## QUESTION PAPER DESIGN-COMBINED

## Subject: Physics (312) Senior Secondary Course

Maximum Marks: 80
Time: 3 Hrs.

1. Weightage by Objectives

| S. No. | Objectives | Marks | \% of Total Mark |
| :--- | :--- | :---: | :--- |
| 1. | Knowledge | 20 | $25 \%$ approximately |
| 2. | Understanding | 40 | $50 \%$ approximately |
| 3. | Application | 20 | $25 \%$ approximately |

2. Weightage by type of questions

| Sl. <br> 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) <br> [Fill in the blanks, match the column, paragraph or casebased questions, one-word questions, True False, etc.] | 12 | 24 |
|  | Total | 28 | 40 |
| 3. | Very Short Answer (2 marks) | 9 | 18 |
| 4. | Short Answer (SA) (3 marks) | 4 | 12 |
| 5. | Long Answer (LA) (5 marks) | 2 | 10 |
|  | Total | 15 | 40 |
|  | G. Total | 43 | 80 |

\# In Objective Type Questions of 1 mark: 8 Questions will have internal choices.
\# \# In Objective Type Questions of 2 marks: 6 Questions will have 4 sub-parts out of which the learner has to do any 2 sub-parts.

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.
2. Weightage to difficulty level of question

| Estimated Level | Marks | Percentage of marks |
| :---: | :---: | :---: |
| Difficulty | 16 | 20 |
| Average | 40 | 50 |
| Easy | 24 | 30 |
| Total | $\mathbf{8 0}$ | $\mathbf{1 0 0}$ |

## 3. 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 |
|  | Total |  |

