

## QUESTION PAPER DESIGN

### Physics (312)

Maximum Marks: 80

Time: 3 Hrs.

#### 1. Weightage by Objectives

S. No.	Objectives	Marks	% of Total Marks
1.	Knowledge	20	25% approximately
2.	Understanding	40	50% approximately
3.	Application	20	25% approximately

#### 2. Weightage by type of questions

Sl. No.	Type of Question	No. of questions	Marks
1.	MCQ (1 mark)	16	16
2.	Objective Type Questions (1*2 = 2 marks) (with 2 sub-parts of 1 mark each) [Fill in the blanks, match the column, paragraph or case-based questions, one-word questions, True False, etc.]	12	24
	<b>Total</b>	<b>28</b>	<b>40</b>
3.	Very Short Answer (2 marks)	9	18
4.	Short Answer (SA) (3 marks)	4	12
5.	Long Answer (LA) (5 marks)	2	10
	<b>Total</b>	<b>15</b>	<b>40</b>
	<b>G. Total</b>	<b>43</b>	<b>80</b>

**In subjective questions:** 4 Questions of 2 marks (VSA), 2 Questions of 3 marks (SA), 2 Questions of 5 marks (LA) will have internal choices.

### 3. Weightage to difficulty level of question

Estimated Level	Marks	Percentage of marks
Difficulty	16	20
Average	40	50
Easy	24	30
<b>Total</b>	<b>80</b>	<b>100</b>

### 4. Weightage by Content

Sl.	Module	Marks
1.	Motion Force and Energy	14
2.	Mechanics of solid and Fluid	06
3.	Thermal Physics	06
4.	Oscillation and Wave	06
5.	Electricity and Magnetism	16
6.	Optics and Optical Instruments	14
7.	Atoms and Nuclei	08
8.	Semiconductor Devices and Communication	10
	<b>Total</b>	<b>80</b>