

Rural Institute of Higher Studies, Bhograi

Programme and Course Outcomes (BSC)

Rural Institute of Higher Studies, Bhograi offers three year undergraduate degree programmes in Science. The BSc Programme includes courses in Botany, Chemistry, Mathematics, Physics, and Zoology. The learning outcomes of graduate programme reflect disciplinary information and understanding, generic abilities, including global skills that all students in different academic fields of study should acquire and demonstrate.

| BSC Programme Outcomes | |
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| <ul style="list-style-type: none">❖ The B. Sc. Programme develops scientific temperament and attitude among the science graduates.❖ The scientific qualities such as observation, precision, analytical mind, logical thinking, clarity of thought and expression, systematic approach, qualitative and quantitative decision making are developed.❖ This programme trains the learners to extract information, formulate and solve problems in a systematic and logical manner.❖ The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice.❖ This programme enables the learners to perform the jobs in diverse fields such as science, engineering, industries, survey, education, banking, development-planning, business, public service, self business etc. efficiently. | |
| BSC Course Outcomes | |
| Botany | <p>After the completion of BSc course in Botany, students will be able to</p> <ul style="list-style-type: none">❖ Gain knowledge about plant diversity❖ Acquire practical skills with laboratory equipment❖ Develop presentation skills in Life Sciences❖ Get knowledge about bio-diversity exploration , estimation, and conservation❖ Promote and create novel ideas in biological concepts❖ Protect, preserve and manage natural resources❖ Generate knowledge, conceptual understanding and insight within fungal plant diseases, human diseases, indoor climates❖ Evaluate the importance of various plant tissues in plant |

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| | <p>development</p> <ul style="list-style-type: none"> ❖ Develop evolutionary relationship among the different group of plants ❖ Gain knowledge on breeding of healthy plant, plants with improved characteristics and plant for biomolecule production. |
| Chemistry | <p>After the completion of BSc course in Chemistry, students will be able to</p> <ul style="list-style-type: none"> ❖ Develop scientific and coherent understanding of the fundamental concepts in Physical Chemistry, Organic Chemistry, Inorganic Chemistry, Polymer Chemistry, Green Chemistry, Industrial Chemistry and all other allied Chemistry subjects ❖ Use the evidence based comparative Chemistry approach to explain the chemical synthesis and analysis ❖ Understand the characterization of materials ❖ Gain knowledge on basic equipments, and instruments used in the Chemistry laboratory ❖ Demonstrate experimental techniques and methods of their area of specialization in Chemistry ❖ Understand synthesis, applications of polymers like nylon, rayon, decagon, polythene etc. |
| Mathematics | <p>After the completion of B. A. course in Mathematics, students will be able to</p> <ul style="list-style-type: none"> ❖ Gain proficiency in calculus computation and solve application problems in a variety of settings ranging from physics and biology to business and economics ❖ Understand the relationship between the derivative and the definite integral as expressed in both parts of the fundamental theorem of calculus ❖ Solve modeling, the general structures of solution analytic and numerical methods for solution by using partial differential equation ❖ Reason, model and draw conclusion or make decision with mathematical, statistical and quantitative information. They will also be able to critique and evaluate quantitative arguments that utilize mathematical, statistical and quantitative |

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| | <p>information</p> <ul style="list-style-type: none"> ❖ Demonstrate an understanding of the concepts of metric spaces and topological spaces, and their role in mathematics known about completeness, connectedness and convergence within the structures ❖ Explain the concept of base and dimension of a vector space, properties of vectors on the base, row and column space ❖ Analyse the equivalence of two curves by applying some theorems express definition and parameterization of surfaces. |
| <p>Physics</p> | <p>After the completion of BSc course in Physics, students will be able to</p> <ul style="list-style-type: none"> ❖ Gain a deep understanding of the physical world through mathematics and develop skill in mathematical modeling, problem solving and critical thinking ❖ Gain the knowledge on why the world works the way it does ❖ Gain knowledge in the geometrical approximation ❖ Know about the growth of the economy ❖ Gain a deep knowledge about the description of the physical properties of nature at the scale of atoms and subatomic particles ❖ Know how the economic impacts on the applications of nuclear physics ❖ Explain the fundamental principles of nanotechnology and their application to biomedical engineering ❖ Build their future in the field of High energy physics theory, high energy physics phenomenology, Condensed matter theory and experimental, nuclear theory and experimental, Numerical Computation, Astrophysics, Study of Cosmology etc. |
| <p>Zoology</p> | <p>After the completion of BSc course in Zoology, students will be able to</p> <ul style="list-style-type: none"> ❖ Demonstrate, solve and an understanding of major concepts in all disciplines of Zoology ❖ Solve the problem and also think methodically, independently and draw a logical conclusion ❖ Understand the evolution, history of phylum |

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| | <ul style="list-style-type: none">❖ Create an awareness of the impact of Zoology on the environment, society, and development outside the scientific community❖ Understand the classification of whole phyla includes in Non chordates with the help of charts/models/pictures❖ Gain knowledge on principles of Ecology❖ Understand diversity among various groups of animal kingdom and management of Bio-diversity❖ Understand fundamental principles of cell biology❖ Utilize the principles of Bio-technology and Micro-biology❖ Understand and analyze animal behavior❖ Recognize and explain how all physiological systems work in unison to maintain homeostasis in the body and use of feedback loops to control the same❖ Gain knowledge and skill in the interactions and interdependence of physiological and biomolecules |
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