23108249

QP CODE: 23108249

Reg No : .....

Name : .....

UNDER GRADUATE (CBCS) SPECIAL SUPPLEMENTARY EXAMINATIONS, APRIL 2023

Fifth Semester

(Offered by the Board of Studies in Physics)

OPEN COURSE - PH5OPT02 - PHYSICS IN DAILY LIFE

2020 Admission Only

573BD85A

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. What is diffraction of light?
2. What do you mean by Total Internal Reflection?
3. The reflecting surface of a spherical mirror is curved outward. Which type of mirror is it?
4. What do you mean by optical power of a lens?
5. When will be the average velocity is zero but instantaneous velocity has a non-zero value?
6. What is the working principle behind the spin dryer of a washing machine?
7. KSEB calculates energy consumption as 'units' for billing purpose. How much is One unit?
8. Name any two Hydroelectric power generation stations in Kerala known to you.
9. How is it possible for small insects to walk on the surface of the water?
10. Convert 98.8 degree Fahrenheit to degree Celsius.
11. If sound becomes louder, which wave characteristic is likely increasing: frequency, wavelength, amplitude, or speed?
12. Name the only planet in the Solar System to have one moon.

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. What are the seven fundamental quantities and give their S I units?
14. The mass of a box is 12.48gm. A coin of mass 3.2 gm is placed on it. Find the total mass and difference in mass by rounding to the correct decimal place.
15. Why we use red colour for traffic signals?
16. Explain the terms a) mass b) weight c) apparent weight and d) weightlessness.
17. What is meant by torque? Define moment of inertia of a body.
18. What is Ohm's law?
19. What do you understand by the term Population Inversion in the case of LASER production?
20. Explain the working principle of Microwave Oven.
21. What do you understand by the term galaxy? Name the Galaxy to which you belong to.

(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. State Bernoulli's theorem and derive Bernoulli's equation.
25. What is GPS? Explain How is it achieved?

(2×15=30)