CLASS-XII
PHYSICS

Time: 3 Hrs **Theory: 70 Marks**
Practical: 25 Marks
I.N.A.: 05 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. There will be one theory paper comprising of 18 questions.
2. Question No 1 will be carrying 20 objective type questions of 1 mark each. In objective type questions there will be 15 multiple choice questions and 5 questions will be of true/false statement. All these 20 objective type questions will be knowledge based and understanding based not application based.
3. Question number 2 to 8 (Total 7 questions) will be carrying 2 marks each. There will be three questions of internal choice from unit-I, unit-II and unit-VII. Each one will have one theory type question and one numerical type in choice.
4. Question number 9 to 15 (Total 7 questions) will be carrying 3 marks each. There will be three questions of internal choice from unit-III, unit-IV and unit-VI. Each one will have one theory type question and one numerical type in choice.
5. Q.No. 16 will be of comprehension type having 5 questions of 1 mark each. This comprehension paragraph will be taken from Unit-III (Magnetic Effects of Current and Magnetism) 12th Class Physics Text-books of Punjab School Education Board.
6. Question number 17 and 18 will be carrying 5 marks each and there will be internal choice of each of all these questions. From unit-VI (Optics) internal choice question will have one question from ray-optics and choice question from wave-optics. 5 marks question may be asked in parts.

7. Distribution of marks over different dimensions of the paper will be as follows.

LEARNING OUTCOMES	MARKS	PERCENTAGE OF MARKS
KNOWLEDGE	26	36%
UNDERSTANDING	30	44%
APPLICATION	14	20%
Total	**70**	**100%**

8. In the category of one mark question there will be objective type question such as multiple choice and true/false.
9. Use of un-programmable calculator is allowed. The log tables can be used.
10. Total weightage of numerical will be 20% i.e approximate15 marks. There will be 3 numericals of 2 marks each and 3 numerical of 3 marks each. These numericals will cover application based part of learning outcomes.

UNIT WISE DISTRIBUTION OF MARKS

Unit No.	Title	Marks
UNIT-I	Electrostatics	12
UNIT-II	Current Electricity	07
UNIT-III	Magnetic effects of current and magnetism	12
UNIT-IV	Electromagnetic Induction & current	07
UNIT-V	Electromagnetic waves	03
UNIT-VI	Optics	13
UNIT-VII	Dual nature of matter	04
UNIT-VIII	Atoms and Nuclei	07
UNIT-IX	Electronics devices	05
Total Marks		**70**

SCHEMATIC DISTRIBUTION OF MARKS

UNIT	Title	1 Mark Question	2 Marks Question	3 Marks Question	5 Marks Question	Total Marks
1	Electrostatic	02	01 or N	01	01	12
2	Current Electricity	02	01 or N	01	-	07
3	Magnetic effects of current & magnetism	02	01	01 or N	1(comprehension type question)	12
4	Electromagnetic Induction & Alternating current	02	01	01 or N	-	07
5	Electromagnetic waves	01	01	-	-	03
6	Optics	05	-	01 or N	01	13
7	Dual Nature of matter	02	01 or N	-	-	04
8	Atoms & Nuclei	02	01	01	-	07
9	Electronic devices	02	-	01	-	05
Total Questions		**1 (20 Sub-parts)**	**7**	**7**	**3**	**16**
Total Marks		**20**	**14**	**21**	**15**	**70**

INSTRUCTION FOR PAPER SETTER

Note: There will be one theory paper comprising of total 16 questions.

1. Question No 1 will be carrying 20 objective type questions of 1 mark each. In objective type questions there will be 15 multiple choice questions and 5 questions will be of true/false statement. All these 20 objective type questions will be knowledge based and understanding based not application based.
2. Question number 2 to 8 (Total 7 questions) will be carrying 2 marks each. There will be 3 questions of internal choice from unit-I, unit-II and unit-VII. Each one will have one theory type question and one numerical type in choice.
3. Question number 9 to 15 (Total 7 questions) will be carrying 3 marks each. There will be three questions of internal choice from unit-III, unit-IV and unit-VI. Each one will have one theory type question and one numerical type in choice.
4. Q.No. 16 will be of comprehension type having 5 questions of 1 mark each. This comprehension paragraph will be taken from Unit-III (Magnetic Effects of Current and

Magnetism)12th class Physics Text-books of Punjab School Education Board.

5. Question number 17 and 18 will be carrying 5 marks each and there will be internal choice of each of all these questions. From unit-VI (Optics) internal choice question will have one question from ray-optics and choice question from wave-optics. 5 marks question may be asked in parts.
6. Question paper should cover all the syllabus.
7. No question or topic should be repeated in the question paper.
8. Questions in the paper can be asked only from mentioned PSEB syllabus. Questions from any topic which is not mentioned in the syllabus will be considered as out of syllabus question.
9. At the end of each question, paper setter must write detailed distribution of marks of each sub-question.
10. Confusing statement type question should not be asked in the paper.
11. Language used should be clearly understood & specific.
12. Time and length limit of paper should be kept in mind while setting the paper.
13. Questions paper should be made according to knowledge, understanding and application part of learning outcomes as shown in the marks distribution.