Government Autonomous College Angul Course Outcomes (UG): 2020-2021

Department of Economics:

- 1. The emphasis is on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.
- 2. This course introduces the students to formal modeling of a macro-economy in terms of analytical tools. It discusses various alternative theories of output and employment determination in a closed economy in the short run as well as medium run, and the role of policy in this context.
- 3. The students develops the notion of probability, followed by probability distributions of discrete and continuous random variables and introduces the most frequently used theoretical distribution, the Normal distribution
- 4. The emphasis will be on giving conceptual clarity to the student coupled with the use of mathematical tools and reasoning
- 5. It develops the skill to make better decisions in business environment and even in your personal choices.
- 6. To impart the knowledge of Banking, Marketing and different sections of economy so that students will get job opportunities in different economic, financial, banking, marketing and other sections of economy.

Department of Education:

- 1. Understand nature of education and pedagogic processes through enriched experiences
- 2. Contribute to fill up the gap between theory and practice by dovetailing both appropriately.
- 3. Interactive processes wherein group reflection, critical thinking and Meaning making will be encouraged Understand various educational issues in the context of diverse socio cultural & Multilingual Indian Society
- 4. Enable them to face the challenging of social, political and technological issues.
- 5. Understand the nature, purpose, influencing factors and problems of secondary education in contemporary issues
- 6. Describe teaching learning process in the classroom and various factors that influence it.
- 7. understands various level learners, their needs, and interest and peculiar problems and motivate them for learning.
- 8. Plan and organize classroom through learner-centered techniques of instruction for inclusive education & effective whole classroom instruction.
- 9. Conduct Pedagogical content analysis in subject areas and use it for facilitating learning in the classroom.
- 10.Effective use and utilization of Information Communication Technology resources, online as well as off line for day-to-day classroom teaching, remedial instruction and for providing challenging learning to the precious

Department of English:

- 1. To introduce the students to British poetry and drama from the 14th to the 17th century. It helps students sample and explore certain seminal texts from the early modern period, covering the genesis of modern English poetry and the Renaissance that set British poetry and drama on their glorious course to greatness.
- 2. To acquaint the students with a remarkable, newly evolved form of literature: the essay. The period is also known for its shift of emphasis from reason to emotion.
- 3. The students will be able to sample some seminal works of the Romantic age which gave expression to the key ideas of the period such as return to nature, subjectivity, desire for personal freedom and the defiance of classicism-imposed restrictions on poetic form.
- 4. To introduce the students to the best of experimental and innovative dramatic literature of modern Europe.
- 5. To introduce the students to genres such as children's literature, detective fiction and campus fiction, which have a "mass" appeal, and can help us gain a better understanding of the popular and folk roots of literature.

Department of Geography:

- 1. It develop the skills including critical thinking, problem solving, reasoning, analysis, interpretations and synthesizing information's and communication literacy, media and internet literacy, data interpretation and analysis and computer programming.
- 2. It imparts the knowledge about different places on earth and how they relate with each other.
- 3. It helps the students to identify and appreciate important events and National and International policies; make better and informed decisions regarding the best use of National resources.
- 4. It helps the students to know about the relationship between human being and the environment and the general process of natural resources.
- 5. It enables the students to understand how population growth and technological advances affect the environment.
- 6. It help the students to gain the understanding of International mattes and multicultural concerns, read maps, interpret local and global information and understand International networks for trade.

Department of History:

- 1. The students shall be able to know early Indian notions of History, Sources of Historical Writings, historical geography (Major Harappan Sites and Sixteen Mahajanapadas)
- 2. The student shall be able to know Evolution of Man, Paleolithic Cultures, Mesolithic Cultures etc.
- 3. The students shall be able to know Expansion of Agrarian Economy: Production relations, Urban growth: Trade & Commerce, Social stratification: Class, Varna, Jati, Gender
- 4. To create interest towards the cultural and historical background of India.

- 5. To understand the various historical incidents and to help students for preparing competitive examination.
- 6. It inspires the students through bravery and courage of our forefather.
- 7. It inculcates critical thinking, reading, writing and research skills among students.

Department of Odia:

- 1. The course is designed to introduce the students about the importance of Odia language and literature.
- 2. The course consist with various aspects of applied linguistics, computerization of Odia language, language communication, film making, research methodology and various aspects of Odia literature in different times.
 - 3. In addition to that it is designed to cater to the need of all categories of students to make it successful in National and International Level.

Department of Philosophy:

- 1. The students will be able to learn the art of rational and critical thinking. They will also acquire the skill of thinking afresh and creative.
- 2. Study of Philosophy will also enable the students to learn the semantics of language and its proper use.
- 3. The students shall be able to know about values, ethics and fundamental nature of knowledge, reality and existence.
- 4. The students shall able to know about theories of metaphysics, epistemology, values, and aesthetics.
- 5. The designed course in Philosophy will give a fundamental knowledge of logic and philosophy to the students which will help them to get through competitive examinations and also face the challenges of life.

Department of Political Science:

- 1. Acquaints students with the Constitutional design of state structures and institutions, and their actual working over time. The Indian Constitution accommodates conflicting impulses (of liberty and justice, territorial decentralization and a strong union, for instance) within itself.
- 2. This course maps the working of 'modern' institutions, premised on the existence of an individuated society, in a context marked by communitarian solidarities, and their mutual transformation thereby. It also familiarizes students with the working of the Indian state, paying attention to the contradictory dynamics of modern state power.
- 3. More specifically the course will focus on examining politics in a historical framework while engaging with various themes of comparative analysis in developed and developing countries.
- 4. To make students aware of the implicit Euro-centricism of International Relations by highlighting certain specific perspectives from the Global South.

5. To introduce undergraduate students to some of the range of issues, literature, and methods that cover comparative political.

Department of Sanskrit:

- 1. BA Sanskrit is a 3 year duration undergraduate course with CBCS syllabus. It covers important topics of Sanskrit language and literature ,prose, poetry ,grammar with certain sections of Bhagavad Gita and Mahabharata.
- 2. Many advanced topics of Sanskrit grammar, creative writing and reading skills are taught. This course also teaches students to critically analyse various scientific Sanskrit texts on astrology, astronomy ayurveda, vruskhyayurveda, Arthashastra, and smruti literature. Such course contents ultimately lead to the overall development of all types of Sanskrit skills including analytical skills, writing skills and grammatical skills.
- 3. Sanskrit being the most scientific language has scope for many research in future and job opportunities.
- 4. The BA Hons candidates can pursue their higher studies in M.A. Sanskrit or MA Sanskrit literature. These postgraduate courses are offered by many reputed universities in India.
- 5. Thus Sanskrit provides an overall understanding of the ancient language to the students through entire coverage of its syllabus.

Department of Sociology:

- 1. To clarify and broaden the student's notion about the subject, the basic concepts used and some universal societal processes. This will provide a wholesome picture about what the subject is all about
- 2. To bring familiarity in a student about Indian society. It will present a comprehensive, integrated and empirically –based profile of Indian society.
- 3. To disseminate knowledge about the significance of environment for society, to change the practices that can protect and preserve the environment and to make the students participate in the mission to preserve, protect and promote the cause of environment.
- 4. To provide a wholesome idea to the students about the process of social change. They can relate their experience with the theoretical explanations.
- 5. To generate ideas and sensitivity about gender in a student which he/she can put into practice in daily life. This will lead to change the prevalent biases and gender practices and create a gender neutral social world where both men and women can enjoy their basic rights and cherish to achieve their dreams.
- 6. To enable the student to understand the society in a better manner, to note the heterogeneities in culture, institutions and their functions, changes, the contrasts found between the rural urban societies and the problems faced by the people.

Department of Commerce

- 1. The student should have a thorough knowledge on the accounting practice prevailing in partnership forms and other allied aspects.
- 2. On the successful completion of this subject the students acquires the knowledge about the various types of business organizations and office management.
- 3. To enable the students to learn principles and concepts of Accountancy.
- 4. The students are enabled with the knowledge in the practical applications of accounting.
- 5. The students should be well versed in the fundamental concepts of auditing, entrepreneur, knowledge in the finance institution, project report incentives and subsidies.
- 6. This course aims to provide an in-depth knowledge on the provisions of Income Tax and to familiarize with recent amendments in Income-Tax.
- 7. To keep the students conversant with the ever-enlarging frontiers of Cost Accounting knowledge.
- 8. The student should be able to work efficiently in MS-PowerPoint and Tally.
- 9. This course enables the students with the knowledge about the Capital budgeting, Working capital, cash management and financial management techniques.
- 10. The student acquires the knowledge in the Management Accounting Techniques in business decision making.
- 11. To understand the nature of human resources and its significance to the organization.

Department of Botany:

- 1. To gain knowledge which they can apply to do botanical research and findings in areas such as agriculture, forestry, horticulture, plant breeding, etc.
- 2. The students contribute to the environmental conservation and genetic modification of plants.
- 3. The degree holders have plenty of opportunities in the field of research and development, pharmaceuticals, chemical industries, public health and environmental protections sectors and clinical or pharmaceutical researches, etc.

Department of Chemistry:

- 1. The students are able to understand basic facts and concepts in chemistry and gain theoretical as well as practical knowledge of handling chemicals.
- 2. They expand the knowledge available opportunities related to chemistry in Government services particularly in the field of chemist, food safety, health inspector, pharmacist, teachers, etc.
- 3. They achieve the skills required to succeed in chemical industry like cement industry, steel/ aluminium industries, paint industries, rubber industries, petrochemical industries, fertilizer industries, food processing industries, etc.
- 4. They will be expert in using experimental techniques using some modern instruments like UV visible spectro meter.
- 5. They understand the concept of chemistry to interrelate and interact other subjects like botany, zoology, physics, geography, mathematics, etc.

6. They learn the laboratory skills and safety to transfer and interpret knowledge in the working environment.

Department of Computer Science:

- 1. To learn basics of C programming language. To be able to develop logics to create programs/ applications in C.
- 2. To understand different methods used for the simplification of Boolean functions and binary arithmetic.
- 3. To design and implement combinational circuits, synchronous & asynchronous sequential circuits.
- 4. To study specific data structures such as arrays, linear lists, stacks, queues, hash tables, binary trees, binary search trees, heaps and AVL trees.
- 5. To learn the use of Java language and the Java Virtual Machine
- 6. To learn how do computers and terminals actually communicate with each other.
- 7. To understand the parts of a communication network and how they work together.
- 8. To learn the fundamentals of web designing, to design and develop standard and interactive web pages and to learn some popular web scripting languages.

Department of Mathematics:

- 1. Students are expected to be able to use Leibnitz's rule to evaluate derivatives of higher order, able to study the geometry of various types of functions, evaluate the area, volume using the techniques of integrations, able to identify the difference between scalar and vector, acquired knowledge on some the basic properties of vector functions.
- 2. Students can study advance courses in mathematical modeling, computer science, statistics, physics, chemistry etc.
- 3. Students will appreciate how abstract ideas and rigorous methods in mathematical analysis can be applied to important practical problems.
- 4. A student completing the course is able to solve differential equations and is able to model problems in nature using Ordinary Differential Equations.
- 5. After completing PDE course, a student will be able to take more courses on wave equation, heat equation, diffusion equation, gas dynamics, non linear evolution equations etc. All these courses are important in engineering and industrial applications for solving boundary value problem.
- 6. Use of good mathematical software will help in getting the accuracy one need from the computer and can assess the reliability of the numerical results, and determine the effect of round off error or loss of significance
- 7. On successful completion of the Topology of Metric Spaces course students will learn to work with abstract topological spaces. This is a foundation course for all analysis courses in future.
- 8. After completing Ring Theory course, this will help students to continue more courses in advanced Ring theory modules, Galois groups.

9. The student will use Linear Algebra knowledge wherever he/She goes after undergraduate program. It has applications in computer science, finance mathematics, industrial mathematics, bio mathematics and what not.

10. Students will be able to handle certain integrals not evaluated earlier and will know a technique for counting the zeros of polynomials. Complex Analysis course is prerequisite to many other advance analysis courses

Department of Physics:

1. The course emphasizes solving the applications problems to the physicists. Students are to be examined on the basis of problems, seen and unseen.

2. The students shall able to know plotting of functions, Intuitive ideas of continuous, differentiable functions and plotting of curves, Approximation: Taylor and binomial series (statements only), First Order Differential Equations and Integrating Factor, Second Order Differential equations: Homogeneous Equations with constant coefficients.

3. The students shall able to know about: Calculus of functions of more than one variable: Partial derivatives, exact and inexact differentials. Integrating factor, with simple illustration, Constrained Maximization using Lagrange Multipliers, Vector algebra: Recapitulation of vectors.

4. The student will determine the appropriate level of technology for use in experimental design and implementation, analysis of experimental data and numerical and mathematical methods in problem solutions

Department of Zoology

- 1. The students shall able to know about Structure of Nucleus: Nuclear envelope, Nuclear pore complex, Nucleolus; Chromatin: Euchromatin and Hetrochromatin and packaging (nucleosome); Mitosis, Meiosis, Cell cycle and its regulation; GPCR and Role of second messenger (cAMP)
- 2. The students shall able to know about Locomotion and Reproduction in Protista, general characteristics and Classification up to classes, Canal system and spicules in sponges.
- 3. The students shall able to know about Study of an aquatic ecosystem: Phytoplankton and zooplankton collection, preservation and mounting, Measurement of temperature, turbidity/penetration of light, determination of pH, Dissolved Oxygen content (Winkler's method), BOD, COD, Free CO2, Hardness, TDS.
- 4. The students shall able to know about Biological data, graphical representation of data (frequency polygon and histogram), sampling techniques, measures of central tendency (Mean, median and mode), Measures of dispersion (range, quartile deviation, mean deviation and standard deviation), Hypothesis and hypothesis testing (Chi-square test, t-test)

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Academic Bursar

Principal Covt.(Auto) College, Angel