West Bengal Board Class 10 Physical Science and Environment Syllabus

Physical Science and Environment

Class- X

First Summative Evaluation: 40 Month of evaluation: April

Internal Formative Evaluation: 10

THEME/SUB-THEME

- 1. Concerns about Our Environment
- 2. Behaviour of Gases
- 3. Light
- 4. Periodic Table and Periodicity of the Properties of Elements
- 5. Ionic and Covalent Bonding

Second Summative Evaluation: 40 Month of evaluation: August

Internal Formative Evaluation: 10

THEME/SUB-THEME

- 1. Chemical Calculations
- 2. Thermal Phenomena
- 3. Current Electricity
- 4. Electricity and Chemical Reactions
- 5. Inorganic Chemistry in the Laboratory and in Industry
- 6. Metallurgy

Third Summative Evaluation: 90 Month of evaluation: December

Internal Formative Evaluation: 10

THEME/SUB-THEME

- 1. Atomic Nucleus
- 2. Organic Chemistry

N.B.: The Themes/Sub-Themes prescribed for the first and second summative evaluation are also to be included in the third summative evaluation.

Physical Science and Environment (Class X)

Blueprint for 1st Summative Evaluation Total Marks 40

THEME/SUB-THEME	MCQ(GR.A)	VSA(GR.B)	SA(GR.C)	LA(GR.D)	TOTAL
1. Concerns about Our Environment	1×1	1×2	2×1	-	5
2. Behaviour of Gases	1×1	1×2	2×1	3×1	8
3. Light	1×3	1×3	2×1	3×2	14
4. Periodic Table and Periodicity	1×1	1×1	2×1	3×1	7
of the Properties of Elements					
5. Ionic and Covalent Bonding	1×1	1×1	2×2	-	6
Total	7	9	12	12	40

Blueprint for 2nd Summative Evaluation Total Marks 40

THEME/SUB-THEME	MCQ(GR.A)	VSA(GR.B)	SA(GR.C)	LA(GR.D)	TOTAL
Chemical Calculations	1×1	1×1	- 11	3×1	5
2. Thermal Phenomena	1×1	1×2	-	3×1	6
3. Current Electricity	1×2	1×2	2×1	3×2	12
Electricity and Chemical Reations	1×1	1×2	11/1/1	3×1	6
5. Inorganic Chemistry in the Laboratory and in Industry	1×1	1×1	2×1	3×1	7
6. Metallurgy	1×1	1×1	2×1	-	4
Total	7	9	6	18	40

- 1. In Group A: All the Multiple Choice Questions (MCQ) are compulsory. There wil be no alternative to any question in this Group.
- 2. In Group B: VSA will contain-(i) answer in single word or single sentence, (ii) column matching, (iii) fill in the blanks, (iv) true/ false type questions. In the first & second summatives there will be alternatives to a total of 3 questions from the same theme/sub-theme.
- 3. In Group C: In the first & second summatives there will be alternative to 3 questions from the same theme/sub-theme.
- 4. In Group D: In the first & second summatives there will be alternative to 3 questions from the same theme/sub-theme. In this Group 3 marks may be broken as (2+1).
- 5. All alternatives should be internal i.e. an alternative to question (2a) should be designed as (2a) [Question] *OR* [Question], (2b), etc.
- 6. Each numerical question will have alternative item from the same theme/sub-theme.

Physical Science & Environment (Class X)

Blueprint for 3rd Summative Evaluation/Selection Test Total marks: 90

SECTION	THEME / SUB-THEME	MCQ(GR. A)	VSA(GR.B)	SA(GR.C)	LA(GR.D)	TOTAL
Common Area	1. Concerns about Our Environment	1×1	1×2	2×1	-	5
	2. Behaviour of Gases	1×1	1×2	2×1	3×1	8
	3. Chemical Calculations	1×1	-	-	3×1	4
Physics	4. Thermal Phenomena	1×1	1×1	-	3×1	5
	5. Light	1×2	1×2	2×1	3×2	12
	6. Current Electricity	1×2	1×2	2×1	3×2	12
	7. Atomic Nucleus	1×1	1×1	-	3×1	5
Chemistry	8. Periodic Table and Periodicity	1×1	1×2	-	3×1	6
	of the Properties of Elements.					
	9. Ionic and Covalent Bonding	1×1	1×1	2×2	-	6
	10. Electricity and Chemical	1×1	1×2	0 -	3×1	6
	Reactions					
	11. Inorganic Chemistry in the	1×1	1×2	2×1	3×1	8
	Laboratory and in Industry		10 10	D .	61	
	12. Metallurgy	1×1	1×2	2×1		5
	13. Organic Chemistry	1×1	1×2	2×1	3×1	8
	Total	15	21	18	36	90

- 1. In Group A: All the Multiple Choice Questions (MCQ) are compulsory. There wil be no alternative to any question in this Group.
- 2. In Group B: VSA will contain-(i) answer in single word or single sentence, (ii) column matching, (iii) fill in the blanks, (iv) true/ false type questions. In this group there will be alternatives to a total of 6 questions: alternative to 1 question from the Common Area, 2 questions from Physics and 3 questions from Chemistry will be given. All alternatives will be from the same theme/sub-theme.
- 3. In Group C: (a) Two (2) questions from Common Area will have to be answered. There will be alternative to 1 question from the same theme. (b) Two (2) questions from Physics will have to be answered. There will be alternative to 1 question from the same theme. (c) Five (5) questions from Chemistry will have to be answered. There will be alternative to 3 questions from the same sub-theme.
- 4. In Group D: (a) Two (2) questions from Common Area will have to be answered. There will be alternative to 1 question from the same theme. (b) Six (6) questions from Physics will have to be answered. There will be alternative to 3 questions from the same theme. (c) Four (4) questions from Chemistry will have to be answered. There will be alternative to 2 questions from the same sub-theme. In this Group 3 marks may be broken as (2+1)
- 5. All alternatives should be internal i.e. an alternative to question (2a) should be designed as (2a) [Question] *OR* [Question], (2b), etc.
- 6. Each numerical question will have alternative item from the same theme/sub-theme.
- 7. This question pattern is indicative of Madhyamik Examination.