S2103400

QP CODE: S2103400

Reg No : .....

Name : .....

UNDER GRADUATE (CBCS) SPECIAL EXAMINATIONS, JANUARY 2023

Fifth Semester

(Offered by the Board of Studies in Physics)

OPEN COURSE - PH5OPT02 - PHYSICS IN DAILY LIFE

2020 Admission Only

51FECA0F

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. What is the SI unit of solid angle?
2. What do you mean by Least Count of an instrument?
3. What is the reason for blue colour of ocean?
4. What do you mean by optical power of a lens?
5. What is the SI unit of momentum?
6. What is Torque? And what is its unit?
7. Explain why do we have to pour some water into a centrifugal pump for proper working.
8. What is the relation between electric charge and electric current?
9. Define coefficient of viscosity.
10. State Bernoulli's theorem.
11. What is phosphorescence ?
12. What is meant by GPS?

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. What is interference of light?

14. What is total internal reflection? What are the conditions for it?

15. Distinguish between concave and convex mirrors.

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

17. 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?

18. Write a short note on Wind power generation.

19. What is Seismic Waves ? Why it is important?

20. Why is Pluto no longer a planet?

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

23. State and explain Newton's laws of motion.

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

25. With a neat diagram explain how lunar and solar eclipse occurs?

(2×15=30)