QUESTION PATTERN

PAPER I (THEORY)	3 HOURS

Section A(40 marks)	Contains objective type questions and **ALL** questions are compulsory.
	  ➢ 15 MCQs, 15 marks
	  ➢ Fill in the blanks -10 items, 5 marks
	  ➢ Matching -10 items, 5 marks
	  ➢ True/False -5 items, 5 marks
	  ➢ Short answer question - 10items, 10 marks

Section B(60 marks)	7 questions x 10 = 70, where students will choose any **SIX** questions.
Total Marks	**40 + 60 = 100 marks(Converted to 80 at BCSEA)**

PAPER II (PROJECT WORK)
The students are required to complete a project work as indicated in the curriculum frame work. The subject teacher must use the 'Criteria for Project Work Assessment' and 'Rubrics for Project Work Assessment' sheets to grade their work.

CRITERIA FOR PROJECT WORK ASSESSMENT

Subject: ……………………..   **Date:**…………….

Name	Criteria						Bibliography (4)	Total score 28
	Problem and hypothesis (4)	**Background research on the hypothesis (4)**	**Experimental design/materials/ Procedure (4)**	**Investigation (4)**	**Analysis (4)**	**Format and editing (4)**		
Student 1								
Student 2								

(Name and Signature of Subject Teacher)   **(Name and Signature of HOD)**

RUBERICS FOR PROJECT WORK ASSESSMENT

Name: …………………………………………….. Roll No: …………….. Class/Section: …………………….

Criteria	Scoring				Total score (28)	Remarks
	4	**3**	**2**	**1**		
Problem and Hypothesis	• Problem is new, meaningful and well researched. • Hypothesis is clearly stated in the "IF..THEN" format.	• Problem is not new but meaningful. • Hypothesis is clearly stated.	• Problem is stated but not new and so meaningful. • Hypothesis is not clearly stated.	• Problem is not stated and • Hypothesis is unclear.		
Background research on the hypothesis	• Research is thorough and specific. • All the ideas are clearly explained.	• Research is thorough but not specific. • Most ideas are explained.	• Research is not thorough and not specific. • Few ideas are explained.	• Research is not thorough and • Ideas are not explained.		Class 11
Experimental design/materials/ Procedure	• Procedure is detailed and sequential. • All materials are listed. • Safety issues have been addressed.	• Procedure is detailed but not sequential. • Most materials are listed. • Safety issues have been addressed.	• Procedure is not detailed and not sequential. • Few materials are listed. • Few safety issues have been addressed.	• A few steps of procedure are listed. • No materials list are listed. • Safety issues are not addressed.		
(Name & Signature of HoD)		**(Name & Signature of Subject Teacher)**		**Total score for Class 11**		

RUBERICS FOR PROJECT WORK ASSESSMENT

Name: ……………………………………………..   **Roll No:** ……………..   **Class/Section:** …………………….

Criteria	Scoring				Total Score (28)	Remarks
	4	**3**	**2**	**1**		
Investigation	• Variables have been identified, controls are appropriate and explained. • Sample size is appropriate and explained. • Data collected from at least 4 sources.	• Variables have been identified and controls are appropriate but not explained. • Sample size is appropriate. • Data collected from at least 3 sources.	• Variables have somewhat been identified, controls are somewhat known. • Sample size is not appropriate. • Data collected from at least 2 sources.	• Missing two or more of the variables or the controls. • Sample size is not considered. • Data collected from only 1 source.		
Analysis	• Conclusion is supported by the data. • Explanation is made for how or why the hypothesis was supported or rejected. • Reflection of what was learnt and how it could be made better is clearly made.	• Conclusions are supported by the data. • Not enough explanation is made for how or why the hypothesis was supported or rejected. • Reflection of what was learnt and how it could be made better is clearly made.	• Conclusions are not supported by enough data. • Not enough explanation is made for how or why the hypothesis was supported or rejected. • Reflection of what was learnt and how it could be made better is not clear.	• Conclusions are not supported by data. • Not enough explanation is made for how or why the hypothesis was supported or rejected. • Reflection of what was learnt and how it could be made better is not stated.		**Class 12**
Format and editing	• Correct format followed throughout. • Report is free of errors in grammar,	• Only one aspect of format is incorrectly done. • Report contains a few	• Only two aspects of format are incorrectly done. • Report contains	• Three or more aspects of format are missing or incorrect. • Report contains many		

	spelling or punctuation.	errors in grammar, spelling, and punctuation.	some errors in grammar, spelling, and punctuation.	errors in grammar, spelling, and punctuation.		
Bibliography	• Five or more references are cited in APA format and referenced throughout the paper and presentation.	• Three or four references are cited and referenced throughout the paper and presentation.	• One or two references are cited and referenced throughout the paper and presentation.	• No references made.		
(Name & Signature of HoD)		**(Name & Signature of Subject Teacher)**		**Total Score for class 12**		
				Grand Total		

Note:
HOW THE PROJECT WORK MARKS ARE CALULATED

➢ The marks for the Project Work for class 12 is the sum total of the project work marks of class 11 and class 12 which is out of 20 (10 +10) marks.

➢ Whatever the student scores both in class 11 & class 12, needs to be converted out of 10 marks each. Suppose a student scored 9 out of 12 (3x4) in class 11, his/her actual score would be (9/12 x 10 = 7.5).
Similarly, if he/she scored 14 out of 16(4x4) in class 12, his/her actual score would be (14/16x10 = 8.8).
Therefore, his/her total score (combining both class 11 & class 12) would be 7.5 + 8.7 = 16 marks.

➢ For example, at the end of class 12, the teacher awards 22 marks out of 28 to a student, he/she will be awarded (22/28x20 = 15.7). The teacher submits this converted marks to BCSEA.