QP Code: U25DRIS023

Reg. No : .....
Name : .....

ST MARY'S COLLEGE (AUTONOMOUS), THRISSUR-20

I SEMESTER (FYUGP/FYVP) DEGREE EXAMINATIONS, NOVEMBER 2025
(Regular/Improvement/Supplementary)
PHY1FM105 : Physics in Daily Life
2024 Admission Onwards
(Credits: 3)

Time:1.5 Hours **Maximum Marks: 50**

Section A

*Answer **All**. Each question carries **2** Marks.* ***(Ceiling: 16 Marks)***

1. Aluminium pans should not be used without an internal coating. Why?
2. Why cheese tray is at the top in a refrigerator ?
3. How can we reduce fridge odour?
4. Compare top spin and back spin in cricket.
5. What is meant by lob bowling ?
6. Illustrate the principle based on the working of hotspot in cricket.
7. How wind affects the direction of ball in football ?
8. Explain how the boundary layer affects the motion of a football.
9. How would you apply the functioning of a quartz tuning fork to explain timekeeping in a quartz clock?
10. What is a harmonic oscillator ?

Section B

*Answer **All**. Each question carries **6** Marks.* ***(Ceiling: 24 Marks)***

11. Compare and contrast the working and features of an electric heater with a hot metal plate and a ceramic hob.
12. Identify and describe the main sources of noise typically encountered in a kitchen.
13. Examine the factors affecting the motion of a cricket ball during spin bowling.
14. Illustrate how technique and body mechanics combine to produce a hard shot in football.
15. Demonstrate the mechanism by which pendulum clocks regulate time.

Turn Over

Section C

Answer ***any one****. Each question carries* ***10*** *Marks.* ***(1x10=10 Marks)***

16. Explain the sequence of steps involved in the photocopying process.
17. Evaluate the effectiveness of technologies in the Decision Review System.

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