

## **PROGRAMME OUTCOME**

### **ANTHROPOLOGY**

Anthropology as a discipline at Undergraduate level is rather new to the students who are usually not aware about the contents of the course at the outset. The department has a number of outcome for the students from Under-graduate courses which are hereby mentioned:

Firstly, the department Introduce and develop a holistic knowledge amongst the student particularly from Anthropological perspective in context of its three sub branches of Anthropology, namely Biological, Archaeological and Social-Cultural.

Secondly, the undergraduate course imparts a Society Oriented knowledge system through intensive field work training for the students of Anthropology. This methodology of learning makes the students community conscious and interested about welfare and development issues in everyday life from both Biological and Cultural domains.

Lastly, the students develop a sense of motivation for progress towards higher education from Post-Graduation and gradually move towards areas of Research and develop insights for in-depth understanding of the subject and apply its knowledge for the betterment of the society.

Anthropology Course at Postgraduate level contributes much for the students from multiple dimensions.

First and foremost, many of the students get interested and move towards Ph.D. programme from Universities within West Bengal and outside as well. Students even move for post-doctoral programme and gradually move into research and applied based activities through both Government and Non-Government Organizations. Secondly, the Post Graduate course also initiate interest amongst the students for a teaching career. Accordingly, students aspire and appear for UGC- NET and WBCSC-SET Examination to move into an illustrious teaching career at College and Universities for undergraduate and post Graduate Courses. Thirdly, due to its fieldwork-based training and society-based academics, many of the budding anthropologists tend to move into the administrative services and look for welfare and development-oriented activities. Lastly and most importantly, the course gives an outgoing student an holistic identity and interest for acquiring knowledge at depth and make proper application to sustain livelihood in the future course of life.

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### **BENGALI**

General outcome:

1. Bengali Students are taught Bengali Language & literature for better understanding of their own culture and tradition.
2. They become capable of writing Book Reviews that prepare them for jobs in media houses.
3. They learn to write Film Reviews which help them in working as Film journalists.
4. They learn Editing and Proof -reading that prepare them for jobs as journalists.
5. They learn appreciation of Bengali Literature and the fine arts.

#### **Course specific outcomes (Semester 1): CC1, CC2**

This course introduces the students to the early Bengali literature. Charyapada, the earliest script of Bengali language and literature is the starting point of this course. Then gradually comes The Srikrishnakirtan, The Mongal Kavyas, Bengali Ramyana, Mahabharat and Bhgabat along with Vaisnab Padabali and Shakta Padabali. The biography of illustrious Sri Chaitanyadeb is the gem of this period. To explore and explain the origins of Bengali heritage all of these books are very important.

#### **(Semester 2): CC3, CC4**

In this course (Part-CC3) students can study the origin and growth of the Bengali language. Perusing the linguistic development, they can acquire sufficient knowledge on Bengali grammar. In Part-CC4 students can perceive the emergence of Bengali prose, poetry, plays and kathasahitya. The great nineteenth century Bengal renaissance is the key point of this course.

#### **(Semester 3): CC5, CC6, CC7, SEC1**

This course introduces the students to the Bengali rhetoric and Prosody, history of Bengali stage, Bengali plays and some Bengali prose writings. The SEC-1 course makes the students understand the film making and appreciate the different genres of films.

#### **(Semester 4): CC8, CC9, CC10, SEC2**

This course introduces the students to the glory of Bengali poetry, starting from renaissance and Romantic period to modern era. Thus it covers the great giants like Madhusudan, Rabindranath and Jibanananda Das simultaneously. Moreover this course glimpses most of the prose writings of Tagore and makes the students knowledgeable to the forms and poetics of literature both Indian and Greek. In the SEC-2 course students are taught Proof reading and Bengali computer typing.

#### **(Semester 5): CC11, CC12, DSE2, DSE3**

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This course introduces the students to the Bengali Novels and short stories right from the beginning of mid-nineteenth century to till date. So students can experience the changes and variances of vast Bengali kathasahitya ie novels and short stories. Contemporary Bengali poems, Belle letters and literary essays of the Bengali writers are also introduced to the students under this course.

**(Semester 6): CC13, CC14, DSE4, DSE6**

This course basically deals with the history of Sanskrit, English, Hindi and Asomiya Literature. Travelogue, Biography of Tagore, Tagore's social activities etc. are also very important part of this course. Reading the History of Sanskrit Literature students can understand the origin of Bengali literature. Studying History of English Literature students can trace back the western influence on Bengali literature. Knowledge of Hindi and Asomiya literature can make the students aware of the literature of the neighboring state of West Bengal.

### **BOTANY**

*For UG course:*

Over the years, Botany as a subject has grown enormously owing to tremendous inputs of information from research in practically every aspect of Plant Sciences. Therefore, the curriculum is designed to touch upon the entire nuance, highlighting the multidisciplinary approach of Botany – from traditional components to the modern aspects of molecular biology and biotechnology. The aim is to develop the knowledge base of students in both structural as well as the functional aspects of plant development. The three years programme spread over six Semesters is designed according to academic calendars, keeping in mind the student's curriculum needs. It is a balanced, carefully-crafted course with due weightage given to the microbial flora, through to the algal-fungal world, pathology, the vast archigoniatae group, taxonomy, ecology, plant diversity & conservation biology, physiology, biochemistry, molecular biology, reproduction, anatomy, economic botany, genetics and cell biology. It is expected that the Undergraduate students would be acquainted with various tools and techniques for exploring the world of plants up to the subcellular level. With the completion of the Course, employability and entrepreneurship prospects of the student seems bright.

*For PG course:*

Botany being a part of Natural Sciences has been transforming itself rapidly due to interdisciplinary and technological inputs. New areas in developmental and molecular biology, population genetics, ecology, biostatistics, stress physiology in plants, next gen sequencing, molecular plant pathology and phylogeny constructions through bioinformatics have been

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created due to research in these fields which are now part of the Plant Sciences. The Master degree curriculum aims to cover both traditional as well as modern topics and techniques in botany and expose the student to changes in traditional boundaries of the subject and carry-on further studies in the wide field of interest ranging from microflora through algae-fungi, archigoniatae, modern taxonomy, plant physiology-biochemistry, ecology, climate change, genetics and cell biology, application of remote sensing, soil sampling and instrumentation. Students would be sensitised on aspects like, green audit, IK & IPR, biosafety issues. Topics taught in the class will be made more interesting through hands on training, dissertation project work. The curriculum would link the latest research findings of the subject and the allied areas in a holistic way. Students would not only have career opportunity in academic fields but also in conservation and restoration biology, climate change, green audit, Intellectual Property Rights. The objective is to raise the bar for students. On the whole, the curriculum is a source of information and is supported by rich resource materials.

### **CHEMISTRY**

Among the different branches of science, Chemistry has occupied the core position in its own right. Almost all disciplines are correlated to chemical sciences since it deals with the molecules – the fundamental part of everything. Actually, we observe the manifestation of the molecules different dimensions in every sphere of science. At the same time, we have to keep it mind that it is very much an experimental science compared to other branches.

Now if we carefully observe the course curriculum designed for the undergraduate students with Chemistry as major subject, it is seen that after the completion of their studies they should have a thorough knowledge of Inorganic, Organic, Physical and Analytical Chemistry. They also grasp at least the basic as well as fundamental knowledge in Biochemistry and Industrial chemistry, along with, two subsidiary subjects (Mathematics, Physics/Microbiology) are included in the syllabus.

Students in any chemical laboratory handle hazardous chemicals, inflammable solvents, Bunsen burner, electronic gadgets and many sophisticated instruments. This sort of practical experience will be very beneficial in their future endeavor for career development.

This department has a composite structure of undergraduate, postgraduate studies and research activities. Therefore, every member is well acquainted with the total activities and curriculum of each section. Fortunately, these unavoidable interactions will mutually benefit all the members.

During this period, they get the scope to participate in the departmental scientific seminars/webinars as well as other interdepartmental deliberations and activities (quiz, writing,

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presentation). These activities help to strengthen them in their future competitive job-related selection.

Therefore, after graduation with Chemistry Honours and Postgraduate students should be able to do the following things in their future career journey.

1. Pursue higher studies in chemical/biological sciences (Master and Ph.D.) in reputed Institutes in India or abroad
2. Pursue studies in professional courses
3. May join teaching job with their acquired knowledge
4. May join chemical/pharmaceutical industries
5. Eligible to join Public/Private sectors with this graduation degree and subsequent examinations/interviews
6. May pursue their own enterprise

### ECONOMICS

The core courses in Microeconomics, Macroeconomics, Trade and BOP (ECOACOR01T, ECOACOR03T, ECOACOR05T, ECOACOR06T, ECOACOR08T, ECOACOR09T, and ECOACOR14T) help students understand human behaviour as economic agents in society. They learn about supply and demand, perfect and imperfect competition, taxation, international trade, price controls, monetary policy, exchange rates, interest rates, unemployment and inflation amongst many other topics to understand individual markets, the aggregate economy and government policies as well. The latter is also taught in a detailed manner in the DSE course ECOADSE02T. The course is thus conceived so that the students inculcate a critical approach to identify how the various components of a product cycle are interrelated and affect decision-making both at the unit as well as the aggregated level. For example, relations between prices and quantities, revenues and elasticity, output and inflation, productivity and aggregate growth, trade and exchange rates, environment and social welfare etc are not at all bivariate. This trains the students with the concepts of economic modelling and help them to develop an insight into the key processes underpinning the study of market, environment and public policy.

As students, the core course ECOACOR13T provides them with the opportunity of studying in details the developmental process of India since independence. This provides them with an empirical study and understanding of the critical aspects of the development of an economy, especially on the role of government policy in striking balance between growth and development.

The mathematical core courses (ECOARCOR02T, ECOARCOR07T) and the statistical core and DSE courses (ECOACOR04T, ECOACOR10T, ECOACOR11T, ECOADSE01T), help the students develop problem-solving and analytical skills that enable them to apply economic principles and models to problems in business, finance and the public sector. They learn to dissect and analyse complicated data using economic logic. The most important skill they learn is cultivating a way of thinking that requires a critical eye and a rigorous method of logical

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reasoning wherein even abstract concepts such as utility, deadweight loss, economic surplus or social welfare can be represented as functions and models. These models can then be used to measure and optimise the required functions, even in the presence of various constraints. This prepares the students for applications in many fields: be it to analyse market for new products or to develop business models and strategies for industries and regions. Thus, career opportunities for students lie fields that use specific knowledge of economics, for example in banks, insurance, accountancy firms, businesses and in government.

The SEC courses (SEC1, SEC2), Project Work paper (ECOADSE06P) and learning of a Programming language (EViews, Stata, SPSS, R etc) train the students to retrieve, interpret, analyse, and report on any complex dataset. Interested students can further train themselves in econometric modelling and analysis by taking the DSE course (ECOADSE01T). They are thus prepared to cater to the very lucrative and high job demands in data analytics and Big Data mining.

### **EDUCATION**

After the completion of the UG and PG course in Education, the students will be able to develop knowledge and understanding of major specialized areas in the subject, develop critical thinking pertaining to issues related to Education and will be oriented on the modern trends of Educational Technology and their application in the educational system. The course will also enhance the necessary competencies to provide a better inclusive classroom environment to accommodate various categories of the students and help to develop competencies to conduct research in emerging areas of Education. It will also develop knowledge and understanding of the process of educational research. Further after the completion of UG and PG Programs in Education, the Students will be able to get employment in various fields and will become competent to contribute to the society.

### **ENGLISH**

The Department of English of Bidhannagar College offers Six Semester English Honours Course under CBCS as part of its Undergraduate Programme. Since the College is affiliated to the West Bengal State University, the Syllabus is formed by the University and the Department of English has to follow the same.

Students who have passed out successfully at the Higher Secondary level, i.e, 10+2, from the various Central or State Boards are eligible to apply at the Under Graduate English Honours Programme. The selection for the Course is based on merit. Since the College is a Government Institution the selection process is done taking into consideration the various instructions/guidelines prescribed by the Central and State Government from time to time.

## **PROGRAMME OUTCOME**

Students who pass out of the Department have a bright future. Some of them go for Higher Studies like M.A. in English. Since the emphasis of the Course and Syllabus is primarily on the acquiring of the knowledge of English Language and Literature many of the brightest students finally make an entry into Academics as Research Scholars, Teachers and Professors.

Some students also endeavour for Civil Services, at the Centre Or the State level. Banking is also preferred by some. Various other miscellaneous services are open before Graduates, and the knowledge of English helps them crack such difficulties examinations.

Some students also join Professional Courses like the various Management Programmes such as Business Management, Hotel and Hospitality Management, Tourism Management, Hospital Management, etc., where the fluency of English, both verbal and written, is extremely essential.

Some students also enter into the vast world of Media and Journalism. The present demand on the Press for the sustenance of Democracy and Peace, at the local, regional, national or international arena, has all the more brightened the scope of young people pursuing studies in English.

The best part of the Course is that it equips the students with a sound knowledge of the English Language. And with the world becoming a global village the prospect of people with a sound knowledge of English is manifold. The future of the students of this Department is, therefore, very great and inspiring.

## **GEOGRAPHY**

Honours in Geography under West Bengal State University encompasses a wide range of topics at undergraduate level. The UG course in Geography Honours highlights the various aspects of theory and practical knowledge. The syllabus includes Physical Geography like Geotectonics, Geomorphology, Hydrology, Oceanography, Climatology, Paedology, Biogeography and Human Geography like Economic Geography, Resource Geography, Population geography, Cultural Geography, Social Geography, Transport Geography, Regional Planning etc. Geographical thought and Remote Sensing and GIS are also taught at undergraduate level.

Practical Geography caters to the knowledge of surveying, map study of various types, cartograms and statistical techniques and Remote Sensing and GIS and field survey. The students of Geography graduated in Honours are eligible to get services in different corners of the government and non-government organisations like departments of Meteorology, Agriculture, River valley project, Soil survey, Rural and Urban Planning, National Atlas and Thematic mapping organisation, Remote Sensing and Geographical Information System and teaching at various levels and so on.

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### **HISTORY**

Like all other subjects History also needs justification why it should be studied with avid interest. It attracts some people simply for its narrative style providing information of the past. But the people who are not spontaneously drawn to the subject need to know what the purpose is. Being a popular branch of Social Science History covers wide range of human activities of the past. Why do we know the past incidents and activities of the human beings? We need to know our past and we should study history because it reveals the past for the understanding of the present and to have an idea about the future. Indeed History, as observed by E. H. Carr, is an unending dialogue between the present and the past.

Since historical events, human evolutions, migrations, social formations, wars, military alliances, creative urge of the people etc can't be experimented in laboratories, a historian has to reconstruct the past through his reflective ability which forms an image of mind through close discussion or dialogue with the subject. History is an interpretation of the past with the intention of predicting the future. Since historical occurrences take place in time and space, it should be possible to make a fair guess of what is in the womb of history.

As per the CBCS syllabi or courses of the West Bengal State University, Barasat, we offer both Core Courses and Generic Courses to all undergraduate students of our College. This gives them a wide exposure to historical incidents and trends both of Indian and World history. The Course Outcome enables our students to analyze all human achievements in all their aspects such as science, technology, discoveries, inventions and adventures. But primarily the social life of man, his political achievements, his cultural attainments, his constitutional management and their economic endeavors form the main subject of their concern. As part of our Course Outcome students shall be able to demonstrate their thinking skills by analyzing, synthesizing and evaluating historical information from multiple sources. Building their solid base here our students pursue higher studies and research in different universities and institutions and establish themselves as teachers in schools, colleges and in different institutions of both public and private sectors.

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### MATHEMATICS

The Bachelor's Degree in B.Sc. (Hons) Mathematics is awarded to the students on the basis of knowledge, understanding, skills, attitudes, values and academic achievements sought to be acquired by learners at the end of this program. 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. Mathematics is the study of quantity, structure, space and change. It has very broad scope in science, engineering and social sciences. The key areas of study in mathematics are Calculus, Algebra, Geometry, Analysis, Differential Equations and Mechanics. Programme Specific Outcome of B.Sc. (Hons) Mathematics · Think in a critical manner. · Familiarize the students with suitable tools of mathematical analysis to handle issues and problems in mathematics and related sciences. · Acquire good knowledge and understanding to solve specific theoretical and applied problems in advanced areas of mathematics and statistics. · Provide students/learners sufficient knowledge and skills enabling them to undertake further studies in mathematics and its allied areas on multiple disciplines concerned with mathematics. · Encourage the students to develop a range of generic skills helpful in employment, internships and social activities. Bachelor's degree in mathematics is the culmination of in-depth knowledge of algebra, calculus, 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. They also share ideas and insights while seeking and benefitting from knowledge and insight of others. This helps them to learn behave responsibly in a rapidly changing interdependent society. Students completing this programme will be able to present mathematics clearly and precisely, describe mathematical ideas from multiple perspectives and explain fundamental concepts of mathematics to non-mathematicians. Completion of this programme will also enable the learners to join teaching profession in Primary, Secondary and Higher Secondary schools. This programme 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.

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### **MICROBIOLOGY**

The undergraduate programme in Microbiology is the first level of college or university degree in the country as in several other parts of the world. After obtaining this degree, a microbiologist may enter into the job market or opt for undertaking further higher studies in the subject. After graduation the students may join industry, academia, public health and play their role as microbiologists in a useful manner contributing their role in the development of the welfare society. Thus the undergraduate level degree in microbiology must prepare the students for all these objectives. Learning Outcome of this curriculum has a very wide range covering all aspects of Microbiology with reasonable depth of knowledge and skills so to as to diversify them in various specialties of the subject and play their role professionally as expected of them.

Microbiology subject is a lab based subject. During the course they must be able to analyze the problems related to microbiology and come up with most suitable solutions. As microbiology is an interdisciplinary subject the students might have to take inputs from other areas of expertise. So the students must develop the spirit of team work. Microbiology is a very dynamic subject and practitioners might have to face several newer problems. To this end, the microbiologists must be trained to be innovative to solve such newer problems. Several newer developments are taking place in microbiology. The students are trained to pick up leads and see the possibility of converting these into products through entrepreneurship. They are also made aware of the requirements of developing a Microbiology enterprise by having knowledge of patents, copyrights and various regulatory process to make their efforts a success. Besides attaining the attributes related to the profession of Microbiology, the graduates in this discipline should also develop ethical awareness which is mandatory for practicing a scientific discipline including ethics of working in a laboratory work and ethics followed for scientific publishing of their research work in future.

A candidate who is conferred an UG (Hons) degree i.e. B.Sc. (Hons) degree in microbiology needs to have acquired/developed the basic skills such as culturing microbes, maintaining microbes, safety issues related to handling of microbes, good Microbiological practices, moderately advanced skills in working with microbes such as pilot scale culturing, downstream processes, diagnostics etc. They will acquire knowledge and understanding of the microbiology concepts as applicable to diverse areas such as medical, industrial, environment, genetics, agriculture, food, patenting and others. They are able to demonstrate key practical skills/competencies in working with microbes for study and use in the laboratory as well as outside, including the use of good microbiological practices. They will be Competent enough to use microbiology knowledge and skills to analyze problems involving microbes, articulate these with peers/ team members/ other stake holders, and undertake remedial measures/ studies etc.

They were also able to develop a broader perspective of the discipline of Microbiology to enable him to identify challenging societal problems and plan his professional career to develop innovative solutions for such problems.

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### **PHILOSOPHY**

The UG Philosophy Honours Program is very much useful for students in development soft skills as well as in building career opportunities. This course comprises of variety of disciplines such as Indian Philosophy, Ethics, Aesthetics, Metaphysics, logic, Epistemology, Social and Political philosophy, Religion, Psychology etc.

- ❖ The study of Philosophy develops the faculty of understanding of the students and enriches one's thought process and sharpens one's analytical abilities.
- ❖ This study helps a student to acquire knowledge of moral values and concepts of good and bad, right and wrong. It helps to develop moral consciousness that enable the students to become an all-round human being and responsible citizens in future.
- ❖ The study helps us to know our mental abilities, mental problems and their solutions.
- ❖ This study builds overall awareness regarding rights and duties towards our natural environment and tries to take initiatives towards environmental sustenance.
- ❖ The study enables the students to express complex thought logically and coherently and develops the ability of assessing arguments using critical reasoning.
- ❖ The study helps in transmitting cultural heritage to the students. Students become aware of our rich intellectual heritage as well as the Western philosophical thought.
- ❖ The study of Philosophy helps to develop an integrated and holistic view of life and world.

**The graduate degree holder in Philosophy Honours have following avenues open:**

- Logical reasoning being an essential part of discipline of Philosophy, students can join legal profession and excel.
- Government services
- Career in Media
- Career in the field of Medical Ethics
- Academic Consultant

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### **PHYSICS**

The Curriculum proposed is related to understand the basic Physics, its significance at global level and our day-to-day encounter with technologies surrounding us requiring our daily needs. The basic conception and knowledge about topics in courses are essential to understand higher level Physics, engineering and research in various multi-disciplinary realms. The curriculum is also entangled with Lab work designed to develop basic instruments handling capabilities, generate working experiences with the electrical and electronics circuits and optical instruments, practical knowledge of circuit construction as basic building block of electronic devices, skill to measure the physical properties of materials which provides a taste of research work essential in future studies.

As a natural outcome, after completing B.Sc. Honours course in Physics

1. Students will be able to pursue a post-graduation degree in respective fields. They can study M.Sc. in Universities or go to IITs and research institutes for integrated M.Sc.-Ph.D. programmes through All India Level competitive examinations like JAM, JEST etc. Background in Physics will also be beneficial for them to join master degree courses such as animation and film studies, management, computer technology etc.
2. They can apply for suitable jobs as scientific assistants at organizations like BARC, DRDO etc.
3. They can apply for Government jobs like fingerprint expert, meteorology scientist, Food & Drug Inspector where knowledge in physics at graduate level is compulsory.
4. They can opt for further job based study like MCA, MACHINE LEARNING and DATA SCIENCE etc.
5. Job applications in industries are also possible.

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### **POLITICAL SCIENCE**

Political Science comes with diverse career prospects. After doing a bachelors in the subject one can opt for higher studies like a Masters in Political Science or allied areas like International Relations, Public Administration or Defense Studies. Students having a masters in any of the aforementioned field can take teaching as a profession through competitive examinations like NET or SET. The CBCS syllabus under the new curriculum is a comprehensive one embracing almost all the relevant areas of Political Science including both its theoretical and practical aspects. Students can also think of a career in social work after completing their bachelors in Political Science as the new syllabus includes a comprehensive paper on human rights. They may also join a thinktank after doing Masters in Political Science or any allied field and opt for serious research. A career in journalism is also a good option as they get significant exposure to different dimensions of politics both national and international along with a constant upgradation of their knowledge of current affairs that the new syllabus demands. And finally a career in active politics is always a good option for the students of Political Science as they are more familiar with different facets of politics

### **STATISTICS**

Decision-making and that too under uncertainty, is the ultimate requirement of the present civilization – be it in governance, commerce, society or in scientific research.

As Information Technology has brought about a revolutionary change in the quantum of knowledge available to the present-day scientific community, the necessity of trimming down the knowledge, using statistical tools and techniques, has grown further.

To be precise, knowledge available in the form of data is always contaminated with various spurious information and confounded with different factors, not relevant to the context of interest. As a result, while making decisions using this knowledge, we always become vulnerable to the elements of uncertainty. The job of a statistician is to identify the various sources of uncertainty and to eliminate them, as far as practicable, using tools and techniques, available to him. When this available bouquet of tools and techniques appears to be insufficient or inadequate to handle the uncertain factors, confounded with the information of interest, necessity for building up new statistical models, leading to further development of the theory in Statistics arises.

Besides this kind of development, judicious use of information from various sources, available at different layers, requires newer techniques to be developed taking advantage of machine learning to give impetus to algorithm-based inference. This particular field of research, though called in a new name - ‘The Data Science’, over an expanded horizon of knowledge, is nothing new and is embedded very much within the basic knowledge of Statistics. In fact, we can safely say that ‘Statistics is the gateway of Data Science’ and it is being explored by the present day statisticians in a more collaborative environment cutting across the border of different scientific disciplines.

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Keeping in mind the present need of the scientific community in particular and the larger society in general, the syllabus of Statistics has been revised and updated thoroughly in tune with the recommendation of the UGC for the newly introduced CBCS system. Besides knowledge gathered from class lecturing, our students are given compulsory practical training in handling and processing of both primary and secondary data, sometimes going beyond the periphery of their domain knowledge. With the training and temperament, a student of Statistics of Bidhannagar College, after having completed her/his UG-Hons. Programme is expected to

1. Render service to the planning and development programme in different government sectors as a responsible officer of Indian Statistical Service and also as officer of the State Statistical Bureau, amongst other government establishments.
2. Contribute substantially in developing the subject through active participation in different training and research programmes in Statistics, conducted by premier institutions of higher learning in India and abroad.
3. Give service to the Giant Corporates and MNCs in the field of Finance, IT and Pharmaceutical Industries.

Apart from developing professional skills, students are encouraged to be part of different social and cultural activities of the college through participation in NSS (National Social Scheme) programme and the Annual Cultural Programme of the college. The talent and quality of leadership, already built in the personality of a student are thus nurtured and flourished. So to conclude this writing on 'Learning –Outcome' it is worth mentioning that our students of Statistics are trained not only for giving service to the nation with their acquired knowledge and skill in the field of Statistics, but a least some of them are expected emerge as a leader to guide the society and the nation on the right path in days to come.

## ZOOLOGY

- The Department of Zoology of Bidhannagar College runs 3 years Under-Graduate Course and 2 years Post-Graduate Course in Zoology under C.B.C.S. system with the affiliation of the West Bengal State University.
- Study of Zoology leads to overall development of knowledge and cognition on the living entities existing on the Earth and the biotic-abiotic interaction occurring in the environment.
- Students are introduced to the variety and diversity of life forms through study of Non-chordate and Chordate fauna.
- Study of physiology and biochemistry reveals the internal mechanism and homeostasis that sustain a life form.
- Concepts of genetics, molecular biology and biotechnology help a student to learn the basics of genomics and proteomics with the advances in genetic engineering.

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- Evolution, taxonomy and ethological studies strengthen the idea regarding the descent of the life forms and their interrelationship and mutual interaction.
- Overall the study of Zoology help the students to build a strong concept on different aspects of Bioscience and application of this knowledge in progression to higher studies or research.
- Moreover practical lessons along with theoretical studies help the students to learn the principles and methodologies of different techniques that ultimately help them to develop an efficient research career and possible entry into the diversified job opportunities in the fields of biotechnology industries, medical industries or food processing industries.
- Studies on economic Zoology like aquaculture, sericulture, apiculture, poultry and dairy also introduce the students to opportunities of further studies and developing a successful career in this fields as entrepreneur.