

23BMD106

UG PROGRAM (4 YEARS HONORS) WITH SINGLE MAJOR

AT THE END OF FIRST SEMESTER

MULTIDISCIPLINARY COURSES

PRINCIPLES OF PHYSICAL SCIENCES

(COMMON FOR ALL MAJORS)

(w.e.f. Admitted Batch 2023-24)

Time: 2 Hours

Maximum: 50 Marks

SECTION A

Answer any Four Questions.

4x5 = 20

1. Discuss physics in relation with other sciences.
2. Define Precision and write the importance of precision and accuracy.
3. Explain the relationship between work and energy.
4. State Newton's laws of motion.
5. Explain concept of gravity.
6. Explain wave types and wave motion.
7. Write the applications of centripetal force in our daily lives.
8. Explain about reflection and refraction.

SECTION- B

Answer All Questions.

3x10 = 30

9. a) Discuss about measurements and units. Write list of SI units.

(Or)

- b) Explain the nature of Physics and explain scope of Physics in nature.

10. a) Define Scalars and vectors and write the difference between them.

(Or)

- b) Explain scientific methods and applications in study of Physics.

11. a) State and Explain Doppler Effect in different situations.

(Or)

- b) What is wave optics? Explain phenomena of interference, diffraction and polarization of light?
