

## QIM

Rourkela Autonomous College without fail. updates its website and uploads all the important news of the college information regarding courses, outreach programmes, examination related matters, admission related matters etc. We will continue to upload the website and upload the following course related and program related information.

### **Hindi:**

- ❖ After completing B.A. course in Hindi the students are motivated for their future education for instance M.A., M. phil, B. Ed etc.
- ❖ Students Nurture themselves in soft skills and develop a research aptitude.
- ❖ They get job for their livelihood.
- ❖ They develop competency in various literary forms.
- ❖ They inculcate the human values for ones transformation of behavior.
- ❖ Learn the literacy works on the basis of the foundation laid by the scholars.
- ❖ Develop ability to communicate effectively through writing, speech, and visual information.
- ❖ Demonstrate the capability to work both independently and in cooperation with others.
- ❖ Integrate quantitative and qualitative information to reach defensible and creative conclusion.
- ❖ Find, access, critically evaluate, and ethically make use of information.
- ❖ Develop reading, writing and communication skills in Hindi.
- ❖ Get information about the history of ancient, medieval, and modern Hindi literature.
- ❖ Get knowledge about the literary theories.
- ❖ Develop approach of Hindi linguistics and grammar, Get jobs for their livelihood.
- ❖ Interprets literary works by critical analysis.

### **English:**

Students will be able to demonstrate good levels of achievement and comprehension in their:

- ❖ Knowledge of foundational texts of British and American literature
- ❖ Understanding of the historical and cultural range of literature written in English

- ❖ Understanding of the development of the English language as used in works of literature
- ❖ Understanding of strategies of textual interpretation appropriate to different literary genres
- ❖ Ability to conduct and use literary research, to the point of achieving:
  - ❖ an overall thesis that pushes the argument beyond summary
  - ❖ accurate and sufficient evidence presented in a scholarly manner
  - ❖ proper disciplinary and inter-disciplinary research tools
  - ❖ Clear and appropriate writing for a research paper.
  - ❖ Ability to write clearly and effectively with the various topics.

### **Political science:**

- ❖ Students will develop and be able to demonstrate academic proficiency in the subfields of American Government and Politics, Comparative Government, International Relations, Public Administration, Political Theory, and Public Law.
- ❖ Students will develop and be able to demonstrate skills in conducting as well as presenting research in political science.
- ❖ Students will develop and be able to demonstrate skills in analytical and critical thinking.
- ❖ Be able to describe and explain political theory, political systems around, and politics in the arena.
- ❖ Understand the fundamental concepts, issues and theories central to comparative politics.
- ❖ Be able to explain the similarities and differences between various types of politics and how they affect their behavior.

### **History:**

#### Ancient Indian History:

Upon successful completion of this course, the student will be able to:

- ❖ Identify and define the world's earliest civilizations, including the Neolithic Revolution, and describe how it shaped the development of these early civilizations.
- ❖ Identify and describe the emergence of the earliest civilizations in Asia: the Harappan and Aryan societies on the Indian subcontinent and the Shang and Zhou societies in China.
- ❖ Identify and describe the characteristics of the Roman Kingdom, the Roman Republic, and Imperial Rome.
- ❖ Identify and analyze the Buddhist and Vedic (Hindu) faiths.

- ❖ Analyze and interpret primary-source documents that elucidate the exchanges and advancements made in civilizations across time and space.
- ❖ Identify and analyze key facets of medieval society in Western Europe—the Catholic Church, feudalism, and the rise of technology and commerce.
- ❖ Identify and describe the rise and fall of the Byzantine Empire.
- ❖ Identify and describe the rise of civilizations in the Americas, particularly in Meso and South America.

### **Economics:**

- ❖ Students are learning and understand the different economic theories as Consumption, Production, Distribution, Exchange, Market & welfare.
- ❖ Students are learning about the different theories of economic development.
- ❖ They can also understand about the environment and current situation of Indian economy.
- ❖ Students are learning differences between micro and macro economics.
- ❖ Students are learning Indian banking system and money regulation.
- ❖ Students are learning about the different types of economy in the world as capitalist, socialist and mixed economy.
- ❖ They can also understand about the different income sources and expenditure fields of Indian government.
- ❖ They learn mathematics & its applications to solving the economic problems.
- ❖ They can also know about the thoughts and ideas of economists.
- ❖ Students are learning about the basic features of demography of India and other countries.
- ❖ Students are learning about the agriculture, its problems, solutions, improvements and role in economic development in the various countries.

### **Commerce:**

#### Financial Accounting:

- ❖ Acquire knowledge about general aspects of business operations.
- ❖ Describe the role of accounting information system and its limitations.
- ❖ Explain the concepts and procedures of financial reporting, including income statement, statement of retained earnings, balance sheet, and statement of cash flows.
- ❖ Identify the basic economic events most common in business operations and be able to report the events in a generally accepted manner, including the impacts of alternative accounting methods on financial statements.

- ❖ Tabulate the basic differences between the Generally Accepted Accounting Standards (GAAP) in the United States and the International Financial Reporting Standards (IFRS).
- ❖ Locate and analyze financial data from annual reports of corporations.

### **Mathematics:**

- ❖ Students will have the **versatility** to work effectively in a broad range of analytic, scientific, government, financial, health, technical and other positions.
- ❖ Have a **broad background** in Mathematics and Statistics, an appreciation of how its various sub-disciplines are related, the ability to use techniques from different areas, and an **in-depth knowledge** about topics chosen from those offered through the department.
- ❖ Be mathematically, statistically and numerically **literate**. In particular, graduates will:
  - ❖ Recognize the importance and value of mathematical and statistical thinking, training, and approach to problem solving, on a diverse variety of disciplines;
  - ❖ Be familiar with a variety of examples where mathematics or statistics helps accurately explain abstract or physical phenomena;
  - ❖ Recognize and appreciate the connections between theory and applications;
  - ❖ Be able to independently read mathematical and statistical literature of various types, including survey articles, scholarly books, and online sources; and
- ❖ Be life-long learners who are able to independently expand their mathematical or statistical expertise when needed, or for interest's sake.

### **Physics:**

- ❖ Students will demonstrate proficiency in mathematics and the mathematical concepts needed for a proper understanding of physics.
- ❖ Students will demonstrate knowledge of classical mechanics, electromagnetism, quantum mechanics, and thermal physics, and be able to apply this knowledge to analyze a variety of physical phenomena.

- ❖ Students will show that they have learned laboratory skills, enabling them to take measurements in a physics laboratory and analyze the measurements to draw valid conclusions.
- ❖ Students will be capable of oral and written scientific communication, and will prove that they can think critically and work independently.

## **Botany**

- ❖ Critically evaluation of ideas and arguments by collection relevant information about the plants, so as recognize the position of plant in the broad classification and phylogenetic level.
- ❖ Identify problems and independently propose solutions using creative approaches, acquired through interdisciplinary experiences, and a depth and breadth of knowledge/expertise in the field of Plant Identification.
- ❖ Accurately interpretation of collected information and use taxonomical information to evaluate and formulate a position of plant in taxonomy.
- ❖ Students will be able to apply the scientific method to questions in botany by formulating testable hypotheses, collecting data that address these hypotheses, and analyzing those data to assess the degree to which their scientific work supports their hypotheses.
- ❖ Students will be able to apply fundamental mathematical tools (statistics, calculus) and physical principles (physics, chemistry) to the analysis of relevant biological situations.
- ❖ Students will be able to identify the major groups of organisms with an emphasis on plants and be able to classify them within a phylogenetic framework. Students will be able to compare and contrast the characteristics of plants, algae, and fungi that differentiate them from each other and from other forms of life.
- ❖ Students will be able to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth. They will be able to use specific examples to explicate how descent with modification has shaped plant morphology, physiology, and life history
- ❖ Students will be able to explain how Plants function at the level of the gene, genome, cell, tissue, Flower development. Drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations, development, reproduction and mode of life cycle followed by different forms of plants.

- ❖ Students will be able to explain the ecological interconnectedness of life on earth by tracing energy and nutrient flow through the environment. They will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems.
- ❖ Students will be able to demonstrate proficiency in the experimental techniques and methods of analysis appropriate for their area of specialization within biology.

### **Chemistry:**

- ❖ Students will have a firm foundation in the fundamentals and application of current chemical and scientific theories including those in Analytical, Inorganic, Organic and Physical Chemistries. Majors to be certified by the American Chemical Society will have extensive laboratory work and knowledge of Biological Chemistry.
- ❖ Students will be able to design and carry out scientific experiments as well as accurately record and analyze the results of such experiments.
- ❖ Students will be skilled in problem solving, critical thinking and analytical reasoning as applied to scientific problems.
- ❖ Students will be able to clearly communicate the results of scientific work in oral, written and electronic formats to both scientists and the public at large.
- ❖ Students will be able to explore new areas of research in both chemistry and allied fields of science and technology.
- ❖ Students will appreciate the central role of chemistry in our society and use this as a basis for ethical behavior in issues facing chemists including an understanding of safe handling of chemicals, environmental issues and key issues facing our society in energy, health and medicine.
- ❖ Students will be able to explain why chemistry is an integral activity for addressing social, economic, and environmental problems.
- ❖ Students will be able to function as a member of an interdisciplinary problem solving team.