QP CODE: XXXXXXXXX

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

FIRST SEMESTER FYUGP EXAMINATION NOVEMBER 2024

MDC

PHY1FM105 PHYSICS IN DAILY LIFE

Time : 1 Hrs 30 Mins **Maximum Marks : 50**

BL - Bloom's Taxonomy Level (1 to 6) CO - Course Outcome

Section A

Ceiling Marks : 16

Answer all questions. Each carries 2 marks.

No.	Question	M	BL	CO
1.	What type of materials are containers made from to allow microwaves to pass through?	2	1	CO1
2.	Methane gas used for cooking odourless, and how is a gas leak detected?	2	2	CO1
3.	Describe the physics behind the operation of LPG gas bottles, how gas transitions from liquid to gas in this system.	2	4	CO1
4.	Why do LPG gas bottles have to be stored in the shade?	2	3	CO1
5.	Why do plastics become more brittle at low temperatures?	2	4	CO1
6.	What are the difficulties a batsman face when a new ball is bowled by a fast bowler on a hard pitch?	2	3	CO3
7.	How is the willow tree cultivated for the purpose of making high quality cricket bat?	2	1	CO3
8.	Write a relation connecting the ball's exit velocity after its impact on the bat and the bat's effective coefficient of restitution. Describe the terms.	2	2	CO3
9.	The optimum angle to get maximum range of a football is less than 45 degree. Why?	2	2	CO4
10.	What are the factors effecting time period of a pendulum?	2	2	CO5

Section B

Ceiling Marks : 24

Answer all questions. Each question carries 6 marks.

No.	Question	M	BL	CO
11.	Why do some vegetables turn soggy when frozen, while others maintain their structure?	6	4	CO1
12.	Write on different ways the side spin is utilized in cricket	6	2	CO3
13.	Write a note on 'Hawkeye' and 'HotSpot' technologies used in cricket.	6	2	CO3
14.	Explain the mechanism of banana kick in football	6	2	CO4
15.	Why do two swings on a playground, one with a child sitting and the other empty, take the same amount of time to complete a back-and-forth motion?	6	3	CO5

Section C

Answer any 1 question. Each carries 10 marks. (1X10=10 Marks)

No.	Question	M	BL	CO
16.	Write a note on heading, punch, receiving and trapping	10	2	CO4
17.	Describe in detail the working of xerographic printer with the key processes involved in producing a printed image?	10	2	CO6

***