

**Sukanta Mahavidyalay**

**Department of Education**

**A project report on Experimental learning**

Project work has been included in the Discipline Specific Elective Course in the 6<sup>th</sup> semester syllabus of North Bengal University. Through this project work students can acquire knowledge through hands-on practical experience. In the 2020-21 academic year of Sukanta Mahavidyalaya, 53 students of the 6<sup>th</sup> semester of the Department of Education participated in this project work. The students completed the project work by selecting different subjects with the help of teachers. The Department of Education has received the expected topics from them. The Department of Education of Sukanta Mahavidyalaya hopes that they will do better projects in the coming days.

**B.A. Education (Honours)**  
**SEMESTER-VI**  
**EDU-H-DSE-T-3/4(D): Project Work/Educational Tour**  
**Discipline Specific Elective Course; Credit-6. Full Marks-75**  
**Educational Tour - (Field Study: 15, Note Book: 15, Viva Voce: 30)**  
**Project- (Field Study: 15, Note Book: 15, Viva Voce: 30)**

**Course objectives:**

After completion of the course the learners will be able to:

- apply the knowledge gained through different courses in practical field.
- solve problems related to his course of study.
- document, calculate, analyse and interpret data.
- deduce findings from different studies
- write and report in standard academic formats.

**Guidelines:**

The student can select a topic for project from any field of Education. It can be an empirical work based on either field survey data or secondary data. The project report will be evaluated by the Departmental teachers and 60 marks will be allotted for that. For viva-voce and/or presentation of the project report and for attendance, 10 marks and 05 marks will be allotted respectively. During the viva-voce and/or presentation one external expert from University/Other Colleges will be present along with the Departmental teachers for evaluation. Each student will be placed under a supervisor. Students will be given a list of topics and the concerned teachers will give some general guidelines. Students will have to prepare the project reports on their own. There can be some demonstration classes about the use of field survey data or secondary data and methodology of the study. The concerned teacher/teachers can mention in the class some of the sources of these secondary data. In case of field survey, the concerned teacher/teachers can give a guideline for the preparation of questionnaire and can administer the field survey to be done by the students. The work completed within the stipulated time and written in standard academic format shall be submitted at the end of the semester.

**Course Contents:**

**Visit to a place (Educational Tour)** of educational importance and writing a report (within 3000 words) on the following and be submitted:

1. Selection of place
2. Objective behind the study
3. Educational Importance of the place
4. Planning for visit
5. Documenting and noting down the visit with important features
6. Recommendations
7. Concluding remarks

The **Project** work will have to be completed according to following points and be submitted:

1. Title of the problem
2. Introduction/ Rational of the Study
3. Statement of the problem
4. Need and Significance
5. Research question (if necessary)
6. Objective of the study
7. Delimitations
8. Methodology
9. Data interpretation and analysis
10. Drawing Recommendation and Inferences
11. Conclusion
12. References

Note : The project may either be a theoretical critical study or an empirical study

**Suggested Readings:**

1. L. Koul – Methodology of Educational Research
2. S. K. Mangal- Statistics in Education and Psychology
3. A. K. Singh – Test, Measurement and Research Methods in Behavioral Sciences
4. J.W.Best & J.V.Kahn – Research in Education
5. J.W.Creswell – Educational Research

**Bengali Reading:**

6. Debashis Paul – Gobesona paddhati o Rashi Biggyaner Koushal
7. Jakir Hossain- Shiksha mulak Gobesona
৮. -দবাশিসপাল- গবেষণা পদ্ধতি ও রাশিবিজ্ঞানের কৌশল
৯. -মাওলুংফুররহমান, শওকতআলী খানএবংস্বপনকুমারদাস- গ-বষণা পদ্ধতি ও পরিসংখ্যান
১০. জাকির -হা-সন- শিক্ষামূলকগ-বষণা

# Department of Geography

## Honours Course

### **First semester Honors**

#### **1. Geotectonics**

##### **CC1-01PR**

1. Scales: Concept and application; graphical construction of plain, comparative, diagonal and vernier scales;

2. Map Projections: Classification, properties and uses; Mathematical/graphical construction of Polar Zenithal Stereographic Projection, Bonne's Projection, Polyconic Projection, Sinusoidal Projection and Mercator's Projections.

*Practical Record: A project file covering all practical topics must be prepared.*

The main practical topics are map scale and map projection. The map scales are used to determine physical distance and size of geographical area. It indicates the distance between 2 points on a map bears the distance between the corresponding points on the actual ground.

The method used to portray a part of the spherical Earth on a flat surface whether a paper map or a computer. In other words a map projection systematically renders a 3D ellipsoid of Earth to a 2D map surface. 3D services cannot be perfectly displayed in two dimensions hence distortions occur. Therefore each type of projection preserves a particular property distorting the other properties. It is up to the cartographer to determine which projection is most suitable for this purpose.

#### **2. Geomorphology**

##### **CC1-02PR**

1. Topographical Map: Interpretation of plateau/mountain area with the help of cross and longitudinal profiles; interpretation of relief profile: superimposed, projected and composite; Slope Analysis (Wentworth's method); Relative relief (Smith's method); Drainage density and drainage frequency; Transect chart.

2. Megascopic identification of rocks and minerals: granite, basalt, limestone, shale, sandstone, phyllite, slate, marble, schist, quartzite, bauxite, calcite, chalcopryrite, feldspar, galena, haematite, magnetite, mica, quartz and talc.

*Practical Record: A project file covering all practical topics must be prepared.*

Topographic maps show physical and cultural features with the help of conventional symbols. It has multiple uses in the present day in any type of Geographic planning or large scale architecture, earth sciences, civil engineering and even the present Remote Sensing and GIS.

The study of Rocks and Minerals help students understand the constituent minerals they are composed of and structure, the relationship between rocks and landform features.

## **SECOND SEMESTER**

### **1. Human Geography**

#### **Course Code: GEO-H-CC-2-03-PR–Practical**

1. Diagrammatic data presentation: isopleth (isotherm, isohyet and isobar); bar (simple, compound and composite); circles (proportional concentric circle and proportional divided circle);

2. Thematic Mapping Techniques: properties, uses and limitations; Areal Data: Choropleth, Chorochromatic, Dot and Sphere, Proportional Cubes.

*Practical Record: A project file covering all practical topics must be prepared.*

While studying human geography students will learn how spatial processes such as migration, landscape change and spatial planning shape people's lives and activities. The study of these devices and tools which are involved in their construction and use. Practical Geography: A systematic approach explains the techniques of surveying and Cartography, using mathematical and Statistical methods.

### **2. Settlement Geography**

#### **Course Code: GEO-H-CC-2-04-PR – Practical**

1. Concept of levelling and surveying; Surveying by Prismatic Compass (closed traverse); levelling by Dumpy Level along a given line by rise and fall and collimation method;

determination of height of an object with accessible and inaccessible base in the same vertical plane by Theodolite (transit);

2. Geological Map; Drawing of sections on uniclinal and folded structures depicting unconformity.

*Practical Record: A project file covering all practical topics must be prepared.*

The primary aim of studying settlement geography is to acquaint with the spatial and structural characteristics of human settlements under varied environmental conditions. It helps to identify the economic and social development of a place and can show its main activity. Most large settlements have more than one function though in the past one function was maybe the most important in defining the success and growth in importance of the settlement.

### **3rd semester Honors**

#### **1.Climatology**

##### **CC3-05-PR**

1. Meteorological instruments: Recording of Maximum and Minimum thermometer, Hygrometer, Fortin's barometer;

2. Interpretation of Indian daily weather report; Representation of climatic data by climographs and hythergraphs.

*Practical Record: A project file covering all practical topics must be prepared.*

The topic includes meteorological instruments and daily weather interpretation and representation of the climatic data. These topics help students learn how to measure the air temperature, air pressure on a daily or monthly basis. The topic also helps to learn to interpret the symbols used in Indian weather maps and analyze and how to represent climatic data through the technique of climograph and hythergraph.

#### **2. Statistical method in geography**

##### **CC3- 06-PR**

1. Tabulation of data; frequency distribution table, class group and class interval; Descriptive statistics: Deciles, Quartiles, Percentiles; Measures of Central Tendency: Mean, Median and Mode; Measures of Dispersion: Quartile Deviation, Mean Deviation, Standard Deviation, Variance and Coefficient of Variation;
2. Association and Correlation: Rank Correlation, Product Moment Correlation, and Simple Linear Regression.

*Practical Record: A project file covering all practical topics must be prepared.*

The topics include basic statistical terms, calculation of measures of Central tendency correlations.

The topics are mathematical science that works with numerical data. It helps better understanding and accurate description of nature's phenomena and also helps in efficient planning in many fields of study. It helps to form a base for research and how real life experiments of a phenomena can be numerically validated.

### **3. Geography of India**

#### **CC3-07-PR**

1. Monthly temperature and rainfall graphs of five selected stations from different climatic regions of India;
2. Decadal growth rate of population; Measures of Inequality: Lorenz Curve and Gini's Coefficient.

*Practical Record: A project file covering all practical topics must be prepared.*

The topics of study are rainfall and temperature graphs in selected stations and decadal growth rate of population. The inequality measuring methods are Lorenz curve and Gini coefficient. The former is the graphical method of expression and the latter is the mathematical method of measuring the inequality regarding any population nature. The students will learn about the various ways of expressing the population characteristics.

## **FOURTH SEMESTER**

### **1. Economic Geography**

**Course Code: GEO-H-CC4-08-PR –Practical**

1. Transport network analysis: connectivity (alpha, beta, gamma, theta and eta indices) and accessibility (Accessibility zoning using Detour Index);
2. Representation of state wise variation in occupational structure and work participation rate using proportional circles and proportional divided circles; Kendall's Ranking Co-efficient method (comparison of developed and developing countries).

*Practical Record: A project file covering all practical topics must be prepared.*

Economic geography is a sub-field within the larger subjects of geography and economics. Researchers within this field study the location, distribution, and organization of economic activity around the world. Economic Geography is important in both developed and underdeveloped nations such as the United States, India, China, Bangladesh because it allows researchers to understand the structure of the area's economy and its economic relationship with other areas around the world.

## **2. Regional Planning and Development**

### **Course Code: GEO-H-CC4-09-PR – Practical**

1. Delineation of formal regions by weighted index method; Delineation of functional regions by breaking point analysis;
2. Measuring inequality by Location Quotient; Nearest Neighbour Test for clustering and regularity.

*Practical Record: A project file covering all practical topics must be prepared.*

Regional Planning is a multidisciplinary approach which aims at holistic development of a region. Regional Planning is a specific type of planning, based on, specific planning structure for inducing public action aimed at societal wellbeing. It implies that Regional Planning is concerned fundamentally with the society in the context of space. Regional Planning is considered as a geo-technology for comprehensive development of regions through rational transformation of regional space. It seeks to recognize space more rationally with a view to achieving greater regional integration

## **3. Field Work and Research Methodology**

### **Course Code: GEO-H-DSC-4-10-PR - Practical (Field Survey)**

1. Use of field tools: Collection of material for physical and socio-economic surveys;
2. Designing the field report: Aims and objectives, methodology, analysis, interpretation and writing the report.



## Project Report

1. Each student will prepare an individual report based on primary and secondary data collected during field work within India
2. The duration of the field work should not exceed 10 days.
3. The word count of the report should be 10,000 to 12,000 excluding figures, tables, photographs, maps, references and appendices.
4. One typed copy of the report on A 4 size paper should be submitted in soft binding.

Field research is defined as a qualitative method of data collection that aims to observe, interact and understand people while they are in a natural environment. For example, nature conservationists observe behavior of animals in their natural surroundings and the way they react to certain scenarios. In the same way, social scientists conducting field research may conduct interviews or observe people from a distance to understand how they behave in a social environment and how they react to situations around them. To complete and analyze a few objectives students need to follow a distinct methodology. 4<sup>th</sup> semester (H) and 6<sup>th</sup> semester (H) students of 2022 went to Dzungri village, Upper Pelling, Sikkim to study and observe their way of life to cope up with landslide hazards.

## **Fifth semester Honors**

### **1. Environmental geography**

#### **CC5-11-PR**

1. Preparation of questionnaire for perception survey on environmental problems;
2. Project on environmental problems of North Bengal relating to solid waste/water pollution/air pollution.

#### Project Report:

1. Each student will prepare an individual report based on primary and secondary data on any one topic mentioned above;
2. The word count of the report should be about 3000 to 4000 excluding figures, tables, photographs, maps, references and appendices;
3. One typed copy of the report on A4 size paper should be submitted in soft binding.

The content for both Honors and Program courses are the same in this paper. The content of the course is preparation of a project report based on environmental problems. The syllabus will make the students learn and practically understand the burning environmental issues today. They

will be more aware about the problem as well as they will learn how to design, collect data and assimilate as well as write a project report.

## **2. Remote sensing and GIS**

### **CC5-12-PR**

1. Air photo interpretation (using pocket stereoscope); and satellite imagery interpretation(manual);
2. Image Processing, Classification (supervised & unsupervised); Geo-referencing, Editing and Output, Overlays.

#### **Practical Record**

A project file consisting of two exercises will be done from aerial photos and satellite images (scale, orientation and interpretation) and three exercises using any of the following software: Map Info/Global Mapper/**QGIS**/ERDAS

This is the new development as well as the most advanced topic in geography as a science. The knowledge of Remote sensing and GIS as well as the aerial photo interpretation, satellite imagery image processing classification etc. constitute the content of this paper.

The content will help the students learn about the new techniques in Remote Sensing and GIS, their application in various subjects and the importance of these modern techniques which is very vital in the modern times.

## **5th semester DSE**

### **1. Population Geography**

#### **DSE 5-01-PR**

1. Population projection by arithmetic method; Population density mapping for India;
2. Analysis of work participation rate: Total and gender-wise for India; Analysis of occupation structure by dominant and distinctive functions for West Bengal.

The content includes population projection, density mapping, and work participation rate. The topics help to learn about the population projection, the concept of density of the population, area identification of low and high density, and its relationship with other causal factors for population growth and distribution. The study also includes the number of people participating in

different sectors of the economy which help to identify the real life situation of the people participating as there will be use of authentic data like Census of India, NSSO. etc

## **2. Urban geography**

### **GEO-DSE5-02-PR**

1. Hierarchy of urban settlements: Rank-size rule;
2. State-wise variation and trends of urbanization; Temporal analysis of urban growth using Census data of India.

In this paper, topics include rank size method, State wise variation and trend in urbanization.

The paper helps to understand the pattern of distribution of urban centers scientifically. Rank size method is one of the accepted methods for studying or analyzing the pattern of distribution of urban centers. The exact state wise variation and trend of urbanization can be observed from the data taken from census population.

## **SIXTH SEMESTER**

### **1. Evolution of Geographical Thoughts**

#### **Course Code: GEO-H-CC-6-13-PR –Practical**

1. Quantitative techniques in geography: Chi square, standard score;
2. Crop combination by Weaver, Rafiulla and Doi.

*Practical Record: A project file covering all practical topics must be prepared.*

“Geographic thought” as commonly understood in the discipline of geography encompasses the development of geographic knowledge in particular places, times, and contexts. Accordingly, it has traditionally been—and continues to be—primarily approached from a historical perspective. This is a new course that develops a conceptual framework for studying evolution within the context of interconnected Earth physical systems and life, including humans, and the processes that have changed them as they relate to geography.

### **2. Disaster Management**

### **Course Code: GEO-H-CC-6-14-PR –Practical**

Project report based on any one field based case study from the following disaster will be prepared:

- a) Flood
- b) Landslide
- c) Earthquake

#### **Project Report**

1. Each student will prepare an individual project report based on primary and secondary data collected from local area.
2. The word count of the report should be about 4000 to 6000 excluding figures, tables, photographs, maps, references and appendices.
3. One typed copy of the report on A4 size paper should be submitted in soft binding.

Disaster management refers to the conservation of lives and property during natural or human-made disasters. Disaster management plans, by protecting from disease and droughts. Disaster management can be either natural disasters or man-made disasters. In this area students learn different techniques and mitigation strategies to cope up with naturally made hazards and disasters.

*(Students will have to choose any two courses: Advanced Cartography or Political Geography and Hydrology & Oceanography or Social Geography)*

### **3. Advanced Cartography**

#### **Course Code: GEO-H-DSE-6-03-PR: Advanced Cartography**

1. Drawing of profiles and contouring by Dumpy Level; determination of height and distance by transit Theodolite (accessible and inaccessible base);
2. Construction of Polar Zenithal Equal Area, Polar Zenithal Equidistant, Simple Conical Projection with two standard parallels; International Projection

Cartography or mapmaking is the study and practice of making maps .Map making involves the application of both scientific and artistic elements, combining graphic talents and specialized knowledge of compilation and design principles with available techniques for product generation. Map function as visualization tools for spatial data. Spatial data is stored in a database and extracted for a variety of purposes. The traditional analog methods of map making have been replaced by digital interactive maps that can be manipulated digitally. Modern cartography like many other fields of “information technology” has undergone Rather than merely drawing maps

the cartographic process is concerned with I) Data manipulation, II) Data capture, III) Image processing and IV) Visual display. Cartographic representations may appear in printed form or as dynamic images generated on a computer display screen. Computer assisted mapping systems have added a new and exciting dimension to cartographic techniques and traditional methodologies have to be augmented with new skills. The fundamental nature of cartography has changed with the evolving technologies, providing cartographers with new methods for visualization and communication of spatial information.

## **Social Geography**

### **Course Code: GEO-H-DSE-6-04-PR: Social Geography**

1. Flow chart to show migration trends;
2. Spatial distribution of caste, religion and gender in India using suitable cartographic techniques.

Social geography is the branch of human geography that is interested in the relationships between society and space, and is most closely related to social theory in general and sociology in particular, dealing with the relation of social phenomena and its spatial components. In a nutshell, social geography focuses on the scientific study of **the relationship of society and space (spatial components)**. It is interested in answering the questions of how societal processes determine space and its structures and how spatial conditions determine the existence of societies.

## **Programme Course**

### **FIRST SEMESTER**

#### **1. Physical Geography**

##### **Course Code: GEO-P-CC-1-01-PR: Practical**

1. Construction of scale; plain (linear and comparative), diagonal and vernier scale;
2. Map Projection: Zenithal Gnomonic Projection (Polar Case), Cylindrical Equal Area Projection (Equatorial Case), Simple Conical Projection with one standard parallel,

Sinusoidal Projection.

*Practical Record: A project file covering all practical topics must be prepared.*

Physical geography is the study of the processes that shape the Earth's surface, the animals and plants that inhabit it, and the spatial patterns they exhibit. Self-identified in the mid- to late 1800s, physical geographers and in particular geomorphologists dominated the discipline of geography to the late 1930s.

## **SECOND SEMESTER**

### **1. Human Geography**

**Course Code: GEO-P-CC-2-02-PR: Practical**

1. Diagrammatic Data Presentation: Line, Bar and Circle;
2. Thematic Mapping Techniques: Choropleth, Proportional Circles and Proportional Divided Circles

*Practical Record: A project file covering all practical topics must be prepared.*

While studying human geography students will learn how spatial processes such as migration, landscape change and spatial planning shape people's lives and activities. The study of these devices and tools which are involved in their construction and use. Practical Geography: A systematic approach explains the techniques of surveying and Cartography, using mathematical and Statistical methods.

## **THIRD SEMESTER**

### **1. Regional Development**

**Course Code: GEO-P-CC-3-03-PR: Practical**

1. Interpretation of Indian Topographical maps: plains/plateaus; scale 1:50000 (Broad physiographic divisions, drainage, natural vegetation, settlement, transport and communication, simple profiles and transect chart);
2. Geological maps: Uniclinal and folded structures with given dips.

*Practical Record: A project file covering all practical topics must be prepared.*

Regional development is a broad term but can be seen as a general effort to reduce regional disparities by supporting (employment and wealth-generating) economic activities in regions.

## **FOURTH SEMESTER**

### **Spatial Information Technology**

#### **Course Code: GEO-P-CC-4-04-PR: Practical**

1. Identification of broad physical and cultural features from aerial photographs using pocket stereoscope;
2. Statistical techniques: Measures of central tendency and measures of dispersion.

*Practical Record: A project file covering all practical topics must be prepared.*

Spatial information technology aims to provide information about the Earth's surface. It includes all the tools and technologies that enable us to acquire information and provide decision-making capability towards planning and sustainable management. The most important technologies are remote sensing, GPS and GIS.

## **FIFTH SEMESTER**

### **1. Disaster Management**

#### **Course Code: GEO-P-DSE-5-01-PR: Practical**

1. Project report based on any one field based case study among the following disasters:
  - a) Flood
  - b) Landslide
  - c) Human induced disaster: fire, chemical and industrial accidents

#### **Practical Record**

1. Each student will prepare an individual report based on primary and secondary data collected during fieldwork.
2. The word count of the report should be about 4000 to 5000 excluding figures, tables, photographs, maps, references and appendices.
3. One typed copy of the report on A4 size paper should be submitted in soft binding.

The content for both Honors and Program courses are the same in this paper. The content of the course is preparation of a project report based on environmental problems. The syllabus will make the students learn and practically understand the burning environmental issues today. They will be more aware about the problem as well as they will learn how to design, collect data and assimilate as well as write a project report.

## **SIXTH SEMESTER**

*(Students will choose either Climate Change: Vulnerability and Adaptation or Rural Development)*

### **1. Climate Change: Vulnerability and Adaptation**

#### **Course Code: GEO-P-DSE-6-02-PR: Practical**

1. Project report based on climate change field based case study among any one of the following:

- a) Local level
- b) National level

#### **Practical Record**

1. Each student will prepare an individual report based on primary and secondary data collected during fieldwork.
2. The word count of the report should be about 4000 to 5000 excluding figures, tables, photographs, maps, references and appendices.
3. One typed copy of the report on A4 size paper should be submitted in soft binding.

Climate change threatens people with food and water scarcity, increased flooding, extreme heat, more disease, and economic loss. Human migration and conflict can be a result. The World Health Organization (WHO) calls climate change the greatest threat to global health in the 21st century. The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. It is a function of the character, magnitude and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity. Climate change adaptation refers to actions that reduce the negative impact of climate change, while taking advantage of potential new opportunities. It involves adjusting policies and actions because of observed or expected changes in climate.



# SukantaMahavidyalaya

(Affiliated to University of North Bengal Recognized under section 2(f) &12(b) of UGC Act & NCTE Accredited by NAAC with “B” Grade)Established: 1981



## Department of History

### Academic Session 2020-21

#### Departmental Report

#### 1.3.2 Details of Experiential Learning Project Work.

In the 3<sup>rd</sup> and 4<sup>th</sup> Semester of History (Hons.) and 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Semesters of History Programme of CBCS syllabus SEC Papers 131&94 are practical papers based on Projects. The two papers which our department teaches is An Introduction to Indian Art and Architecture and the other being Museum Studies. In the academic session of 2020-21 there were 51 (Hons.) students and 64 Programme students in 3<sup>rd</sup> Semester and 51 (Hons.) students and 64 Programme students in 4<sup>th</sup> Semester taking these papers. There were 232 students in 5<sup>th</sup> and 6<sup>th</sup> Semester in Programme taking this paper. Altogether 430 students participated in the experiential learning. Due to the pandemic situation classes were conducted online on Google meet and study materials were shared on whatsapp group and engaged portal of our College website. For the Covid 19 situations instead of projects Assignments were given to the students.



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**SYLLABUS FOR THIRD SEMESTER HISTORY HONS STUDENTS AND B.A.(P)  
STUDENTS**

- I. Definition and history of development (with special reference to India)
- II. Types of archives and museums: Understanding the traditions of preservation in India.
- III. Collection: field exploration, excavation, purchase, gift and bequests, loans and deposits, exchanges, treasure trove confiscation and others. IV.
- IV. Documentation and Preservation: indexing and cataloguing, digital documentation and deaccessioning, preservation and restoration.

**ESSENTIAL READINGS:**

Saloni Mathur, India By Design: Colonial History and Cultural Display, University of California, 2007.

Sengupta, S. Experiencing History Through Archives. Delhi: Munshiram Manoharlal.2004.

Guha, Thakurta, Tapati, Monuments, Objects, Histories: Institution of Art in Colonial India, New York, 2004.

Kathpalia, Y. P., Conservation and Restoration of Archive Materials.UNESCO, 1973.

Choudhary, R.D., Museums of India and their maladies. Calcutta: Agam Kala, 1988.

Nair, S.M. Bio- Deterioration of Museum Materials. 2011.

Agrawal, O.P., Essentials of Conservation and Museology, Delhi.

**FOURTH SEMESTER SEC:**

**PAPER-II: ART APPRECIATION AN INTRODUCTION TO INDIAN ART**

The purpose of this course is to introduce students to Indian art, from ancient to contemporary times, in order to understand and appreciate its diversity and its aesthetic richness. The course will equip students with the abilities to understand art as a medium of cultural expression. It will give students direct exposure to Indian art through visuals, and visits to sites and museums.

- I. Prehistoric and protohistoric art: Rock art; Harappan arts and crafts

- II. Indian Art (c. 600 CE – 1200 CE): Temple forms and their architectural features early illustrated manuscripts and mural painting traditions Early medieval sculpture: style and iconography Indian bronzes or metal icons.
- III. Indian art and architecture (c. 1200 CE – 1800 CE): Sultanate and Mughal architecture Miniature painting traditions: Mughal, Rajasthani, Pahari Introduction to fort, palace and haveli architecture.
- IV. Modern and Contemporary Indian art and Architecture: The Colonial Period Art movements: Bengal School of Art, Progressive Artists Group, etc. Major artists and their artworks popular art forms (folk art traditions).

**ESSENTIAL READINGS:**

Neumayer, Erwin, Lines of Stone: The pre-historic rock-art of India, South Asia Books, 1993.

Goswamy, B.N., Essence of Indian Art, Asian Art Museum of San Francisco, 1986.

Huntington, Susan, The Art of Ancient India: Hindu, Buddhist, Jain, Weatherhill, 1985.

Guha-Thakurta, Tapati, The making of a new modern Indian art: Aesthetics and nationalism in Bengal, 1850-1920, Cambridge University Press, 1992.

**SUGGESTED READINGS:**

Mitter, Partha, Indian Art, Oxford History of Art series, Oxford University Press, 2001.

Dhar, Parul Pandya, ed., 2011, Indian Art History Changing Perspectives, New Delhi:

D.K. Printworld and National Museum Institute (Introduction). Beach, M.C., The New Cambridge History of India I: 3, Mughal and Rajput Painting, Cambridge University Press, 1992. Ray,

Niharranjan, An Approach to Indian Art, Calcutta, 1970.



## **B.A. 6<sup>th</sup> SEMESTER HONOURS COURSE CODE: DSE 64P**

The students of B.Sc. 6<sup>th</sup> semester Computer Science honours have successfully completed their final year project works through online mode. This web based project has been implemented using different software. One group consisting three students has been formed under the supervision of one experienced faculty member of the concerned department. In the pandemic situation, the whole work has been performed through online mode and the evaluation of their respective works has been done through online mode only. The visual recording of their project presentation has been done using Google Gsuite platform. The title of project report is presented below -

- ONLINE SHOPPING WEBSITE PROJECT

### **Syllabus of Project DSE-1B Project work / Dissertation Total Marks: 100, Credits: 6**

This option is to be offered only in 6<sup>th</sup> Semester.

The students will be allowed to work on any project based on the concepts studied in core / elective or skill based elective courses.

The group size should be maximum of three (03) students.

Each group will be assigned a teacher as a supervisor who will handle both their theory as well lab classes.

A maximum of Four (04) projects would be assigned to one teacher.

## **B.A. 6<sup>th</sup> SEMESTER PROGRAM COURSE CODE: DSE-1B**

The students of B.Sc. 6<sup>th</sup> semester Computer Science Program course have successfully completed their final year project works through online mode. The software based and web based projects have been implemented using various software. There were total 12 numbers of students in this batch, hence, four groups having three students in each one, have been constituted under the supervision of four different experienced faculty members of the concerned department. In the pandemic situation, the whole work has been performed through online mode and the evaluation of their respective works has been done through online mode only. The visual recording of their project presentation has been done using Google Gsuite platform. The title of project report is listed below -

- Mobile Phone Shop Management System
- DEVELOPING A STANDARD AND SCIENTIFIC CALCULATOR USING PYTHON
- SMV Online Assessment System
- ATM SOFTWARE PROJECT

### **Syllabus of Project B.sc. 6th Semester Honours Course code: DSE 64P: Project Total Marks: 75, Credits: 6**

The students will be allowed to work on any project based on the concepts studied in core / elective or skill based elective courses. The group size should be maximum of three (03) students. Each group will be assigned a teacher as a supervisor who will handle both their theory as well lab classes. A maximum of Four (04) projects would be assigned to one teacher.

# DEPT. OF ENVIRONMENTAL SCIENCE

## SUKANTA MAHAVIDYALAYA

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Ref. No. ....

Date .....15/03/2021.....

### Departmental Report on

#### 1.3.2 Details of Experiential Learning through project work/field work/internship

Ability Enhancement Compulsory Course (AECC1) is divided into two parts *i.e.*, theoretical part and field work. The detailed course structure is attached herewith.

Field work/project work is the required component of the BA/B.Sc./BBA (Honours & General) students for Ability Enhancement Compulsory Course (AECC1) under Environmental Studies programme. The onset of the covid-19 pandemic, as well as the ongoing scenario, has altered the overall educational system. Field work/project work has none of that. The Department of Environmental Science was unable to do any organized fieldwork as a result of this scenario. All the students of Environmental Studies [SEM - I, Session 2020-21] were given specific topic for preparation of their eco-project. The students were divided into 10 groups and provided four topics namely i) listing of economic plants in nearby locality, ii) listing of birds in nearby locality on seasonal basis, iii) record of insects in potato fields, and iv) components of a riverine system of Dooars for their project submission. Altogether 2317 students were participated in the field work. Due to the epidemic, courses were held online using Google Meet, and study materials were exchanged *via* Whatsapp group as well as uploaded in our college's portal.

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[DIC, Environmental Science]

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### **Structure of distribution of marks and credit under CB**

#### **Subject – ENVIRONMENTAL STUDIES (AECC-1)**

#### **B.Sc, BA, B.Com., BBA/BCA Honours Program and Program**

Course		Marks	Credit	Total Credit
<b>Semester 1</b>	Theory	80	1.6	<b>2</b>
	Field Work	15	0.4	



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**Truncated Syllabus for Environmental Studies (AECC-1) under CBCS B.Sc., BA, B.Com. Degree**  
**BBA/BCA Honours Program and Program**  
**Course- 1 (Credit – 2)**

<b>Theory Full Marks: 80</b>	<b>Credit: 1.6</b>
<b>Unit 1: Introduction to environmental studies</b> Scope and importance; Concept of sustainability and sustainable development.	4 Lectures
<b>Unit 2: Ecosystems</b> What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem, food chains, food webs and ecological pyramid	
<b>Unit 3: Natural Resources: Renewable and Non – renewable Resources</b> Land resources and land-use change; Land degradation, soil erosion and desertification. Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.  Water: Use and over – exploitation of surface and ground water, floods, droughts, Dams – benefits and problems. Food resources: effects of modern agriculture, fertilizer-pesticide problems Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources	4 Lectures
<b>Unit 4: Biodiversity and Conservation</b> Levels of biological diversity : genetic, species and ecosystem diversity; biodiversity hotspots India as a mega--biodiversity nation; Endangered and endemic species of India, threats to biodiversity: Habitat loss, poaching of wildlife, man---wildlife conflicts. Conservation of biodiversity: In – situ and Ex – situ conservation of biodiversity.  Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.	4 Lectures
<b>Unit 5: Environmental Pollution</b> Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution Nuclear hazards and human health risks Solid waste management	3 Lectures
<b>Unit 6: Environmental Policies &amp; Practices</b> Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).	3 Lectures

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### Field Work (Full Marks – 15)

1. Study of flora and fauna (any one) (5)
  - a) Prepare a list of the economic plants available in the nearby locality.
  - b) List the birds sighted and found nesting in the nearby locality and its surroundings with the season of their occurrence.
  - c) Record insects associated with any common crop/grassland/tree of local area with an idea of their habitat.
2. Visit to local area to document environmental assets (any one): (5)
  - a) Trip to any riverine system of Terai or the Dooars: comment on the direction, volume and quality of water, flowing as observed.
  - b) Record the nature of vegetation/forest type/land use pattern at the site of visit.
  - c) Analyze the cause of deforestation and landslide on hill slope, if sighted.
3. Submission of a field work (covering the above practical works undertaken) (5)

Equals to 6 Lectures

[Dr. Monoranjan Chowdhury]  
Signature of the Chairmen  
Board of Under-Graduate Studied  
Environmental Studies

  
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