QP CODE: 24029119

Reg No : .....

Name : .....

UNDER GRADUATE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, OCTOBER 2024

Fifth Semester

(Offered by the Board of Studies in Physics)

OPEN COURSE - PH5OPT02 - PHYSICS IN DAILY LIFE

2017 Admission Onwards

412D1EE0

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. What is the SI unit of Temperature?
2. What do you mean by refractive index of a medium?
3. Which type of mirror is used by dentists to see the cavity in the tooth of a patient?
4. Which type of lens are called diverging lens?
5. A passenger standing or sitting loosely in a bus experience a jerk in the backward direction when the bus suddenly starts moving. Explain this phenomenon.
6. Distinguish between weight and mass.
7. Why steering wheel of a car is smaller than that of an 18-wheeler, though they do the exact same thing?
8. A motor cyclist going round in a circular track at a constant speed leans to one side. Why?
9. Give any two application of Bernoulli's theorem.
10. Convert 300 degree Kelvin to degree Celsius.
11. When the sound intensity is above 120 Decibel, What happen to human ears ?
12. How many planets are there in our solar system?

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. How can we calculate error in the case of multiplication and division of two measurements?

14. Explain the reason for twinkling of stars.

15. Distinguish between long sightedness and short sightedness of human eye.

16. State the condition under which the magnitude of average velocity of an object is equal to its average speed. ii) Mention the type of motion exhibited by a free fall body.

17. What is Ohm's law?

18. What is meant by DC and AC? , Give example for each.

19. Explain why water raises in a tube of very small inner radius.

20. What is RADAR? How does it works?

21. How did the concept of Constellations helped us to divide an year into twelve months?

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. What is total internal reflection? What are the conditions for total internal reflection? Explain any two examples for total internal reflection.

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

25. What is GPS? Explain How is it achieved?

(2×15=30)