series of real numbers.</p> <p>iv) Understand the genesis of Ordinary Differential Equations.</p> <p>v) Learn various techniques of getting exact solutions of solvable first order differential equations and linear differential equations of higher order. Learn some method to solve partial differential equations.</p> <p>i) Obtain numerical solutions of algebraic and transcendental equations.</p> <p>ii) Learn about various interpolating and extrapolating methods.</p> <p>iii) Find numerical solutions of system of equations and check accuracy of the solutions.</p> <p>iv) Learn numerical differentiation and integration.</p> <p>v) Analyze and solve LPP models in real life situations.</p> <p>vi) Provide graphical solutions of LPPs with two variables and illustrate the concepts of convex set and extreme points,</p> <p>vii) Learn the theory of the simplex method.</p> <p>viii) Know about the relationship between primal and dual problems.</p> <p>ix) Learn about the applications to transportation, assignment and game theory.</p>
	<p><b>Paper-6: Analytical Dynamics, Probability and Statistics, Elements of Difference Equation and Calculus of</b></p>	<p>i) Study of motion of a particle in a straight line under different restrictions.</p> <p>ii) Learn tangential and normal components of velocity and acceleration, work energy</p>

	Variation	equation, motion in two dimension and central orbit related topics with physical problems.
PART-III	<b>Paper-7:</b> Elements of Computer Science and Programming, A Course of Calculus, Discrete Mathematics	<ul style="list-style-type: none"> <li>i) Understand Boolean algebra and Boolean functions, logic gates, switching circuits and their applications.</li> <li>ii) Understand and apply the programming concepts of C++ which is important for mathematical investigation and problem solving.</li> <li>iii) Study convergence of Power Series and also learn topics related to Fourier Series.</li> <li>iv) Learn Laplace transformation and its application to the solution of ODE of 2<sup>nd</sup> order with constants coefficients.</li> <li>v) Study cardinality of sets, Well-ordering properties of positive integers, division algorithm, congruence relation between integers, principle of mathematical induction etc.</li> </ul>

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**KGTM, Bagdogra**

16/06/2023

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**Kalipada Ghosh Tarai**  
**Mahavidyalaya**  
**Bagdogra**

16/06/2023



**DEPARTMENT OF COMMERCE**  
**B.Com Honours**

**PROGRAMME OUTCOME**

PO1	After completing the B.Com Honours Course, students will be able to understand the basic concept of Accounting, Finance, Law & Taxation.
PO2	Students will be able to understand the theoretical and practical aspects of Commerce.
PO3	It will inculcate knowledge, skill and attitude within the students which will be highly relevant in the contemporary job market.
PO4	This course offers an option to pursue higher education courses like MBA, M.Com, CA, CS, CWA & other professional courses.

**PROGRAMME SPECIFIC OUTCOME**

PSO1	Students will be able to learn practical skills related to Accounting and Tax which can be applied in the job market along with the creation of entrepreneurial skills.
PSO2	Students will have diverse knowledge and understanding of basics related to management and finance.

**COURSE OUTCOME**

<b>CBCS (Hons)</b>	<b>Semester I &amp; II</b>
Financial Accounting	Students will be able to understand the accounting fundamentals and their application. This paper will help them to apply their accounting knowledge in their own business or any corporate job.
Business Law	Students will be in a position to understand the different Laws associated with the business which will strengthen their capacity and increase awareness related to a contract, negotiable instrument, and limited liability partnership.
Micro Economics	By studying this paper student will have a fundamental understanding of economics which will create a base in understanding the economy.
Corporate Law	Students will have necessary information related to the functioning of the Corporates along with the rights associated with the investors.
Management Principle & Application	Students will be able to understand the basic fundamental of management and its application in the real-life scenario creating a value system within them.
Macro Economics	This paper will provide insight regarding the macroeconomic aspect of our economy starting with monetary policy to fiscal policy and its implication on our economy.

  
Head  
Department of Commerce  
Kalipada Ghosh Tarai Mahavidyalaya  
Bagnura, Burdwan, WB  
7/06/2023

  
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CBCS (Hons)	Semester III & IV
Human Resource Management	Students will be familiarized with concepts and principles of Recruitment and Selection in an organization and have in depth insight into various aspects of Human Resource Management and make them acquainted with practical aspect of the subject.
Income Tax Law and Practice	Students will know the Income Tax Act 1961, acquire the knowledge of important terms in income tax, residential status, concept of income from salary and its provisions, income from house property and income from business or profession.
Corporate Accounting	Students will acquire the knowledge on issue of shares, debentures and redemption, calculation of profits prior to incorporation and final accounts, accounting treatment for valuation of goodwill & shares, profits of the company and their division, liquidation of companies and aware on the corporate accounting conformity with the provision of the companies act.
Business Statistics	The outcome of this course is to familiarize students with the basic statistical tools used for managerial decision-making and developing proficiency to analyze and interpret business problems with statistical tools.
Entrepreneurship	Students will be able to aware about the business and business environment, develop entrepreneurial awareness and make their mind set for thinking entrepreneurship as career.
Cost accounting	Students will be able to understand the theoretical foundation of cost accounting, the basic issues related to cost measurement in job costing systems and process costing systems and the problems of overhead application rates and how to refine the plant- wide application rates of over- head.
Business Mathematics	Students will be able to understand the concepts and use equations, formulae, and mathematical expressions and relationships in a variety of contexts. Apply the knowledge in mathematics (algebra, matrices, calculus) in solving business problems. Analyze and demonstrate mathematical skills required in mathematically intensive areas in Economics and business.
Principles Of Marketing	Students will be able to understand the role of marketing within society and within an economic system. They will learn the vital role of marketing within a firm and the necessary relationships between marketing and the other functional areas of business along with key marketing principles and terminology.
Indian Economy	Students will be able to learn hardcore economic prescriptions to development, concerns hitherto relegated to background like education, health, sanitation and infrastructural development. They will have comprehensive understanding of Indian Economy and will be able to understand government policies



	and programs sectorial developments in the economy over the time.
E-Commerce	After Completion of the subject student should able to understand the basic concepts and technologies used in the field of management information systems; have the knowledge of the different types of management information systems. They will be also aware of the ethical, social, and security issues of information systems.

<b>CBCS (Hons)</b>	<b>Semester V &amp; VI</b>
Computer Applications in Business	The students will be able to understand the uses of computer in offices for daily business operations. The students will be able to learn the uses of formatting techniques using word processing for documentation of daily business information, making data sheets, manual accounting using formula and functions through spreadsheet, making presentations to represent the their ideas to the management.
Fundamentals of Financial Management	Students will be able to describe the effects of decision making of finance manager on shareholders wealth maximization. Analyze the role of time value of money and its use for valuing asset and have a thorough understanding of financial statements be able to evaluate and analyze cash flows statements, interpret and illustrate the investment, financing and dividend policy decision making in an organization, recall different procedures in deciding the best alternatives out of various alternatives, examine the working capital needs and financing of the firm and apply methods to measure the operating efficiency of business.
Banking and Insurance	By studying this paper students will achieve the knowledge about the basic principles of the banking and insurance. It will help to fit the needs of the industry, producing skilled graduates, capable of withstanding and solving the challenges of the industry. The students will be offered career opportunities in different industries ranging from banking and insurance sectors to accounting and industrial houses as well.
Advertising	Students will learn how to describe different types of advertisement, identify key players in advertising industry, discuss the ethics in advertisement, identify and make decisions regarding the most feasible advertising appeal and media mix, and describe different types of sales persons.
Management Accounting	On successful completion of this paper, candidates will able to explain the nature, source and purpose of management information, analyze and interpret the financial data in order to help management to take decisions, make policies, strategies and control the organization effectively. It will also support management in planning and decision-making in a variety of business contexts and apply performance measurements and monitor business performance.



Industrial Relations and Labour Laws.	Students will familiarize with the role of management and unions in the promotions of industrial relations, examine the labour relation issues and its management, and to acquire skills in handling employer-employee relations.
Auditing and corporate governance	To provide knowledge of auditing principles, procedures and techniques in accordance with current legal requirements and professional standards To provide a complete details of company auditor with regards to the job. To give an overview of the principles of Corporate Governance and Corporate Social Responsibility To provide business ethics and moralities and code of ethics.
Goods And Services Tax & Customs Duty	To familiarize the student with indirect taxes features and principles To provide the concept of GST, supply (time and value) and input tax credit. To provide the concept of custom duty and its procedure
Computerised Accounting & Systems	This course seeks to enhance the skills needed for computerized accounting system. To enable the students to develop simple accounting applications.
Fundamental of investment	To familiarize the students with different investment alternatives, To introduce them to the framework of their analysis and valuation To highlight the role of investor protection.
Financial Markets, Institutions and Financial Services	To provide the student a basic knowledge of financial markets and institutions. To provide the students with the structure of financial system and its operations To familiarise them with major financial services in India and their benefits
Business Research methods And Project Work	This course aims at providing the general understanding of business research and the methods of business research. The course will impart learning about how to collect, analyse, present and interpret data.

**B.COM HONS(1+1+1)1<sup>ST</sup> YEAR**

Business Communication	On successful completion of this paper, candidates should be able to: <ol style="list-style-type: none"><li>1. Understand the meaning of communication and its role in day to day life.</li><li>2. Factors affecting the communication process.</li><li>3. Strategy to make communication effective.</li></ol>
Money And Financial Institution -1	On successful completion of this paper, candidates should be able to: <ol style="list-style-type: none"><li>1. Basic conceptual framework of money and its various forms.</li><li>2. Understand the financial framework prevailing in the Indian economy</li><li>3. Learn about various policies &amp; problems in the economy regarding various sectorial finance &amp; credit</li></ol>
Economic Principles	On successful completion of this paper, candidates should be able to: <ol style="list-style-type: none"><li>1. Understand the basic micro economic concepts and inculcate an analytical approach to the subject matter</li><li>2. Apply economic reasoning to problems of business</li><li>3. Understand the concept of National Income and various issues related to international trade.</li></ol>
Business Regulatory Framework	On successful completion of this paper, candidates should be able to: <ol style="list-style-type: none"><li>1. To acquaint students with the basic concepts, terms, and provisions of mercantile and business laws.</li><li>2. To develop the awareness among the students regarding these laws affecting business, trade and commerce.</li></ol>
Introduction To Information Technology	On successful completion of this paper, candidates should be able to: <ol style="list-style-type: none"><li>1. Learn the deployment of IT in business.</li><li>2. Learn binary arithmetic ,conversion from one system to another and its application</li><li>3. Meaning and role of internet in business environment.</li></ol>
Principles Of Management	On successful completion of this paper, candidates should be able to: <ol style="list-style-type: none"><li>1. Definition, scope, concept and importance of management and its applications</li><li>2. Understand the importance of planning, organizing, staffing, motivation, coordination and leadership in various day to day life.</li></ol>
Financial Accounting	On successful completion of this paper, candidates should be able to: <ol style="list-style-type: none"><li>1. To impart the students with a comprehensive and balanced coverage of various accounting concept.</li><li>2. To obtain a practical understanding of the accounting in various disciplines of commerce.</li></ol>
Business Mathematics And Statistics	On successful completion of this paper, candidates should be able to:



	<ol style="list-style-type: none"> <li>1. To understand the concept of simple interest, compound interest and the concept of EMI.</li> <li>2. To understand the concept of population and sample.</li> <li>3. To use correlation and regression analysis to estimate the relationship between two variables.</li> <li>4. To understand the concept and techniques of different types of index number.</li> </ol>
<b>B.COM HONS(1+1+1) 2<sup>nd</sup> YEAR</b>	
Corporate Accounting	<p>On successful completion of this paper, candidates should be able to:</p> <ol style="list-style-type: none"> <li>1. Have conceptual aspects of corporate accounting.</li> <li>2. To develop skills about accounting standards.</li> </ol>
Cost Accounting	<p>On successful completion of this paper, candidates should be able to:</p> <ol style="list-style-type: none"> <li>1. Explain and apply cost accounting techniques .prepare budgets for planning and control</li> <li>2. Compare actual costs with standard costs and analyze any variances</li> <li>3. Explain and apply performance measurements and monitor business performance</li> </ol>
Secretarial Practice	<p>On successful completion of this paper, candidates should be able to:</p> <ol style="list-style-type: none"> <li>1. Know about the practicing procedures rules, administrative points and policies regarding law and its practice.</li> <li>2. Have specific &amp; strong knowledge about the field and its relative terminologies too.</li> </ol>
Money And Finance II	<p>On successful completion of this paper, candidates should be able to:</p> <ol style="list-style-type: none"> <li>1. The meaning of development banks and its structure.</li> <li>2. Role of RBI</li> <li>3. Different types of banks.</li> <li>4. Meaning of interest rates and its causes.</li> </ol>
Economic Problem	<p>On successful completion of this paper, candidates should be able to:</p> <ol style="list-style-type: none"> <li>1. Understand the main features of developing banks.</li> <li>2. Causes of problems like population pressure, unemployment, poverty, social injustices, inflation, etc.</li> <li>3. Cooperative farming- meaning and causes</li> </ol>
Company Law	<p>On successful completion of this paper, candidates should be able to:</p> <ol style="list-style-type: none"> <li>1. Understand the legal requirements required to form a company.</li> <li>2. Different types of company.</li> <li>3. How a company raises their funds.</li> <li>4. How a company winds up- legal procedures.</li> </ol>
Application Of Information	<p>On successful completion of this paper, candidates should be</p>



Technology I		B.COM HONS(1+1+1) 3 <sup>RD</sup> YEAR- ACCOUNTING HONS	
Business Economics And Quantitative Techniques	On successful completion of this paper, candidates should be able to:	<p>To make the students familiar with basics of network, environment.</p> <p>2. To make the students familiar with basics of network, environment.</p> <ol style="list-style-type: none"> <li>1. Understand the relationship between business economics To enable students to develop their own websites.</li> <li>2. To analyze the demand and supply curves in about application demand and supply conditions and elasticity's of demand &amp; Supply</li> <li>3. To know the production analysis i.e. functions, laws of production.</li> </ol>	
Fundamental Of Entrepreneurship	On successful completion of this paper, candidates should be able to:	<p>To overview the market structure of the paper, candidates should be able to determine the market structure under different markets</p>	
Management Accounting	On successful completion of this paper, candidates should be able to:	<p>To explain the nature, purpose and legal requirements for establishment of a venture.</p> <ol style="list-style-type: none"> <li>1. Learn to explain the nature, purpose and legal management information for establishment of a venture.</li> <li>2. To analyze and interpret the financial data in order to help management to take decisions, make policies, strategies and control the organization effectively.</li> <li>3. To support management in planning and decision-making in a variety of business contexts.</li> <li>4. Explain and apply performance measurements and monitor business performance</li> </ol>	and role of
Direct Tax And Indirect Tax	On successful completion of this paper, candidates should be able :	<ol style="list-style-type: none"> <li>1. To understand the basic concepts and to acquire knowledge about Computation of Income, Submission of Income Tax Return, Advance Tax, and Tax deducted at Source, Tax Collection Authorities under the Income Tax Act, 1961.</li> <li>2. To gain knowledge of the various types of indirect taxes prevailing in India and also its implications.</li> </ol>	
Auditing	On successful completion of this paper, candidates should be able to:	<ol style="list-style-type: none"> <li>1. Explain the types of audit and objectives of audit.</li> <li>2. Summarize audit planning and conduct of audit.</li> <li>3. Explain Vouching of Trading Transaction and Verification &amp; Valuation of Assets &amp; Liabilities.</li> <li>4. Explain the Qualification, Rights, Duties, and Liabilities. Professional Ethics of an auditor.</li> </ol>	

### B.COM HONS(1+1+1) 3<sup>RD</sup> YEAR- MANAGEMENT HONS

Personnel Management	<p>On successful completion of this paper, candidates should be able to:</p> <ol style="list-style-type: none"> <li>1. Explain the importance of human resources in an organization.</li> <li>2. Outline the dimensions; job analysis and job description and procedure for recruitment and selection.</li> <li>3. Identifying the training need, implementation, monitoring and assessment procedures of training.</li> <li>4. Understanding the importance of Performance appraisal system.</li> <li>5. The significance of compensation for employee and grievance redressal .</li> </ol>
Marketing Management	<p>On successful completion of this paper candidates should be able to:</p> <ol style="list-style-type: none"> <li>1. Summarize the concept of marketing, marketing mix, marketing environment and micro and macro marketing</li> <li>2. Explain the meaning of product, product planning and development, product life cycle and branding</li> <li>3. Demonstrate the concept of pricing and factors affecting pricing</li> <li>4. Outline the elements of promotional mix and CRM and Explain channels of distribution and Recent trends in Marketing</li> </ol>
Auditing	<p>On successful completion of this paper, candidates should be able to:</p> <ol style="list-style-type: none"> <li>5. Explain the types of audit and objectives of audit.</li> <li>6. Summarize audit planning and conduct of audit.</li> <li>7. Explain Vouching of Trading Transaction and Verification &amp; Valuation of Assets &amp; Liabilities.</li> <li>8. Explain the Qualification, Rights, Duties, and Liabilities. Professional Ethics of an auditor.</li> </ol>
Management Accounting	<p>On successful completion of this paper, candidates should be able to:</p> <ol style="list-style-type: none"> <li>5. Learn to explain the nature, source and purpose of management information</li> <li>6. To analyze and interpret the financial data in order to help management to take decisions, make policies, strategies and control the organization effectively.</li> <li>7. To support management in planning and decision-making in a variety of business contexts.</li> <li>8. Explain and apply performance measurements and monitor business performance</li> </ol>

## **B.COM PROGRAMME**

### **PROGRAMME OUTCOME**

PO1	After completing the B.Com Programme Course, students will develop a theoretical and practical skill that will be applicable in the current work environment
PO2	Students will gain conceptual knowledge in various disciplines of Commerce
PO3	It will offer career options in Banking, Retail and other corporate sectors.



**PROGRAMME SPECIFIC OUTCOME**

PSO1	Students will have a diverse understanding starting with accounting, taxation, law, language and management
PSO2	Students will be able to learn entrepreneurial skills along with management and communication skills.

**COURSE OUTCOME**

<b>CBCS (PROGRAM)</b>	<b>SEMESTER (I) &amp; (II)</b>
Financial Accounting	Students will be able to understand the accounting fundamentals and their application. This paper will help them to apply their accounting knowledge in their own business or any corporate job.
Business Law	Students will be in a position to understand the different Laws associated with the business which will strengthen their capacity and increase awareness related to a contract, negotiable instrument, and limited liability partnership.
Business Organization & Management	Students will be able to understand the basic fundamental of business management and its application in the real-life scenario creating a better understanding.
Corporate Law	Students will have necessary information related to the functioning of the Corporates along with the rights associated with the investors.
Management Principle & Application	Students will be able to understand the basic fundamental of management and its application in the real-life scenario creating a value system within them.
Macro Economics	This paper will provide insight regarding the macroeconomic aspect of our economy starting with monetary policy to fiscal policy and its implication on our economy.

<b>CBCS (PROGRAM)</b>	<b>SEMESTER (III) &amp; (IV)</b>
Income Tax Law and Practice	Students will know the Income Tax Act 1961; acquire the knowledge of important terms in income tax, residential status, concept of income from salary and its provisions, income from house property and income from business or profession.
Corporate Accounting	Students will acquire the knowledge on issue of shares, debentures and redemption, calculation of profits prior to incorporation and final accounts, accounting treatment for valuation of goodwill & shares, profits of the company and their division, liquidation of companies and aware on the corporate accounting conformity with the provision of the companies act.



Entrepreneurship	Students will be able to aware about the business and business environment, develop entrepreneurial awareness and make their mind set for thinking entrepreneurship as career.
Cost accounting	Students will be able to understand the theoretical foundation of cost accounting, the basic issues related to cost measurement in job costing systems and process costing systems and the problems of overhead application rates and how to refine the plant- wide application rates of over- head.
Business Mathematics and Statistics	The outcome of this course is to enable the students to have basic ideas of mathematics which is applicable in business. The outcome of this course is to enable the students to have basic ideas of mathematics which is applicable in business. The objective of this course is to familiarize students with the applications of mathematics and statistical techniques in business decision-making.
E-Commerce	After Completion of the subject student should able to understand the basic concepts and technologies used in the field of management information systems; have the knowledge of the different types of management information systems. They will be also aware of the ethical, social, and security issues of information systems.

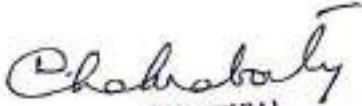
<b>CBCS (PROGRAM)</b>	<b>SEMESTER (V) &amp; (VI)</b>
Banking and Insurance	By studying this paper students will achieve the knowledge about the basic principles of the banking and insurance. It will help to fit the needs of the industry, producing skilled graduates, capable of withstanding and solving the challenges of the industry. The students will be offered career opportunities in different industries ranging from banking and insurance sectors to accounting and industrial houses as well.
Principles of Marketing	Students will be able to understand the role of marketing within society and within an economic system. They will learn the vital role of marketing within a firm and the necessary relationships between marketing and the other functional areas of business along with key marketing principles and terminology.

Management Accounting	On successful completion of this paper, candidates will be able to explain the nature, source and purpose of management information, analyze and interpret the financial data in order to help management to take decisions, make policies, strategies and control the organization effectively. It will also support management in planning and decision-making in a variety of business contexts and apply performance measurements and monitor business performance.
Human Resource Management	Students will be familiarized with concepts and principles of Recruitment and Selection in an organization and have in-depth insight into various aspects of Human Resource Management and make them acquainted with the practical aspect of the subject.
Principles of Microeconomics	By studying this paper, the student will have a fundamental understanding of economics which will create a base in understanding the economy. It illustrates how microeconomic concepts can be applied to analyze real-life economic situations. The students learn some basic principles of microeconomics and interactions of supply and demand, characteristics of perfect competition, efficiency and welfare.
Computer Applications in Business	The students will be able to understand the uses of a computer in offices for daily business operations. The students will be able to learn the uses of formatting techniques using word processing for documentation of daily business information, making data sheets, manual accounting using formulas and functions through spreadsheets, making presentations to represent their ideas to the management.
Computerized Accounting and Systems	Students will be familiarized with the basic concepts of the skills required in the field of computerized accounting and also it would enable the students to develop simple accounting applications.
Auditing and Corporate Governance	Students will be able to acquire the knowledge of auditing and its use in the corporate world. They will be acquainted with the principles, procedures and techniques of Auditing required in a business.
Financial Markets, Institutions, and Financial Services	Students will be able to get the basic knowledge of the financial markets and its functioning. They will also be able to have an idea of various services that are provided and the various institutions involved in the financial markets.
Goods and Service Tax & Customs Duty	Students will be enriched with the concept of GST and its practical application in day-to-day life. Also, they will be acquainted with the various laws contained in the Customs Act.

Indian Economy	Students will be aware of the basic feature of economy of India and also they will be acquainted with the various problems of the Indian Economy and the solutions to those problems along with various policy frameworks. They will also be aware of the various tools used in macroeconomic analysis.
Business Communication	Students will be aware of the different forms of communication used in a business and also it would help them acquire knowledge about the various forms of business correspondence.

  
 Hand  
 Department of Commerce  
 Kalipada Ghosh Tarai Mahavidyalaya  
 Bagdogra, Darjeeling, WB

7/06/2023

  
 PRINCIPAL  
 Kalipada Ghosh Tarai  
 Mahavidyalaya  
 Bagdogra

7/06/2023