



QP CODE: 20100041

Reg No :

Name :

UNDERGRADUATE (CBCS) EXAMINATION, FEBRUARY 2020

Fifth Semester

(Offered by the Board of Studies in Physics)

Open Course - PH5OPT02 - PHYSICS IN DAILY LIFE

2017 Admission Onwards

853159C4

Time: 3 Hours

Maximum Marks :80

Part A

*Answer any **ten** questions.*

Each question carries 2 marks.

1. What is the dimensional representation of acceleration?
2. The angle of incidence on a plane mirror is 30^0 . What is the angle of reflection?
3. What is the unit of optical power of a lens?
4. Which type of lens is used to correct short-sightedness?
5. What is the significance of Newton's second law of motion?
6. Define acceleration due to gravity.
7. A wrench with a long arm makes it easy to turn a lug nut. Why?
8. What is the voltage and frequency of the domestic power supply in India?
9. What is meant by viscosity?
10. Distinguish the terms heat and temperature.
11. What is phosphorescence ?
12. What is RADAR? What is its use?

(10×2=20)



Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Why sky appears red in colour at sun rise and sun set?
14. What is mirage? What is the reason for it?
15. Distinguish between concave and convex mirrors.
16. If a body of mass of 10 grams travels with a velocity of 200m/sec , calculate its momentum.
17. Explain the working principle of centrifugal water pump.
18. What is Ohm's law?
19. A source of sound of frequency 450 Hz is moving towards a stationary observer with 34 m/sec speed. If the speed of sound is 340 m/sec, then What will be the apparent frequency of the sound.
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? Name the Galaxy to which you belong to.

(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. With a neat diagram explain how lunar and solar eclipse occurs.
25. What is GPS? Explain How is it achieved?

(2×15=30)

