QP CODE: 25030660

25030660

Reg No : .....

Name : .....

UNDER GRADUATE (CBCS) REGULAR / REAPPEARANCE / MERCY CHANCE EXAMINATIONS, OCTOBER 2025

Fifth Semester

(Offered by the Board of Studies in Physics)

OPEN COURSE - PH5OPT02 - PHYSICS IN DAILY LIFE

2017 Admission Onwards

C67FC65B

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. What do you mean by fundamental quantities? Give one example.
2. What is the relation between velocity, wavelength and frequency of a wave?
3. Which type of mirror is used as rear view mirror in motor vehicle?
4. What is short sightedness?
5. Why does a Canon recoil after firing ?
6. A wrench with a long arm makes it easy to turn a lug nut. Why?
7. If you swing vertically a bucket of water attached to a string in a circle above your head. What keeps the water in the bucket?
8. What is the relation between electric charge and electric current?
9. What is the principle behind Oil raising against gravity through the wick of a lamp?
10. What alternate material do we use in thermometers instead of mercury now-a-days?
11. What is Ultrasonic Sound?
12. Name the natural satellite of the earth, How long it takes to go round the earth?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Why we use red colour for traffic signals?

14. How rainbows are formed?

15. What is focal length of a lens? Give the expression for focal length of a lens in terms of refractive index of the lens and radius of curvature of the lens.

16. If a body of mass of 100 grams travels with a velocity of 200m/sec , calculate its momentum.

17. Explain the terms a) mass b) weight c) apparent weight and d) weightlessness.

18. A transformer has 2300 winding in primary and 100 winding's in secondary. If a voltage of 230 V ac is aplied to the primary, how much voltage do you expect at secondary?

19. Explain the working principle of Microwave Oven.

20. Write down the name of the planets in the solar system in the increasing order of their distance from the Sun.

21. What do you understand by the term galaxy? Give two examples.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. What are different type of errors? How can we determine error in the case of a) addition and subtraction b) multiplication and division of two measurements.

23. What are the different Power generation techniques known to us? Write a short note on each of it bringing out its principle , merits and demerits.

24. State Bernoulli's theorem and derive Bernoulli's equation.

25. Distinguish between fluorescence and phosphorescence. Explain how do we make use of each of these phenomena in our daily life.

(2×15=30)