QP CODE: 25003547

25003547

Reg No : .....

Name : .....

UNDER GRADUATE (CBCS) SPECIAL REAPPEARANCE EXAMINATIONS, FEBRUARY 2025

Fifth Semester

(Offered by the Board of Studies in Physics)

OPEN COURSE - PH5OPT02 - PHYSICS IN DAILY LIFE

2022 Admission Only

9DF32CFC

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. What do you mean by refraction of light?
2. What is critical angle?
3. The reflecting surface of a spherical mirror is curved inward. Which type of mirror is it?
4. What do you mean by optical power of a lens?
5. Can a body have same speed while having different velocity?
6. What is meant by Banking of Curves?
7. What is the name of the instrument we use to measure Voltage?
8. What is a step down transformer?
9. What is plasma? Where do you find it in our daily life?
10. What is RADAR? What is its use?
11. Name the only planet in the Solar System to have one moon.
12. What is meant by GPS?

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Give any two uses of dimensional analysis with example.

14. In the equation X - Y = Z , the error in X is 3 and the error in Y is 1. What is the maximum error in Z ?

15. Why sky appears red in colour at sun rise and sun set?

16. Which of the following has more inertia? Give reason for your answer: i) a bicycle or a train ii) A rubber ball and a stone of the same size.

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

18. What is meant by torque? Define moment of inertia of a body.

19. An airplane requires a long run on the ground before taking off. Explain why?

20. What is meant by the frequency of a wave? How is it connected with the Time period? Write down the unit of each.

21. How a LASER beam is different from a normal beam of light?

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Write note on any three defects of human eye and give their corrections by lens.

23. With a neat diagram explain hydroelectric power generation. What are its merits and demerits?

24. Derive the relation between Celsius, Fahrenheit and Kelvin scale of temperature.

25. How do we classify stars?

(2×15=30)