

The Item Bank is a compilation of sample items from english, mathematics, science, and social science for secondary grades, Tripura Board of Secondary Education. A robust process has been adopted to develop the items in terms of their alignment with the subject-specific learning outcomes, competencies, and cognitive levels. The item bank consists of Multiple -Choice questions (MCQ) and Constructed Response Questions (CR). An attempt has been made to develop the items which tend to bring out the nature, skill, and disposition of the subject. A wide range of item formats has been used for MCQ and CR items to assess learning in multiple ways.

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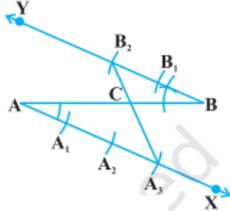
English

Subject	English
Content Domain	Literature
Chapter	From the Diary of Anne Frank (Textbook - First Flight)
Learning Outcome	LO15: Analyses and appreciates a point of view or cultural experience as reflected in the text; presents orally or in writing.
Competency	Identifies attitudes, values, practices etc. of diverse cultures in a text.
Cognitive Level	Understand
Question Type	CR
Item Stem	Why does Anne Frank say, "...no one will believe that a thirteen-year-old girl is completely alone in the world"?
Marking Scheme	Marks
The reason is well-inferred and articulated (it is expected that children have laid-back lives without worry, teenagers especially are expected to have a thriving social life, etc.), without any spelling, grammar, and punctuation errors.	2
The reason is partially inferred and articulated (Anne does not have any close friends, etc.) or there are a few errors of spelling, grammar, and punctuation.	1
The reason is not inferred and articulated. Includes responses not relevant to the question, sentences copied from the question, and no response given.	0

Subject	English
Content Domain	Literature
Chapter	The Trees (Textbook - First Flight)
Learning Outcome	LO27: Identifies significant literary elements such as figurative language — metaphor, imagery, symbol, simile, intention or point of view, rhyme scheme, etc.
Competency	Compares and contrasts the structure of two or more texts by analysing how the different literary element of each text contributes to its meaning and style
Cognitive Level	Analyse
Question Type	MCQ
Item Stem	<p>Read the two given extracts from 'The Trees' by Adrienne Rich and identify the literary device that is common to both.</p> <p>Extract 1: 'All nights the root work to disengage themselves from the cracks in the verandah floor'</p> <p>Extract 2: 'A tree whose hungry mouth is prest Against the earth's sweet flowing breast'</p>
Key	Personification
Distractor 1	Alliteration
Distractor 2	Simile
Distractor 3	Metaphor
	Reason for choosing distractor
	Indicates the inability to distinguish between personification and alliteration
	Indicates the inability to identify the figure of speech
	Indicates the inability to identify the key words in the extracted lines

Mathematics

Topic	Algebra - Quadratic Equations	
Learning outcome	Demonstrates strategies of finding roots and determining the nature of roots of a quadratic equation	
Competency	Compares the roots of two quadratic equations	
Cognitive level	Reasoning	
Question Type	MCQ	
Marks	1	
Item Stem	The roots of the equation $2x^2 - 3x - 5 = 0$ are _____ to the roots of the equation $5 - 2x^2 + 3x = 0$:	
Correct answer	Equal in magnitude and sign	Reason for choosing the distractor
Distractor 1	Equal in magnitude but opposite in sign	Is confused by the negative sign
Distractor 2	Not equal in magnitude or sign	Does not see any relationship between the two equations

Topic	Geometry - Construction	
Learning outcome	Constructs — a triangle similar to a given triangle as per a given scale factor a pair of tangents from an external point to a circle and justifies the procedures	
Competency	Justifies each step of a construction	
Cognitive level	Reasoning	
Question Type	CR	
Marks	2	
Item stem	<p>In the adjoining figure, by what ratio does C divides AB? Justify.</p>  <p>Figure taken from https://ncert.nic.in/textbook/pdf/jemh111.pdf</p>	

Marking scheme		
Students' response	Marks	Guidance
There are 3 points at equal distances on AX and 2 points at equal distances on BY. C divides internally by 3 : 2	½	This is for the identification of ratios based on the number of points at equal distances.
Shows $\triangle ACA_3 \approx \triangle BCB_2$ (AA similarity)	1	For showing the similarity of the 2 triangles
$AC/BC = AA_3/BB_2 = 3/2$	½	For arriving at the ratio.

Subject	Biology
Chapter	Chapter 8 - How do organisms reproduce?
Learning Outcome	LO 7 : Analyses and interprets data, graphs and figures.
Competency	Interprets graphs/data showing population of girl child against boys across the years.
Cognitive Level	Analyze
Question Type	CR
Marks	5

Item Stem



Image source - <https://www.bbc.com/news/world-south-asia-13264301>

Refer to the graph given above and answer the following questions: -

- In which year was the female to male ratio the lowest?
- Write the two years wherein the female to male ratio was almost the same.
- Identify the two years in which the number of girls remained almost the same.
- If one of the reasons for the falling numbers of girls is female foeticide, in which year is it seen to be the least?
- What is the overall trend of the population of girls that this graph represents?

Marking Scheme

Part	Marks	Answer	Further information/ remarks
a.	1	1991	
b.	1	1961, 2011 or 1971, 1991	½ marks for each correct year.
c.	1	1971, 1981	½ marks for each correct year.
d.	1	2011	
e.	1	An overall decrease in the population of girls	Similar explanation shall be accepted.

Subject	Chemistry
Chapter	Chapter 3 - Metals and Nonmetals
Learning Outcome	LO 3 – Plans and conducts investigations and experiment to arrive at and verify the facts, principles, phenomena, or to seek answers to queries on their own.
Competency	Investigates the factors causing corrosion in metals – Fe, Cu, Ag
Cognitive Level	Analyze
Question Type	CR- SA
Marks	3

Item Stem

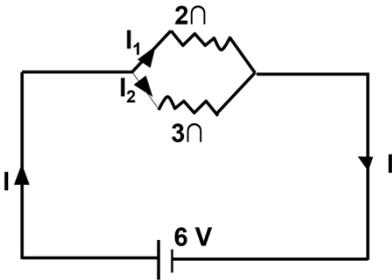
Look at the pictures given below and answer the questions

1. The nails in test tube A are rusted. What could be the reason for this?

2. Give the reasons for why the nails in test tubes B and C might not get rusted?

Marking Scheme			
Part			Further information/ remarks
1	1	Both air and moisture are needed for rusting to take place. Test tube A has both conditions.	
2	1 + 1	In test tube B the oil forms a protective layer In test tube C the drying agent removes the water	Only moisture is available in test tube B Test tube C provides only air

Science | Physics

Subject	Physics	
Chapter	Chapter 12 - Electricity	
Learning Outcome	LO 9 – Uses scientific conventions to represent units of various quantities, symbols, formulae and equations.	
Competency	Determines the effective resistance of a given circuit and finds the current in each branch and potential difference across each element of a simple circuit.	
Cognitive Level	Apply	
Question Type	MCQ	
Marks	1	
Item Stem	 <p>The electric currents I_1 and I_2 in the above circuit is,</p>	
Key	$I_1 = 3 \text{ A}, I_2 = 2 \text{ A}$	Reason for choosing distractor
Distractor 1	$I_1 = 2 \text{ A}, I_2 = 3 \text{ A}$	The learner has not understood the parallel connection in the circuit.
Distractor 2	$I_1 = 1 \text{ A}, I_2 = 6 \text{ A}$	The learner is unable to analyse the voltage drop across each resistance in the circuit.
Distractor 3	$I_1 = 6 \text{ A}, I_2 = 1 \text{ A}$	The learner is not able to evaluate the equivalent resistance of the circuit.

Social Science

Topic	Manufacturing Industries	
Learning outcome	LO 9: Constructs views, arguments, and ideas on the basis of collected or given information	
Competency	Construct a view on the challenges of cottage industry	
Cognitive level	Understand	
Question Type	CR	
Marks	5	
Item stem	<p>Tripura has many cottages industry. Risa cottage industry is one of them. A Risa is a long-embroidered handwoven garment worn by the women of Tripura. This 5 feet long cloth is wrapped around the upper body. It is beautifully embroidered with unique patterns and comes in vibrant colours. It is usually gifted to distinguished visitors at functions, as a sign of welcome and respect.</p> <p>To weave a Risa, cotton yarn in different colours, especially red is needed. It takes 5 to 15 days to make a Risa depending on the design.</p> <p>A handwoven Risa costs around INR 1000 to INR 1500. During the COVID-19 pandemic, this industry faced a lot of challenges and is still struggling.</p> <p>Question:</p> <ol style="list-style-type: none"> 1. What possible challenges could the Risa weavers have faced during the pandemic of 2020-22? 2. What measures can the government take to address these challenges? 	
Marking scheme:		
Student response	Marks	
<p>Answer 1. Yes, it was a hard time for the Risa weavers and the people engaged with cottage or small-scale industries and unorganised sectors. They would have faced difficulty with procuring raw materials, accessing transport for products, and accessing markets.</p> <p>Answer 2. To overcome such challenges the Government can take the following steps:</p> <ol style="list-style-type: none"> 1. Support through a business loan with a minimum rate of interest 2. Resolving transportation problems, even in remote locations. 3. Remove high taxes on small-scale industry products 4. Providing the weavers' health safety and security through policy so that they can work efficiently. 5. Cottage industry-friendly Government. policy, so they can evolve in a better way such as: <ul style="list-style-type: none"> - they should be given an adequate degree of priority in the allocation pattern of essential, but scarce, raw materials, imported components, and equipment. - help to replace their outmoded equipment with newer technology, facilities, and incentives. 6. Provision of adequate facilities for industrial education and training. 	<p>5 marks (2+3)</p> <p>Answer1.Any two points (2 marks)</p> <p>Answer 2-Any three points (3 marks)</p>	
Answers any 2 points from each section	4	
Answers any 3 points from either section	3	
Answers any two points from either section	2	
Answers any one point from either section	1	
Irrelevant answer	0	

Chapter	Nationalism in India	
Learning outcome	LO3: Explains cause and effect relationship between phenomena, events, and their occurrence	
Competencies	Explains the limitation of the Civil Disobedience Movement in the context of the various social group	
Cognitive level	Remember	
Question Type	MCQ	
Marks	1	
Item Stem	<pre> graph LR A[Dr B.R. Ambedkar organises the Dalits into the Depressed classes Association in 1930] --> B[He demands for Separate Electorates for the Dalits at the second-round table conference] B --> C[British government concedes to the Ambedkar's demand] C --> D[Gandhiji began a fast unto death and Ambedkar's acceptance of Gandhiji's proposal] </pre> <p>Observe the pictorial representation of the events of historical significance in the course of the Indian National Movement. What was the impact of these historical events in India?</p>	
Correct answer	Poona Pact	Reason for choosing the distractor
Distractor 1	Civil Disobedience Movement	The above historical events did not lead to Civil Disobedience Movement On March 12, 1930, Gandhiji begins a defiant march to the sea in protest of the British monopoly on salt An event/event date closer to the Poona Pact
Distractor 2	Gandhi-Irwin Pact	The above historical events did not lead to Gandhi-Irwin Pact Gandhi was released from custody in January 1931, and Gandhiji and Irwin began negotiating the terms of the pact. A date /event closer to the Poona Pact
Distractor 3	Lucknow Pact	The above historical events did not lead to Lucknow Pact The Lucknow Pact was an agreement reached between the Indian National Congress and the Muslim League at a joint session of both parties held in Lucknow. Misconception between the two Pacts