

Bachelor of Arts (B.A.)

Program outcomes of Bachelor of Arts (B.A.)

Student seeking admission for BA Program are expected to imbue with the following quality which help them in their future to achieve the expected goals.

- a. Realization of human values.
- b. Sense of Social service.
- c. Responsible and dutiful citizen.
- d. Critical temper.
- e. Creative ability.

Programme: B.Sc.

Program Outcomes

Bachelor of Science (B.Sc.) offers theoretical as well as practical knowledge about different subject areas. These subject areas include Physics, Chemistry, Mathematics and Biology, Zoology and other fields depending on the specialization a student opts. This programme course is most beneficial for students who have a strong interest and background in Science and Mathematics. The course is also beneficial for students who wish to pursue multi and inter-disciplinary science careers in future. Following are the various programme outcomes:

1. This course forms the basis of science and comprises of the subjects like physics, chemistry, biology, zoology and mathematics.
2. It helps to develop scientific temper and thus can prove to be more beneficial for the society as the scientific developments can make a nation or society to grow at a rapid pace.
3. After the completion of this course students have the option to go for higher studies i.e. M. Sc and then do some research for the welfare of mankind.
4. After higher studies students can join as scientist and can even look for professional job oriented courses.
5. This course also offers opportunities for serving in Indian Army, Indian Navy, Indian Air Force as officers.
6. Students after this course have the option to join Indian Civil Services as IAS, IFS etc..
7. Science graduates can go to serve in industries or may opt for establishing their own industrial unit.
8. After the completion of the B.Sc. degree there are various other options available for the science students. Often, in some reputed universities or colleges in India and abroad the students are recruited directly by big MNC's after their completion of the course.
9. Apart from the research jobs, students can also work or get jobs in Marketing, Business & Other technical fields. Science graduates also recruited in the bank sector to work as customer service executives. Students can also find employment in government sectors.

Programme Specific Outcomes (Chemistry)

- Gain the knowledge of Chemistry through theory and practical's.
- To explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions.
- Identify chemical formulae and solve numerical problem
- Use modern chemical tools, Models, Chem-draw, Charts and Equipments.
- Know structure-activity relationship.
- Understand good laboratory practices and safety.
- Develop research oriented skills.
- Make aware and handle the sophisticated instruments/equipments.

Course Outcomes B. Sc Chemistry

| Course | Outcome |
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| Physical Chemistry | <ul style="list-style-type: none">• Write an expression for rate constant K for third order reaction.• Solve the numerical problems based on Rate constant.• Understand the term specific volume, molar volume and molar Refraction.• Know the meaning of phase, component and degree of freedom .• Derive the expression for rotational spectra for the transition from J to J+1.• Understand Mechanics of system of particles.• Know the Redox reaction.• Study the Crystal Field Theory.• Solve the cell reaction and calculate EMF.• Calculate interplanar distance.• Understand De-Broglie hypothesis and Uncertainty principle.• Derive Schrodinger"s time dependent and independent equations. |
| Inorganic Chemistry | <ul style="list-style-type: none">• Know the meaning of various terms involved in co-ordination chemistry.• To understand Werner"s formulation of complexes and identify the types of valences• Know the limitations of VBT.• Know the shapes of d-orbital"s and degeneracy of d-orbital"s.• Draw the geometrical and optical isomerism of complexes.• Study the electronic configuration of lanthanides and actinides.• Get knowledge of Crystalline solid.• Understand different operation in stoichiometric |

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| | <p>molecule.</p> <ul style="list-style-type: none"> • Study the Bio-inorganic chemistry. • Understand the p-type semiconductor and n-type semiconductor. |
| Organic Chemistry | <ul style="list-style-type: none"> • Define organic acids and bases. • Distinguish between geometrical and optical isomerism. • Discuss kinetics, mechanism and stereochemistry of SN1 and SN2 reactions. • Compare between E1 and E2 reactions. • Understand the evidences, reactivity and mechanism of various elimination and substitution reactions. • To study UV, IR and NMR spectroscopy. • Discuss different types of rearrangement reactions. • Determine structure of compound by spectroscopic methods. • Understand the difference between carbonation and carbanion. • To study alkaloids, Ephedrine, citral molecule with their properties and application |