

UG - Nursing, Paramedical & Physiotherapy

Exam Pattern

Section	Subject	Questions	Total_Marks	Duration
1	Critical Thinking and Problem-Solving	40	80	60 minutes
2	Physics, Chemistry and Biology	60	120	90 minutes

Section 1: Critical Thinking and Problem-Solving

- Reading Comprehension:** Analyze and interpret a variety of reading materials to derive meaning and infer key ideas.
- Identifying Logical Fallacies:** Recognize errors in reasoning, such as false assumptions or flawed arguments.
- Identifying Accurate Conclusions/Assumptions:** Draw logical and sound conclusions from, recognize underlying assumptions in, or derive accurate extensions from a given set of statements.
- Identifying Accurate Examples/Definitions:** Accurately decipher the crux of a statement or argument and recognise appropriate evidence in support of the argument.
- Situation Analysis/Problem Solving:** Synthesise appropriate information to the end of recognizing problems or identifying the best possible solutions to a real-life context.
- Argument/Object Classification:** Recognize patterns in arguments, group similar arguments or statements together, and recognize suitable relationships between material or abstract concepts.
- Data Analysis:** Interpret data from graphs, tables, charts and other representations to draw meaningful conclusions.
- Commercial Math:** Solve real-world mathematical problems related to trade, profit, and loss.
- Visual Reasoning:** Analyze and solve problems involving symmetry, tessellation and patterns.
- Algebra:** Apply algebraic concepts to solve equations and inequalities.

11. **Arithmetic:** Solve fundamental numerical problems involving operations, ratios, and percentages.
12. **Mensuration/Volume:** Calculate areas, perimeters, volumes, and surface areas of geometric shapes.
13. **Complex Problem Solving:** Approach multi-step mathematical problems that require logical and quantitative reasoning.

Section 2 : Physics

1. **Scientific Literacy:** Understand scientific concepts and their real-world applications.
2. **Light and Optics:** Explore the behavior of light, reflection, refraction, and optical instruments.
3. **Waves and Sound:** Study the properties and behavior of waves, sound propagation, and resonance.
4. **Cosmic and Earth Sciences:** Topics related to astronomy, the solar system, and Earth processes.
5. **Force, Motion, Work, and Energy:** Analyze concepts of Newtonian mechanics, work-energy theorem, and applications.
6. **Heat:** Study heat transfer, thermodynamics, and temperature measurements.
7. **Electricity and Magnetism:** Understand electric circuits, magnetism, and electromagnetic induction.
8. **Modern Physics:** Introduction to atomic structure, nuclear physics, and fundamental theories.

Chemistry

1. **Matter:** States of matter, properties, and changes in matter.
2. **Structure, Bonding, and Properties in Chemistry:** Study of atomic structures, chemical bonding, and material properties.
3. **Principles of Reactivity:** Chemical reactions, equations, and factors affecting reactivity.
4. **Applications of Chemistry:** Real-life applications such as chemical technologies, environmental chemistry, and daily life chemistry.

Biology

1. **Plants, Animals, and Human Body:** Study of structure, functions, and processes in plants, animals, and human systems.
2. **Classification of Living Organisms:** Understanding the classification and

characteristics of different life forms.

3. **Cells and Tissues:** Explore cell structure, types, and tissue functions.
4. **Ecology, Adaptation, Genetics, and Evolution:** Study of ecosystems, adaptations, heredity, and evolutionary processes.
5. **Microbiology:** Introduction to microorganisms, their roles, and impacts.
6. **Food, Nutrition, Health, and Hygiene:** Study the importance of nutrition, health practices, and diseases.