



# CERTIFICATE PROGRAMME IN TEST DEVELOPMENT

A compilation of Outputs

A document showcasing subject-wise test constructs, assessment frameworks and sample items designed by participants of the Certificate Programme in Test Development 2023 Batch.

## Subject- English Assessment Framework

### Test Construct: Language ability

The ability to read and infer the meaning; to comprehend, reflect and appreciate a wide genre of texts (fiction, non-fiction-including authentic reading materials; digital material, poetry) that may be from familiar and unfamiliar contexts; and to write coherently for different purposes.

<i>Content domain</i>	<i>No.</i>	<i>Learning outcomes</i>	<i>Learning indicators</i>	<i>Cognitive level</i>
<i>Reading Comprehension: familiar texts</i>	1.	Appreciates nuances and shades of literary meaning, talks about literary devices like onomatopoeic sounds, symbols, metaphors, alliterations, comparisons, allusions and the poet's or the writer's point of view.	Employs literary elements from known texts creatively and imaginatively in own writing for added effect and impact.	Integrate and Interpret
			Analyses idioms, analogies, metaphors, and similes to infer the literal and figurative meanings of phrases.	Reflect and Evaluate
			Constructs a personal point of view using evidence from the content, background knowledge about the topic and/or from past experiences.	Create
	2.	Identifies significant literary elements such as figurative language — metaphor, imagery, symbol, simile, intention or point of view, rhyme scheme, etc.	Identifies significant literary elements in the given text.	Integrate and Interpret
			Identifies the meaning of words and phrases as they are used in a text, including figurative and connotative meanings.	Integrate and Interpret
	3.	Makes use of collocations and idioms in speech and writing.	Analyses the impact of specific word choices on the meaning and tone.	Reflect and Evaluate
	4.	Uses the figurative meaning of words and phrases as given in the texts read.	Locates information from the given text.	Access and Retrieve
			Uses the literal and figurative meanings of words.	Integrate and Interpret
			Distinguishes between the denotative and connotative meanings of words.	Integrate and Interpret

<i>Reading Comprehension: unfamiliar texts</i>	5.	Reads, comprehends, and responds to complex texts independently.	Analyses in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).	Reflect and Evaluate
			Infers explicit meanings	Access and Retrieve
	6.	Identifies significant literary elements such as figurative language — metaphor, imagery, symbol, simile, intention or point of view, rhyme scheme, etc.	Infers the meanings of unfamiliar words by analyzing the parts of the words (suffixes, prefixes, synonyms, antonyms etc.) and/or using evidence from the text.	Integrate and Interpret
			Infers implicit meanings in complex texts from different genres	Integrate and Interpret
			Employs reading strategies like skimming, scanning, and predicting to comprehend texts independently	Integrate and Interpret
	7.	Uses the figurative meaning of words and phrases as given in the texts read.	Identifies significant literary elements in unseen texts.	Integrate and Interpret
			Uses the literal and figurative meanings of words and writes word derivations.	Integrate and Interpret
	8.	Collects evidences and discusses in groups for reading autobiographies, history and science based literary texts	Distinguishes between the denotative and connotative meanings of words.	Integrate and Interpret
Compares and contrasts two or more extracts with arguments and supporting evidence.			Reflect and Evaluate	
		Summarizes the major points of discussion.	Integrate and Interpret	

		Analyzes the writer's point of view, characters, themes, plots, incidents and/or information/ details in the text with arguments and supporting evidence.	Reflect and Evaluate	
	9.	Collects evidences and discusses in groups for reading autobiographies, history and science based literary texts.	Compares and contrasts two or more extracts with arguments and supporting evidence	Reflect and Evaluate
		Summarizes the major points of discussion.	Integrate and Interpret	
		Analyzes the writer's point of view, characters, themes, plots, incidents and/or information/ details in the text with arguments and supporting evidence.	Reflect and Evaluate	
<i>Written expression</i>	10.	Writes paragraphs, narratives, etc., by planning revising, editing, rewriting, and finalizing.	Expresses ideas with interconnectedness and a logical flow.	Integrate and Interpret
			Organizes writing with a proper beginning, middle and end.	Integrate and Interpret
			Constructs a personal point of view using evidence from the content, background knowledge about the topic and/or from past experiences.	Create
			Uses grammatically correct sentences.	Integrate and Interpret
			Uses spellings and conventions of punctuation and capitalization accurately.	Integrate and Interpret
	11.	Writes reports of functions in school, family, and community activities.	Reports information/details correctly with descriptive details, if applicable.	Integrate and Interpret
			Uses examples, definitions, scenarios etc., for clarity of expression	Integrate and Interpret
			Expresses ideas with interconnectedness and a logical flow.	Integrate and Interpret

12. Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.	Organizes writing with a proper beginning, middle and end.	Integrate and Interpret
	Organizes the sequence of events in a chronological/logical order.	Integrate and Interpret
	Interprets the given inputs/clues appropriately to formulate a response.	Integrate and Interpret
	Provides solutions to the central problem wherever applicable e.g., a letter to the editor or a debate.	Create
	Justifies a position with arguments and supporting pieces of evidence to effectively communicate the intended message and persuade the audience.	Reflect and Evaluate
	Constructs a personal point of view using evidence from the content, background knowledge about the topic and/or from past experiences.	Create
	Employs narrative techniques such as dialogue, description, and reflection, to develop experiences, events, and/or characters.	Integrate and Interpret
	Uses appropriate formats for the writing task.	Integrate and Interpret
	Expresses ideas with interconnectedness and a logical flow.	Integrate and Interpret
	Uses grammatically correct sentences.	Integrate and Interpret
13. Writes scripts and participates in role play, skit, street plays for the promotion of social/environmental issues.	Uses spellings and conventions of punctuation and capitalization accurately.	Integrate and Interpret
	Identifies contemporary issues and challenges in society.	Integrate and Interpret
	Debates and reflects on topics related to social issues.	Reflect and Evaluate
	Suggests solutions to social issues by furnishing strong rationale and justification.	Reflect and Evaluate
	Writes dialogue, scripts etc. individually/in groups to effectively depict social issues and provide realistic solutions.	Create
	Justifies a position with arguments and supporting evidences to effectively communicate the intended message and persuade the audience.	Reflect and Evaluate
	Employs language that is appropriate to the purpose, setting and audience.	Integrate and Interpret
	Uses appropriate formats for the writing task.	Integrate and Interpret
Interprets the given inputs/clues appropriately to formulate a response.	Integrate and Interpret	

14. Uses language appropriate to purposes and perspectives. Uses grammatically correct sentences. Integrate and Interpret

Uses spellings and conventions of punctuation and capitalization accurately. Integrate and Interpret

Employs language that is appropriate to the purpose, setting and audience, is appropriate to the purpose, setting and audience. Integrate and Interpret

15. Expresses opinions on key contemporary issues like social justice, environment, gender, etc., in writing. Constructs a personal point of view using evidence from the content, background knowledge about the topic and/or from past experiences. Create

Justifies a position with arguments and supporting evidence to effectively communicate the intended message and persuade the audience. Reflect and Evaluate

Uses grammatically correct sentences. Integrate and Interpret

Uses spellings and conventions of punctuation and capitalization accurately. Integrate and Interpret

Employs language that is appropriate to the purpose, setting and audience, is appropriate to the purpose, setting and audience. Integrate and Interpret

16. Speaks or writes on variety of themes. Demonstrates command of the conventions of appropriate word choice, grammar, and sentence structure that are appropriate to the purpose, setting and audience. Integrate and Interpret

Critiques and expresses opinions on contemporary issues. Reflect and Evaluate

Justifies a position with arguments and supporting pieces of evidence to effectively communicate the intended message and persuade the readers. Reflect and Evaluate

Provides solutions to the central problem. Create

Organizes writing with a proper beginning, middle and end.

Integrate and Interpret

Expresses ideas with interconnectedness and a logical flow.

Integrate and Interpret

Uses grammatically correct sentences.

Integrate and Interpret

Uses spellings and conventions of punctuation and capitalization accurately.

Integrate and Interpret

## Sample Items

### READING

Based on the extract given below, answer the questions that follow:

#### The Lost Art of Handwriting

- (i) I did that thing recently where you have to sign a big card – which is a horror unto itself, especially as the Keeper of the Big Card was leaning over me at the time. Suddenly I was on the spot, a rabbit in the headlights, torn between doing a fun message or some sort of in-joke or a drawing. Instead, overwhelmed by the myriad of options available to me, I decided to just write: ‘Good luck, best, Joel.’
- (ii) It was then that I realised, to my horror, that I had forgotten how to write. I had to scribble an ‘e’ out twice. I wrote my own name too quickly and ruined the ‘J’, tried to save it with an underline but miscalculated and drew a line through the whole thing. The thing is: when do I ever write? My entire existence is ‘tap letters into the computer’. My shopping lists are hidden in the notes function of my phone. If I need to remember something, I send an email to myself. And then I ignore that. A pen is something I chew when I’m struggling to think. Paper is something I pile beneath my laptop to make it a more comfortable height for me to type on.
- (iii) I lead an inkless existence. This makes me express my solidarity, then, with the teenagers who are being criticised this week for their reluctance to write handwritten notes. A poll of 1000 teens found that one in ten do not like using a pen, a third have never written a detailed letter, and half of 13 to 19-year-olds have never been forced to sit down and write a thank you letter. Because, mainly, we’re in the twenty-first century.
- (iv) Bic, have you heard of mobile phones? Have you heard of email, Facebook and Snap chatting? Are you down with social media? This is the future. Pens are dead. The Paper is dead. Handwriting is a relic.
- (v) “Handwriting is one of the most creative outlets we have and should be given the same importance as other art forms such as sketching, painting for photography. Handwriting is an essential skill for both children and adults. For younger children, handwriting activates the brain more than keyboarding because it involves more complex motor and cognitive skills. Handwriting activates the visual perception of letters. Handwriting is a predictor of success in all subjects because good handwriting has a positive impact on grades. Cursive handwriting helps students both young and old, with Dyslexia.
- (vi) But criticising them for not writing thank you letters is bizarre. The most a teen ever has to use a pen is on an exam paper. They need pens as much as they need typewriters and flint. They need a stash of letter paper at home as much as they need a cure for the plague.

**Item 1a**

<b>Content domain</b>	Reading Comprehension: unfamiliar texts
<b>Learning Outcome</b>	Identifies significant literary elements such as figurative language — metaphor, imagery, symbol, simile, intention or point of view, rhyme scheme, etc
<b>Learning indicator</b>	Identifies significant literary elements in unseen texts.
<b>Cognitive level</b>	Integrate and interpret
<b>Marks Allotted</b>	1 Mark
<b>Item Stem</b>	An idiom is a phrase that, when taken as a whole, has a meaning different from the direct meaning of the given individual words. Choose the sentence that uses an idiom closest in meaning to ‘ <i>A rabbit in the headlights</i> ’ as used in Para 1
<b>Correct answer</b>	I <b>break out in a cold sweat</b> whenever I visit the dentist and hear the drilling equipment.
<b>Distractor 1</b>	Rashi felt that she was <b>biting off more than she could chew</b> by trying to finish writing her book.
<b>Distractor 2</b>	As soon as Trimurti started posting on social media, he quickly found himself <b>going down the rabbit hole</b> .
<b>Distractor 3</b>	John felt <b>under the weather</b> after attending the meeting, which took a toll on his already weakened state.

**Item 1b**

<b>Content domain</b>	Reading Comprehension: unfamiliar texts
<b>Learning Outcome</b>	Collects evidences and discusses in groups for reading autobiographies, history and science based literary texts
<b>Learning indicator</b>	Compares and contrasts two or more extracts with arguments and supporting evidence
<b>Cognitive level</b>	Reflect and Evaluate
<b>Marks Allotted</b>	1 Mark

<b>Item Stem</b>	Based on the author's perspective in Paragraph 6, which of the following best describes the cause-effect relationship discussed?
<b>Correct answer</b>	Cause: Teens are criticized for not writing Thank You letters. Effect: They fail to accept pen and paper as a means of expression.
<b>Distractor 1</b>	Cause: Teens have limited exposure to writing opportunities. Effect: They struggle to express themselves through letters.
<b>Distractor 2</b>	Cause: Teens are heavily reliant on technology. Effect: They prefer using typewriters and flint for their work.
<b>Distractor 3</b>	Cause: Teens lack proficiency in writing skills. Effect: They score poorly in writing sections of exams.


#### Item 1c

<b>Content domain</b>	Reading Comprehension: unfamiliar texts
<b>Learning Outcome</b>	A. Reads, comprehends, and responds to complex texts independently. B. Collects evidences and discusses in groups for reading autobiographies, history and science based literary texts
<b>Learning indicator</b>	A. Employs reading strategies like skimming, scanning, and predicting to comprehend texts independently. B. Analyzes the writer's point of view, characters, themes, plots, incidents and/or information/ details in the text with arguments and supporting evidence.
<b>Cognitive level</b>	A. Integrate and Interpret B. Reflect and Evaluate
<b>Marks Allotted</b>	4 Marks
<b>Item Stem</b>	Answer the following questions briefly in 20-40 words. A. Why does the author think that young children are reluctant to write? B. Does the author feel that he is too lazy to write? Give any two reasons to justify your answer.
<b>Marking Scheme</b>	

- A. Reasons to justify the answer: - Handwriting requires more complex motor and cognitive skills, which can be challenging for young children. (1 mark) - Young children are more exposed to digital devices and technology, leading to a preference for typing rather than writing. (1 mark) or award marks to any other relevant answer from the text.
- B. Two reasons to justify the answer: - The author's entire existence revolves around typing on a computer and using digital tools, making writing less frequent. (1 mark)  
The author uses a pen as a chewing object, indicating a lack of interest in writing. (1 mark) or award marks to any other relevant justifications from the text.

## WRITING

### Item 2

<b>Content domain</b>	Written expression	
<b>Learning Outcome</b>	Expresses opinions on key contemporary issues like social justice, environment, gender, etc., in writing.	
<b>Learning indicator</b>	Constructs a personal point of view using evidence from the content, background knowledge about the topic and/or from past experiences.	
<b>Cognitive level</b>	Create	
<b>Marks Allotted</b>	5 Marks	
<b>Item Stem</b>	<p>Imagine you are Kumarshri/Anitapp, a resident of Chhattisgarh who recently visited Bengaluru. While walking back to your hotel from the grocery store one day, you came across the following sight (picture given below). Based on the given experience and using your own ideas, compose an article in 125-150 words shedding light on the environmental consequences of online shopping packaging. Provide a suitable title for the article.</p>	

### Marking Scheme

#### 1.Content (2 marks):

- Introduction: Clear introduction that sets the context and introduces the topic of online shopping packaging and its environmental consequences.
- Discussion of environmental consequences: Discusses the negative impact of online shopping packaging on the environment, such as excessive waste generation, plastic pollution, and carbon emissions.
- Supporting points: Provides specific examples, or facts to support the discussion and strengthen the arguments.

#### 2. Organization and structure (1 mark):

- Paragraph development: Well-structured with coherent paragraphs that develop the ideas logically.
- Transition words: Effective use of transition words and phrases to ensure smooth flow and connectivity between ideas and paragraphs.

#### 3.Language and expression (1 mark):

- Clarity and coherence: Clear and coherent use of language, enabling the reader to understand the message easily.
- Vocabulary and sentence structure: Effective use of varied vocabulary and sentence structures to enhance the quality of writing.
- Grammar and punctuation: Correct usage of grammar and punctuation.

#### 4.Title (1 mark):

- The title should accurately reflect the content and focus of the article.
- The title should be engaging and attract the reader's attention.

## GRAMMAR

### Item 3

<b>Content domain</b>	Written expression
<b>Learning Outcome</b>	Uses language appropriate to purposes and perspectives.
<b>Learning indicator</b>	Uses grammatically correct sentences.
<b>Cognitive level</b>	Integrate and Interpret
<b>Marks Allotted</b>	3 Marks

<b>Item Stem</b>	The given sentences have not been edited. There is an error in each line. Write the error as well as the correction:	
	<p>a. Raju, as well as his brothers, are enjoying the party.</p> <p>b. They are relishing there feast.</p> <p>c. One of their friend has not come for the event.</p>	
	Error	Correction
	a.	
	b.	
c.		

**Marking Scheme**

a. Error: are (1/2 mark)  
 Correction: is (1/2 mark)  
 Explanation: Since "Raju" is a singular subject, the verb should be "is" instead of "are."

b. Error: there (1/2 mark)  
 Correction: their (1/2 mark)  
 Explanation: "Their" indicates possession, while "there" refers to a place. Since it is about enjoying "their" feast, the correct word is "their."

c. Error: friend  
 Correction: friends  
 Explanation: The word "friend" should be pluralized to "friends" because the sentence is referring to more than one friend. The correct sentence should be "One of their friends has not come for the event."

**LITERATURE**

Answer the following questions with reference to context.

*“In life, every man has twin obligations ----- obligation to his family, to his parents, to his wife and children; and he has obligation to his people, his community, his country. In a civil and humane society, each man is able to fulfil those obligations according to his own inclinations and abilities. But in a country like South Africa, it was almost impossible for a man of my birth and colour to fulfil both of those obligations.”*

**Item 4a**

<b>Content domain</b>	Reading Comprehension: familiar texts
<b>Learning Outcome</b>	Reads, comprehends, and responds to complex texts independently.
<b>Learning indicator</b>	Infers implicit meanings in complex texts from different genres
<b>Cognitive level</b>	Integrate and Interpret
<b>Marks Allotted</b>	1 Mark
<b>Item Stem</b>	Which of the following statements best justifies why Nelson Mandela is considered a true hero and a great world leader?
<b>Correct answer</b>	He demonstrated immense courage and dedicated his life to ending apartheid.
<b>Distractor 1</b>	He excelled in fulfilling his obligations to his family, parents, wife, and children.
<b>Distractor 2</b>	He was highly devoted to his parents and showed great love as a son.
<b>Distractor 3</b>	He spent the majority of his life in prison for his actions.

#### Item 4b

<b>Content domain</b>	Reading Comprehension: familiar texts
<b>Learning Outcome</b>	Reads, comprehends, and responds to complex texts independently.
<b>Learning indicator</b>	Employs reading strategies like skimming, scanning, and predicting to comprehend texts independently.
<b>Cognitive level</b>	Reflect and Evaluate
<b>Marks Allotted</b>	1 Mark
<b>Item Stem</b>	Select the appropriate assertion and reason statement based on the given extract: <b>Assertion:</b> Nelson Mandela faced obstacles from the Whites that hindered his ability to fulfil his obligations. <b>Reason:</b> It was extremely challenging for any South African to meet their obligations.

<b>Correct answer</b>	Both the assertion and reason are correct, but the reason does not explain the assertion.
<b>Distractor 1</b>	Both the assertion and reason are correct, and the reason explains the assertion.
<b>Distractor 2</b>	The assertion is false, but the reason is true.
<b>Distractor 3</b>	Both the assertion and reason are false.

## Subject- Hindi Assessment Framework

### Test Construct

- अपठित गद्यांश के माध्यम से पठन, लेखन और अवबोधन की योग्यता का विकास ।
- उचित शब्दों का प्रयोग करते हुए प्रभावशाली रचनात्मक लेखन की योग्यता का विस्तार।
- गद्य और काव्य को पढ़कर उससे संबंधित प्रश्नों को समझकर उसकी सराहना करने की क्षमता का विकास।
- व्याकरण और भाषायी संरचना के अंतर्गत विभिन्न प्रयोगों को समझने की योग्यता का विकास।

कॉन्टेंट डोमेन	क्रम संख्या	सीखने के प्रतिफल	सीखने के संकेतक	संज्ञानात्मक स्तर
अपठित गद्यांश	1.	पाठ्यपस्तुकों में शामिल रचनाओं के अतिरिक्त अन्य कविता, कहानी, एकांकी को पढ़ते-लिखते और मंचन करते हैं।	रचनाओं को इंटरनेट, पुस्तकालय और अन्य स्रोतों से ढूँढने की कोशिश करते हैं और चुनी हुई रचनाओं को रुचि के साथ पढ़ते हैं।  अपनी पसंद की रचनाओं और रचनाकारों की सूची बनाते हैं।	अधिगम और पुनः प्रतिष्ठापन  एकीकरण और विवेचन
	2.	नई रचनाएँ पढ़कर उन पर परिवार एवं साथियों से बातचीत करते हैं।	पढ़ने में रुचि लेते हैं और इसके लिए पाठ्यपुस्तक और इससे इतर विभिन्न विषयों और विधाओं से संबंधित रचनाओं के बारे में विविध स्रोतों से जानकारी हासिल करते हैं।  रचनाओं को पढ़ते हुए उन्हें अपने अनुभवों से जोड़ने का प्रयास करते हैं।	एकीकरण और विवेचन  विश्लेषण और मूल्यांकन

		इन रचनाओं की विषयवस्तु, घटनाक्रमों, तथ्यों, लेखन शैली आदि के बारे में बातचीत करते हैं।	एकीकरण और विवेचन
		इन रचनाओं से जुड़े अपने अनुभवों को परिवार और साथियों के साथ साझा करते हैं, इस संबंध में उनके अनुभवों को भी ग्रहण करते हैं।	एकीकरण और विवेचन
पाठ्य पुस्तक (पाठित साहित्य, पठित गद्यांश और पठित पद्यांश)	3.	देखी-सुनी, सुनी-समझी, पढ़ी और लिखी घटनाओं/रचनाओं पर स्पष्ट मौखिक एवं लिखित अभिव्यक्ति करते हैं।	देखी, सुनी घटनाओं और प्रसंगों को अपनी पाठ्य पुस्तक के पाठों से जोड़ने का प्रयास करते हैं।
			पठित सामग्री के विषय में अपनी समझ को बोलकर और लिखकर सामने रखते हैं।
			अपनी बात को प्रभावी तरीके से प्रस्तुत करने के लिए स्पष्ट प्रमाणों, सटीक उदाहरणों और तर्कों का उपयोग करते हैं।
			अधिगम और पुनः प्रतिष्ठापन
			एकीकरण और विवेचन
			विश्लेषण और मूल्यांकन
रचनात्मक लेखन- (औपचारिक पत्र, विज्ञापन लेखन, समीक्षा आदि)	4.	औपचारिक पत्र, ई-मेल, सूचना जैसे- प्रधानाचार्य, संपादक को अपने आस-पास की समस्याओं, मुद्दों को ध्यान में रखकर पत्र लिखते हैं।	अपने आस-पास की समस्याओं और मुद्दों को समझते हैं।
			इनसे जुड़े कार्यक्रम, रिपोर्ट, चर्चा आदि को सुनते, देखते, पढ़ते हैं और इनसे संबंधित कार्यक्रमों में सक्रिय रूप से शामिल होते हैं।
			इनके जरिए उठाए गए विभिन्न मुद्दों/विषयों और उनसे संबंधित विचारों, जानकारियों और तथ्यों को इकट्ठा करते हैं/सूचीबद्ध करते हैं।
			अधिगम और पुनःप्रतिष्ठापन
			एकीकरण और विवेचन
			एकीकरण और विवेचन
			विश्लेषण और मूल्यांकन
			सृजन
	5.	रोजमर्रा के जीवन से अलग किसी घटना/स्थिति- विशेष में भाषा का काल्पनिक और सृजनात्मक प्रयोग करते हुए लिखते हैं। जैसे – दिन में रात ....	संबंधित मुद्दों और विषयों से जुड़े अपने पूर्व ज्ञान और / या पूर्व- अनुभवों की सहायता से अपने दृष्टिकोण का निर्माण करते हैं।
		इन मुद्दों की ओर ध्यान आकर्षित करने और इनके बारे में जागरूकता बढ़ाने के लिए संबंधित अधिकारियों को प्रार्थना पत्र, ई-मेल, संपादक के नाम पत्र आदि लिखते हैं।	
			विश्लेषण और मूल्यांकन

		संबंधित अधिकारियों/अधिकृत व्यक्तियों को ध्यान में रखते हुए अपने विचारों को लिखते हैं। इसके लिए उचित शब्दावली (प्रशासनिक, औपचारिक आदि), शैली, वाक्य-विन्यास का चयन करते हैं।	सृजन	
व्याकरण और भाषाई संरचना	6.	फिल्म एवं विज्ञापनों को देखकर उनकी समीक्षा लिखते हुए, दृश्य माध्यम की भाषा का प्रयोग करते हैं।	कक्षा में विज्ञापन से जुड़े हर पहलू पर चर्चा कर पाते हैं; जैसे- प्रस्तुतीकरण के तरीके और मौलिकता आदि चर्चा कर पाते हैं।	एकीकरण और विवेचन
			विभिन्न साहित्यिक विधाओं को खोज कर पढ़ने में दिलचस्पी रखते हैं व विश्लेषण करते हैं।	विश्लेषण और मूल्यांकन
			लेखन के विषय और पाठकों को ध्यान में रखते हुए उचित लेखन शैली/विधा का चुनाव करते हैं।	एकीकरण और विवेचन
	7.	अपने अनुभवों एवं कल्पनाओं को सृजनात्मक ढंग से लिखते हैं। जैसे - यात्रा वर्णन, संस्मरण लिखना।	विभिन्न साहित्यिक रचनाओं में अपनाई गई अलग-अलग लेखन शैलियों का उपयोग करने में सक्षम बनते हैं।	विश्लेषण और मूल्यांकन
			सृजन क्षमता को अभिव्यक्त करने के लिए अपने लेखन में विषयवस्तु की मांग के अनुरूप अलग-अलग विधाओं का प्रयोग करते हैं।	एकीकरण और विवेचन
	8.	भाषा-साहित्य की बारीकियों पर चर्चा करते हैं, जैसे-विशिष्ट शब्द भंडार, वाक्य-संरचना, शैली के प्रायोगिक प्रयोग एवं संरचना आदि।	विविध साहित्य को पढ़ते हुए उसकी भाषागत संरचना पर ध्यान देते हैं।	अधिगम और पुनः प्रतिष्ठापन
		विभिन्न साहित्यिक विधाओं को पढ़ते हुए व्याकरणिक संरचनाओं पर चर्चा / टिप्पणी करते हैं।	पाठ्यपुस्तक और उसके इतर पढ़ी गई साहित्यिक रचनाओं में किसी काल - समय/अञ्चल-स्थान/प्रसंग आदि के अनुसार प्रयुक्त शब्दों एवं वाक्य विन्यास को पहचान पाते हैं, समझते हैं और उनके प्रयोग के नयेपन या अनोखेपन पर बात करते हैं।	विश्लेषण और मूल्यांकन

### Sample Items

#### कक्षा - दसवीं

#### खंड - अ (वस्तुपरक प्रश्न)

रातें दसों दिशाओं से कहेंगी अपनी कहानियाँ पर संगीतकार जयकिशन ने आपत्ति की। उनका ख्याल था कि दर्शक 'चार दिशाएँ' तो समझ सकते हैं- 'दस दिशाएँ' नहीं। लेकिन शैलेंद्र परिवर्तन के लिए तैयार नहीं हुए। उनका दृढ़ मंतव्य था कि दर्शकों की रुचि की आड़ में हमें उथलेपन को उन पर नहीं थोपना चाहिए। कलाकार का यह कर्तव्य भी है कि वह उपभोक्ता की रुचियों का परिष्कार करने का प्रयत्न करे और उनका यकीन गलत नहीं था। यही नहीं, वे बहुत अच्छे गीत भी जो उन्होंने लिखे बेहद लोकप्रिय हुए। शैलेंद्र ने झूठे अभिजात्य को कभी नहीं अपनाया। उनके गीत भाव-प्रवण थे- दुरुह नहीं। 'मेरा जूता है जापानी, ये पतलून इंगलिस्तानी, सर पे लाल टोपी रूसी, फिर भी दिल है हिंदुस्तानी' - यह गीत शैलेंद्र ही लिख सकते थे। शांत नदी का प्रवाह और समुद्र की गहराई लिए हुए। यही विशेषता उनकी ज़िंदगी की थी और यही उन्होंने अपनी फ़िल्म के द्वारा भी साबित किया था।

#### Item 1a

Content domain	अपठित गद्यांश
Learning Outcome	देखी-सुनी, सुनी-समझी, पढ़ी और लिखी घटनाओं/रचनाओं पर स्पष्ट मौखिक एवं लिखित अभिव्यक्ति करते हैं।
Learning indicator	पठित सामग्री के विषय में अपनी समझ को बोलकर और लिखकर प्रस्तुत करते हैं।
Cognitive level	विश्लेषण और मूल्यांकन
Marks Allotted	1 Mark
Item Stem	गीत 'रातें दसों दिशाओं से कहेंगी अपनी कहानियाँ' पर संगीतकार जयकिशन ने आपत्ति की क्योंकि उनके अनुसार -
Correct answer	(क) दस दिशाओं का गहन ज्ञान दर्शकों को नहीं होगा।
Distractor 1	(घ) दर्शकों की रुचि के लिए उन पर उथलापन नहीं थोपना चाहिए।
Distractor 2	(ग) जागरूक दर्शक ऐसी स्पष्ट बातें पसंद नहीं करते थे।
Distractor 3	(ख) इससे दर्शकों की रुचियों का परिष्कार नहीं होगा।

**Item 1b**

<b>Content domain</b>	अपठित गद्यांश
<b>Learning Outcome</b>	देखी-सुनी, समझी, पढ़ी और लिखी घटनाओं/रचनाओं पर स्पष्ट मौखिक एवं लिखित अभिव्यक्ति करते हैं।
<b>Learning indicator</b>	पठित सामग्री के विषय में अपनी समझ को बोलकर और लिखकर सामने रखते हैं।
<b>Cognitive level</b>	अधिगम और पुनः प्रतिष्ठापन
<b>Marks Allotted</b>	1 Mark
<b>Item Stem</b>	‘उनका यह दृढ़ मंतव्य था कि दर्शकों की रुचि की आड़ में हमें उथलेपन को उन पर नहीं थोपना चाहिए। कलाकार का यह कर्तव्य भी है कि वह उपभोक्ता की रुचियों का परिष्कार करने का प्रयत्न करे’।  कथन के माध्यम से ज्ञात होता है कि शैलेन्द्र हैं –
<b>Correct answer</b>	(घ) आदर्शवादी, उच्चकोटि के गीतकार व कवि
<b>Distractor 1</b>	(ग) समाज-सुधारक, कर्मयोगी गीतकार व कवि
<b>Distractor 2</b>	(ख) सफल फिल्म निर्माता, गीतकार व कवि
<b>Distractor 3</b>	(क) दृढ़निश्चयी, सफल फिल्म निर्माता व कवि

**Item 2**

<b>Content domain</b>	पठित गद्यांश
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Learning Outcome	विभिन्न साहित्यिक विधाओं को पढ़ते हुए व्याकरणिक संरचनाओं पर चर्चा/टिप्पणी करते हैं।
Learning indicator	विविध साहित्य को पढ़ते हुए उसकी भाषागत संरचना पर ध्यान देते हैं
Cognitive level	अधिगम और पुनः प्रतिष्ठापन
Marks Allotted	1 Mark
Item Stem	निर्देशानुसार 'पदबंध' पर आधारित बहुविकल्पीय प्रश्नों के उत्तर दीजिए-  (1) 'वामीरो फटती हुई धरती के किनारे चीखती हुई दौड़ रही थी।' रेखांकित पदबंध का भेद है -
Correct answer	(ग) क्रिया पदबंध
Distractor 1	(ख) सर्वनाम पदबंध
Distractor 2	(घ) विशेषण पदबंध
Distractor 3	(क) संज्ञा पदबंध

Item 3

Content domain	Reading Comprehension
Learning Outcome	औपचारिक पत्र, ई-मेल, सूचना जैसे प्रधानाचार्य, संपादक को अपने आस-पास की समस्याओं, मुद्दों को ध्यान में रखकर पत्र लिखते हैं।
Learning indicator	आस-पास की समस्याओं और मुद्दों को समझते हैं।
Cognitive level	सृजन
Marks Allotted	5 Marks

Item Stem	आपका नाम रोहन/रेहाना है। आपके क्षेत्र में बच्चों के खेलने, बड़ों के टहलने और शुद्ध हवा में व्यायाम करने के लिए कोई भी उपयुक्त स्थान नहीं है। अपने क्षेत्र में पार्क विकसित करवाने का निवेदन करते हुए 'नगर निगम अधिकारी' को पत्र लिखिए। (शब्द-सीमा - लगभग 100 शब्द)	
Marking Scheme		
Criteria		Marks Allotted
1) प्रारूप : पत्र के प्रारूप को क्रमबद्ध रूप से उपयुक्त प्रकार से लिखते हैं। 2) विषय वस्तु : • स्वयं का उचित परिचय देते हैं। समस्या की ओर पाठक का ध्यान आकर्षित करते हुए समाधान की आशा के साथ पत्र लिखते हैं। • औपचारिक पत्र के उद्देश्य की समझ रखते हैं और इसके लिए प्रासंगिक उदाहरणों का सटीक इस्तेमाल करते हैं। • पाठक की सहजता को ध्यान में रखते हुए, परिवेशगत समस्याओं का विश्लेषण करते हुए उपयुक्त/प्रासंगिक शब्दों का इस्तेमाल करते हैं। 3) उद्देश्य और अर्थ को ध्यान में रखते हुए उचित शब्दों एवं विराम चिह्नों का प्रयोग करते हुए प्रभावशाली व सुसंगत लेखन करते हैं।		1+3+1=5
• प्रारूप : प्रारूप की जानकारी तो है किंतु क्रमबद्धता का अभाव है • विषय वस्तु : ➤ स्वयं का परिचय देते हुए अपनी समस्या की ओर पाठक का ध्यान आकर्षित करते हुए समाधान की आशा करते हुए पत्र लिख पाते हैं। ➤ औपचारिक पत्र के उद्देश्य की पूर्ण समझ के साथ लिखते हैं, लेकिन इसके लिए प्रासंगिक सामग्री व जानकारी का सटीक इस्तेमाल नहीं कर पाते हैं। • सुसंगत लेखन किन्तु सटीक शब्दों का अभाव। उद्देश्य और अर्थ के अनुसार प्रासंगिक शब्दों के चुनाव का प्रयास करते हैं। • उद्देश्य और अर्थ को ध्यान में रखते हुए उचित शब्दों एवं विराम चिह्नों के प्रयोग करते समय त्रुटियाँ करते हैं।		$\frac{1}{2}+3 +\frac{1}{2}=4$
• प्रारूप : प्रारूप की जानकारी है और औसत तौर पर इस्तेमाल करते हैं। • विषय वस्तु : ➤ औपचारिक पत्र के उद्देश्य की पूर्ण समझ का अभाव है साथ ही साथ प्रासंगिक सामग्री व जानकारी का सटीक इस्तेमाल नहीं कर पाते हैं। ➤ सुसंगत लेखन और सटीक शब्दों का अभाव। उद्देश्य और अर्थ के अनुसार प्रासंगिक शब्दों के चुनाव का प्रयास करते हैं। • उद्देश्य और अर्थ को ध्यान में रखते हुए उचित शब्दों एवं विराम चिह्नों के प्रयोग करते समय त्रुटियाँ करते हैं।		1+1+1=3
• प्रारूप : उपयुक्त फॉर्मेट की जानकारी है पर इस्तेमाल नहीं करते हैं। • विषय वस्तु :		2

<ul style="list-style-type: none"> <li>➤ उद्देश्य की कुछ समझ रखना पर उससे जुड़ी किसी भी प्रासंगिक सामग्री का अभाव।</li> <li>➤ सुसंगतता की कमी, इसके कारण पाठक को पढ़ने में परेशानी। अनुपयुक्त शब्दों के इस्तेमाल, जिससे अर्थ सम्प्रेषण में बाधा।</li> </ul>	
<ul style="list-style-type: none"> <li>• व्याकरणगत त्रुटियाँ और उचित वाक्य विन्यास का अभाव।</li> </ul>	1
<ul style="list-style-type: none"> <li>• प्रारूप : उपयुक्त फॉर्मेट की न तो जानकारी है, न ही इस्तेमाल करते हैं।</li> <li>• विषय वस्तु: <ul style="list-style-type: none"> <li>○ उद्देश्य की समझ न होना और उसके अनुकूल लिख नहीं पाना।</li> <li>○ लेखन में तारतम्यता का अभाव।</li> </ul> </li> <li>• वाक्य संरचना, व्याकरण और वर्तनी में त्रुटियाँ, जिससे अर्थ सम्प्रेषण में बाधा।</li> </ul>	0
कोई प्रतिक्रिया नहीं	

Item 4

Content domain	Reading Comprehension
Learning Outcome	औपचारिक पत्र, ई-मेल, सूचना जैसे- प्रधानाचार्य, संपादक को अपने आस-पास की समस्याओं, मुद्दों को ध्यान में रखकर पत्र लिखते हैं।
Learning indicator	इनके जरिए उठाए गए विभिन्न मुद्दों/विषयों और उनसे संबंधित विचारों, जानकारियों और तथ्यों को इकट्ठा करते हैं; सूचीबद्ध करते हैं।
Cognitive level	सृजन
Marks Allotted	3 Marks
Item Stem	विद्यालय में वार्षिकोत्सव समारोह के आयोजन के लिए आपको संयोजक बनाया गया है। विद्यालय की ओर से सभी विद्यार्थियों के लिए लगभग 50 शब्दों में सूचना तैयार कीजिए।

Marking Scheme	
Criteria	Marks Allotted
<ul style="list-style-type: none"> <li>▪ सूचना का प्रारूप - 1               <ul style="list-style-type: none"> <li>○ प्रारूप का ठीक से सही उपयोग हुआ है</li> </ul> </li> <li>▪ सूचना की विषयवस्तु - 1               <ul style="list-style-type: none"> <li>○ मुख्य बिंदु लिखे गए हैं।</li> <li>○ अपने अनुभव को शामिल किया गया है।</li> <li>○ रचनात्मकता का उपयोग किया गया है।</li> </ul> </li> <li>▪ भाषायी शुद्धता - 1               <ul style="list-style-type: none"> <li>○ लेखन में तारतम्यता है।</li> <li>○ वाक्य संरचना सही है, वर्तनीगत शुद्धता है।</li> <li>○ व्याकरण का उपयोग सही है।</li> </ul> </li> </ul>	2-3
<ul style="list-style-type: none"> <li>▪ सूचना में मुख्य बिंदु नहीं है या आंशिक रूप से हैं।</li> <li>▪ लेखन में तारतम्यता की कमी है।</li> <li>▪ वाक्य संरचना सटीक नहीं है, वर्तनीगत अशुद्धता है।</li> <li>▪ व्याकरण के सही उपयोग की कमी है।</li> </ul>	1-2
कोई जवाब नहीं लिखा है	0

## Subject- Math Assessment Framework

### Test Construct- Mathematical Reasoning

1. Skills - Analyse logically, think critically to handle abstractions.
2. Knowledge - Comprehend and apply appropriate theorems, Mathematical vocabulary, and Mathematical operations.
3. Creativity - Ability to see the connections and the relationships between different Mathematical concepts with other subjects / real life.
4. Flexibility - Apply alternative approaches to solve the given problem.

<i>Content Domain (Sub Domain)</i>	<i>Sno.</i>	<i>Learning outcomes</i>	<i>Learning indicators</i>	<i>Cognitive level</i>
<i>Number Systems</i>	1.	Generalises properties of numbers and relations among them studied earlier to evolve results – such as, Fundamental Theorem of Arithmetic – and applies them to solve problems related to real life contexts.	Recall that the fundamental theorem of arithmetic is used to find HCF/LCM for any two positive integers to solve problems related to real life contexts.	Applying
			Justify the irrationality of $\sqrt{2}$ , $\sqrt{3}$ , $\sqrt{5}$ and other surds such as $m + p\sqrt{n}$ using the fundamental theorem of arithmetic.	Reasoning
<i>Algebra (Arithmetic Progression)</i>	2.	Develops strategies to apply the concept of AP to daily life situations.	Generalize the procedure by arriving at the nth term given the first term and common difference.	Knowing
			Express a given real life problem in terms of an arithmetic progression and identify the specified term, common difference and number of terms.	Applying
<i>Algebra (Polynomials)</i>	3.	Utilizes the relationship between zeroes and the coefficients of a polynomial.	Utilise the relationship between the zeroes and coefficients of a Quadratic polynomial and form a Quadratic polynomial.	Knowing
<i>Algebra (Pair of Linear Equations in Two Variables)</i>	4.	Classifies linear equations as consistent or inconsistent, and dependent or independent and interprets their geometric meaning, the type of solutions and the relationship between the coefficients.	Connect relationship between coefficients of terms in the equations of a pair of lines with the three categories: <ol style="list-style-type: none"> <li>i. intersecting</li> <li>ii. parallel</li> <li>iii. coincident</li> </ol>	Reasoning
<i>Algebra (Quadratic Equations)</i>	5.	Explores the relationship between the nature of roots and the discriminant of a quadratic equation.	Solve problems based on the relationship between the nature of the roots and the discriminant of a quadratic equation.	Knowing

<i>Trigonometry (Introduction)</i>	6.	Determines all trigonometric ratios with respect to a given acute angle (of a right triangle) and uses them in solving problems in daily life contexts like finding heights of different structures or distance from them.	Given one of the trigonometric ratios of an acute angle, find the others.	Knowing
			Find the height/depth or length of an object or the distance between two distant objects using trigonometric ratios.	Reasoning
<i>Trigonometry (Applications)</i>	7.	Uses trigonometric ratios to solve simple problems.	Simplify and Justify expressions based on trigonometric ratios and identities.	Reasoning
<i>Coordinate Geometry</i>	8.	Derives formulae to establish relations for geometrical shapes in the context of a coordinate plane, such as, finding the distance between two given points, to determine the coordinates of a point between any two given points.	Generalize midpoint formula to section formula (internal division) (by finding similar triangles).	Reasoning
			Given coordinates of points apply reasoning to solve problems such as finding: <ol style="list-style-type: none"> <li>i. Distances</li> <li>ii. Coordinates of points dividing a line in a particular ratio</li> <li>iii. Types of triangles</li> <li>iv. Types of quadrilaterals</li> <li>v. Collinearity of given points</li> </ol>	Reasoning
<i>Geometry (Similar Triangles)</i>	9.	Establishes properties for similarity of two triangles logically using different geometric criteria established earlier such as, Basic Proportionality Theorem, etc.	Analyse conditions to prove similarity of triangles.	Reasoning
			Use basic proportionality theorem to find unknown length(s)	Applying
<i>Geometry (Circles)</i>	10.	Solves problems related to the tangent of a circle.	Apply results related to tangent(s) to a circle to solve problems.	Reasoning
<i>Mensuration (SA Volumes)</i>	11.	Solves problems based on surface area and volume of different shapes and their combinations.	Synthesize formulas for the curved surface area, total surface area and volume of solids formed by combination of any two of cuboid, cylinder, cone and hemisphere to find the unknown measures.	Reasoning
			Estimate and approximate measures of area and volumes of solid in real-world context.	Reasoning
<i>Mensuration (Area Related to Circle)</i>	12.	Solves problems in areas related to circle, sector and segments.	Apply formulas of areas and lengths related circles to find unknown measurements and/or real-world problems.	Reasoning

<i>Data Handling (Probability)</i>	13.	Determines the probability of an event and applies the concept in solving daily life problems.	Compute the probability of an event in daily life context.	Reasoning
<i>Data Handling (Statistics)</i>	14.	Calculates and interprets measures of central tendency for tabulated data.	Compute and interpret the meaning of the measures of central tendency of a given dataset.	Applying

## Sample Items

## Item 1

<b>Content domain</b>	Number Systems
<b>Learning Outcome</b>	Generalises properties of numbers and relations among them studied earlier to evolve results – such as, Fundamental Theorem of Arithmetic – and applies them to solve problems related to real life contexts.
<b>Learning indicator</b>	Recall that the fundamental theorem of arithmetic is used to find HCF/LCM for any two positive integers to solve problems related to real life contexts.
<b>Cognitive level</b>	Apply
<b>Marks Allotted</b>	1
<b>Item Stem</b>	In a formula racing competition, the time taken by two racing cars A and B to complete 1 round of the track is 30 minutes and p minutes respectively. If the cars meet again at the starting point after 90 minutes and the $HCF(30, p) = 15$ , then what is the value of p?
<b>Correct answer</b>	45 minutes
<b>Distractor 1</b>	60 minutes
<b>Distractor 2</b>	75 minutes
<b>Distractor 3</b>	180 minutes

## Item 2

<b>Content domain</b>	Coordinate Geometry
<b>Learning Outcome</b>	Derives formulae to establish relations for geometrical shapes in the context of a coordinate plane, such as, finding the distance between two given points, to determine the coordinates of a point between any two given points.
<b>Learning indicator</b>	Given coordinates of points apply reasoning to solve problems to find collinearity of given points.
<b>Cognitive level</b>	Reasoning
<b>Marks Allotted</b>	1

<b>Item Stem</b>	Assertion: The points P (2, -5), Q (3, -4), R (8,1), are collinear. Reason: Since $[(PQ)]^2 + [(QR)]^2 \neq [(PR)]^2$ .
<b>Correct answer</b>	Both A and R are true but R is not the correct explanation of the assertion
<b>Distractor 1</b>	Both A and R are true but R is not the correct explanation of the assertion
<b>Distractor 2</b>	A is true, but R is false
<b>Distractor 3</b>	A is false, but R is true

## Item 3

<b>Content domain</b>	Trigonometry (Applications)
<b>Learning Outcome</b>	Uses trigonometric ratios to solve simple problems.
<b>Learning indicator</b>	Simplify and Justify expressions based on trigonometric ratios and identities.
<b>Cognitive level</b>	Reasoning
<b>Marks Allotted</b>	1
<b>Item Stem</b>	Assertion (A): The maximum value of $[\sin]^2 \theta \times [\cos]^2 \theta$ is 1. Reason (R): Maximum value of both $\sin \theta$ and $\cos \theta$ is 1.
<b>Correct answer</b>	A is false, but R is true
<b>Distractor 1</b>	Both A and R are true, and R is the correct explanation of the assertion
<b>Distractor 2</b>	Both A and R are true, but R is not the correct explanation of the assertion
<b>Distractor 3</b>	A is true, but R is false

## Item 4

<b>Content domain</b>	Data Handling (Statistics)																															
<b>Learning Outcome</b>	Calculates and interprets measures of central tendency for tabulated data.																															
<b>Learning indicator</b>	Compute and interpret the meaning of the measures of central tendency of a given dataset.																															
<b>Cognitive level</b>	Applying																															
<b>Marks Allotted</b>	5																															
<b>Item Stem</b>	<p>The following frequency distribution gives the monthly consumption of electricity in a locality of 80 families. If the median is 206, find the missing frequencies x and y.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Monthly Consumption of Electricity</th> <th>170-180</th> <th>180-190</th> <th>190-200</th> <th>200-210</th> <th>210-220</th> <th>220-230</th> <th>230-240</th> <th>240-250</th> </tr> </thead> <tbody> <tr> <td>No. of families</td> <td>4</td> <td>x</td> <td>12</td> <td>15</td> <td>13</td> <td>y</td> <td>14</td> <td>6</td> </tr> </tbody> </table>		Monthly Consumption of Electricity	170-180	180-190	190-200	200-210	210-220	220-230	230-240	240-250	No. of families	4	x	12	15	13	y	14	6												
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<b>Marking Scheme</b>	<table border="1" style="width: 100%;"> <thead> <tr> <th>Monthly Consumption of Electricity</th> <th>No. of Families</th> <th>cf</th> </tr> </thead> <tbody> <tr> <td>170-180</td> <td>4</td> <td>4</td> </tr> <tr> <td>180-190</td> <td>x</td> <td>4+x</td> </tr> <tr> <td>190-200</td> <td>12</td> <td>16+x</td> </tr> <tr> <td>200-210</td> <td>15</td> <td>31+x</td> </tr> <tr> <td>210-220</td> <td>13</td> <td>44+x</td> </tr> <tr> <td>220-230</td> <td>y</td> <td>44+x+y</td> </tr> <tr> <td>230-240</td> <td>14</td> <td>58+x+y</td> </tr> <tr> <td>240-250</td> <td>6</td> <td>64+x+y</td> </tr> <tr> <td>Total</td> <td>N = 80</td> <td></td> </tr> </tbody> </table>		Monthly Consumption of Electricity	No. of Families	cf	170-180	4	4	180-190	x	4+x	190-200	12	16+x	200-210	15	31+x	210-220	13	44+x	220-230	y	44+x+y	230-240	14	58+x+y	240-250	6	64+x+y	Total	N = 80	
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	<p>1) 1. For calculation of cf. [1 m]</p> <p>2. Deciding that total frequency <math>N = 80</math> and <math>N/2 = 40</math> [½ m]</p> <p>3. If students write the correct formula of Median. [½ m] (½ mark will be given for partly correct)</p> <p>4. For identifying the <math>l=200, cf=16+x, f=15, h=10</math> [1 m] (½ for each labelling).</p> <p>5. Calculation of the median using the median formula. [1 m]</p> <p>6. For finding <math>y = 1</math>. [½ m]</p>																															

$Md = l + \left(\frac{N-cf}{f}\right) \times h$ $206 = 200 + \left(\frac{40-(16+x)}{15}\right) \times 10$ $6 = \left(\frac{24-x}{15}\right) \times 10$ <p style="margin-left: 20px;">x = 15</p> <p>Therefore,</p> $64 + x + y = 80$ <p>Put x = 15</p> $y = 1$ <p>Answer: x = 15, y = 1</p>	
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## Item 8

<b>Content domain</b>	Algebra (Pair of Linear Equations in Two Variables)	
<b>Learning Outcome</b>	Classifies linear equations as consistent or inconsistent, and dependent or independent and interprets their geometric meaning, the type of solutions and the relationship between the coefficients.	
<b>Learning indicator</b>	Connect relationship between coefficients of terms in the equations of a pair of lines with the three categories: i. intersecting ii. parallel iii. coincident	
<b>Cognitive level</b>	Reasoning	
<b>Marks Allotted</b>	3	
<b>Item Stem</b>	$3x - y - 5 = 0$ and $6x - 2y - p = 0$ is a pair of linear equations in two variables. a) If these two equations represent two roads, then will these roads ever meet? Give reasons for your answer. (2m) b) If these two equations represent the parallel tracks of a railway, then what should be the value(s) of p? (1m)	
<b>Marking Scheme</b>		

a)  $\frac{3}{6} = \frac{-1}{-2} \Rightarrow \frac{a_1}{a_2} = \frac{b_1}{b_2}$  [ $\frac{1}{2}$  m +  $\frac{1}{2}$  m]

$\Rightarrow$  as  $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$ , these equations can not represent intersecting lines. Therefore, these roads will never meet. [ $\frac{1}{2}$  m +  $\frac{1}{2}$  m]

b)  $\frac{3}{6} = \frac{-1}{-2} \neq \frac{-5}{-p}$  [ $\frac{1}{2}$  m]

$\Rightarrow p \neq 10$  [ $\frac{1}{2}$  m]

a) Incorrect ratios compared	[0m]
a) Correct ratios compared but reason not given	[1m]
a) Correct ratio compared; reason given but conclusion for the roads not given	[1.5m]
b) Incorrect ratios compared	[0m]
b) Correct ratios compared; but p is not equal to 10 not given	[0.5m]

## Subject- Science Assessment Framework

### Test Construct: Scientific Knowledge & Ability

1. Knowledge of scientific concepts- This comprises of student's understanding of key scientific concepts and principles related to their grade level, such as the laws of thermodynamics, biological classification, or the periodic table.
2. Critical thinking skills- This comprises of ability to evaluate scientific information critically, identify biases, evaluate evidence, and make evidence-based conclusions.
3. Problem-solving skills- This is about ability to use scientific knowledge and skills to solve problems and make evidence-based decisions. The student should be able to identify the best solution to a problem and explain their reasoning.
4. Ability to design and conduct experiments- This comprises of ability to design experiments to test hypotheses and analyse data.
5. Making ethical choices.

<i>Content domain</i>	<i>Sno.</i>	<i>Learning outcomes</i>	<i>Learning indicators</i>	<i>Cognitive level</i>
<i>Material</i>	1.	Differentiates materials/ objects/ organisms/ phenomena/ processes, based on, properties/ characteristics.	Separates oxidation from reduction in terms of loss and gain of oxygen.	Knowing
	2.	Plans and conducts investigations/ experiments to arrive at and verify the facts, principles, phenomena or to seek answers to queries on their own.	Verifies the acidic/basic nature of solutions using the pH scale	Applying
	3.	Analyses and interprets data/ graph/ figure	Analyses the colour change in a metal salt solution during a reaction.	Reasoning
	4.	Classifies materials/objects/ organisms/ phenomena/ processes, based on, properties/ characteristics.	Classifies saturated/unsaturated carbon compounds as alkanes, alkenes, alkynes, alcohols, carboxylic acids, ketones and aldehydes	Knowing
	5.	Explains processes and phenomena,	Explains the preparation of bleaching powder, baking soda and washing soda.	Knowing
	6.	Explains reactivity of metals based on their reactions with other metals	Infers reactivity of metals and arranges them in decreasing order of reactivity based on their reactions	Reasoning
	7.	Plans and conducts investigations to verify facts/ principles/or phenomenon to seek answers	Conducts an activity to show action of detergent on hard and soft water	Reasoning
<i>The world of living</i>	8.	Applies learning to hypothetical situations	Applies learning of life processes in hypothetical situations predicting consequences/ implications (if bile juice doesn't get secreted by liver, if the stomata clog etc.).	Reasoning

	9.	Draws conclusion.	Draws conclusions through experiments/ activities that aerobic respiration results in CO <sub>2</sub> and water	Reasoning
	10.	Communicates the findings and conclusions effectively	Communicates findings and conclusions around prevalence, occurrence and prevention of major hormonal diseases using slides, posters, data tables, graphs, pamphlets and videos, assigned or pursued as a project/assignment	Applying
	11.	Exhibits values of honesty/ objectivity/ rational thinking/ freedom from myth/ superstitious beliefs while taking decisions, respect for life, e	Exhibits values of objectivity/rational thinking/ freedom from myth/superstitious beliefs while debating matters of hormonal and nervous system disorders (e.g. Dwarfism and Gigantism are not hereditary, females with late onset of menstrual cycle will not be fertile etc.)	Reasoning
			Exhibits objectivity and rational thinking while approaching discussions on puberty and sex in peer groups	Reasoning
	12.	Explains processes and phenomena.	Elaborates on the role and significance of different organs/structures involved in various life processes across organisms.	Knowing
	13.	Draws labelled diagrams/ flow charts/ concept map/graphs,	Draws labelled diagrams/flow charts illustrating modes and process of reproduction and reproductive organs in animals/humans/plants.	Knowing
	14.	Explains the processes / phenomenon relating to control and coordination	Explains control and coordination in human beings with reference to the nervous system	Applying
<i>Natural resources</i>	15.	Makes efforts to conserve environment realising the inter-dependency and interrelationship in the biotic and abiotic factors of environment.	Takes steps to conserve the environment realising the inter-dependency and interrelationship in the biotic and abiotic factors of environment, promoting segregation of biodegradable and non-biodegradable waste with appropriate recycling and reuse etc.	Applying
			Takes steps to conserve the environment by taking steps to promote sustainable management of resources in day-to-day life	Applying
<i>Natural Phenomena</i>	16.	Applies scientific concepts in daily life and solving problems.	Applies the concepts of refraction to eye correction and fishing.	Applying
	17.	Draws labelled diagrams/ flow charts/ concept map/graphs	Draws and labels the ray diagram of a) white light passing through a prism, b) its recombination on passing through an identical, inverted prism, and c) the formation of a rainbow.	Knowing

*How things  
work?*

18.	Uses scientific conventions/ symbols/ equations to; represent various quantities/ elements/ units	Uses Cartesian sign convention for spherical mirrors. Uses symbols of components of a circuit diagram.	Applying
19.	Explains processes and phenomenon that occur in nature	Explains the role of medium / density in refraction	Reasoning
20.	Analyses and interprets data/ graph/ figure.	Analyses and interprets V-I graphs pertaining to household electric appliances/ supply	Reasoning
21.	Calculates using the data given.	Determines effective resistance of a given circuit, finds the current in each branch and potential difference across each element of a simple circuit.	Applying
22.	Applies scientific concepts in daily life and solving problems.	Applies concepts from electricity to decrease/increase resistance.	Applying
23.	Relates processes and phenomena with causes/ effects	Relates the effect on magnetic field due to a current through a straight conductor, a circular loop and through a solenoid.	Applying
24.	Takes initiative to know about scientific discoveries/ inventions.	Discusses the safety measures used in electric circuits.	Knowing

### Sample Items

#### Item 1

<b>Content domain</b>	Biology- The World of living -Life Processes		
<b>Learning Outcome</b>	Draws conclusion.		
<b>Learning indicator</b>	Draws conclusions through experiments/ activities that aerobic respiration results in CO <sub>2</sub> and water		
<b>Cognitive level</b>	Reasoning		
<b>Marks Allotted</b>	1 mark		
<b>Item Stem</b>	Identify the correct organism or cell which undergoes aerobic respiration.		
	Organism/cells	End products	change in colour with lime water
(i)	Yeast	Ethanol, CO <sub>2</sub> and energy	turns milky
(ii)	muscle cells	lactic acids and Energy	no change
(iii)	Hydra	CO <sub>2</sub> , H <sub>2</sub> O and Energy	turns milky
(iv)	Amoeba	CO <sub>2</sub> , H <sub>2</sub> O and Energy	turns milky
<b>Correct answer</b>	(iii) and (iv)		
<b>Distractor 1</b>	Only (ii)		
<b>Distractor 2</b>	Only (i) and (iii)		
<b>Distractor 3</b>	(i), (iii) and (iv)		

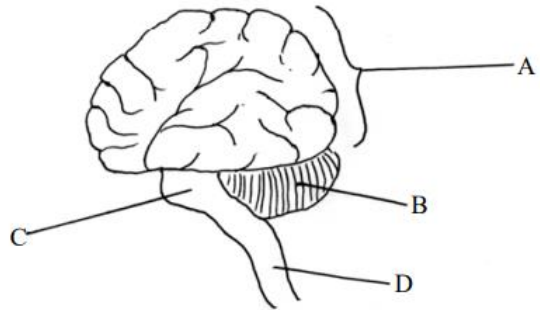
#### Item 2

<b>Content domain</b>	Biology- The world of Living – Heredity and Evolution
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<b>Learning Outcome</b>	Analyses and interprets data to explain patterns of inheritance
<b>Learning indicator</b>	Analyses data to interpret the pattern of inheritance in pea and other similar plants.
<b>Cognitive level</b>	Reasoning
<b>Marks Allotted</b>	1 Mark
<b>Item Stem</b>	When a pea plant bearing purple flowers is crossed with a pea plant bearing white flowers, 50% percent of the progeny plants obtained from the cross bear white flowers and 50 % plants bear purple flowers. What is the possible genotype of parent plants?
<b>Correct answer</b>	Heterozygous (Pp) plant with purple flowers and homozygous (pp) plant with white flowers plant
<b>Distractor 1</b>	Homozygous purple flowers (PP) plant and homozygous (pp) white flowers plant
<b>Distractor 2</b>	Both the parents are heterozygous purple flowers (Pp) plant
<b>Distractor 3</b>	Heterozygous purple flowers (Pp) plant and homozygous (PP) white flowers plant

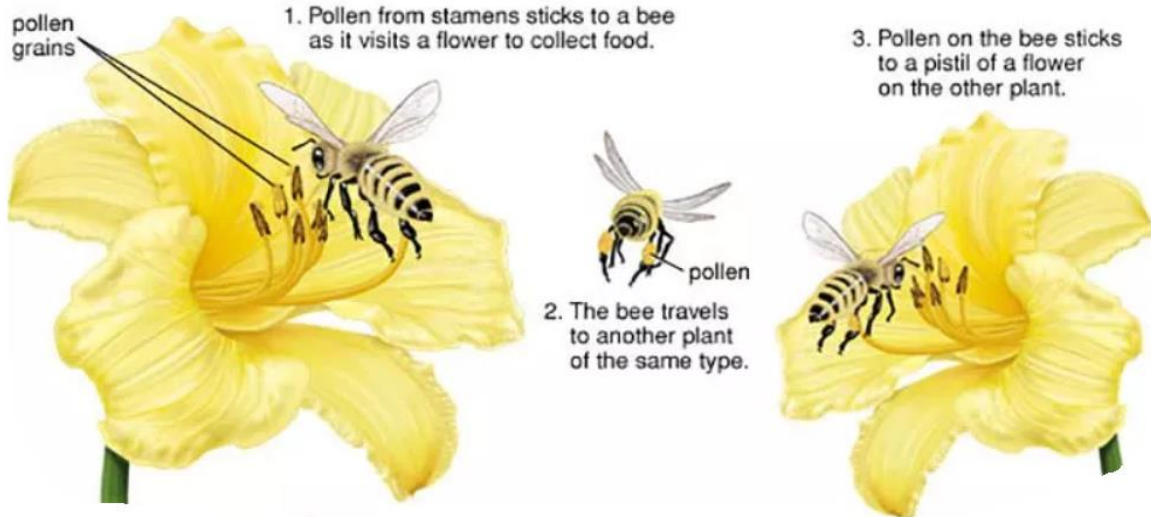
### Item 3

<b>Content domain</b>	Biology-The world of living- Control and Coordination
<b>Learning Outcome</b>	Explains the processes / phenomenon relating to control and coordination
<b>Learning indicator</b>	Explains control and coordination in human beings with reference to the nervous system
<b>Cognitive level</b>	Applying
<b>Marks Allotted</b>	3 Marks

<b>Item Stem</b>	<p>Below is a picture of the Human brain.</p>  <p>a) Label the parts A, B, C and D. b) After a recent head injury, Ramesh is neither able to maintain posture nor is he able to walk in a straight line. Which part of his brain might be damaged?</p>
<b>Marking Scheme</b>	
<p>A – Cerebrum (½) B – Cerebellum (½) C- Pons (½) D – Medulla Oblongata (½)</p> <p>b) Cerebellum is damaged as it is responsible for balance, posture and movement (1)</p>	

**Item 4**

<b>Content domain</b>	Biology-The World of Living – How do Organisms Reproduce
<b>Learning Outcome</b>	Explains processes and phenomena.
<b>Learning indicator</b>	Elaborates on the role and significance of different organs/structures involved in various life processes across organisms.
<b>Cognitive level</b>	Knowing

<b>Marks Allotted</b>	3 Marks
<b>Item Stem</b>	<p>Observe the picture given below and answer the following questions</p>  <p>1. Pollen from stamens sticks to a bee as it visits a flower to collect food.</p> <p>2. The bee travels to another plant of the same type.</p> <p>3. Pollen on the bee sticks to a pistil of a flower on the other plant.</p> <p>a) How is this phenomenon different in unisexual and bisexual flowers? Justify. b) What is the significance of this phenomenon?</p>
<b>Marking Scheme</b>	
<p>a) In unisexual flowers <b>cross pollination</b> is only possible as they have <b>either male or female reproductive organs</b>. (1)</p> <p>In bisexual flower <b>cross and self-pollination</b>, both are possible as they <b>have both male and female reproductive organs</b>. (1)</p> <p>b) Leads to fertilisation. (½) Leads to formation of fruits and seeds. (½) Leads to variation in case of cross of pollination ( Any two points )</p>	

## Item 5

<b>Content domain</b>	Chemistry- Materials- Acids Bases and Salts
<b>Learning Outcome</b>	Explains processes and phenomena,
<b>Learning indicator</b>	Explains the preparation of bleaching powder, baking soda and washing soda.
<b>Cognitive level</b>	Knowing
<b>Marks Allotted</b>	3 Marks
<b>Item Stem</b>	<p>In one of the industrial processes for manufacture of sodium hydroxide, a gas P is formed as by-product. The gas P reacts with lime water to give a compound Q which is used as an oxidizing agent in chemical industry.</p> <p>a) Identify P and Q            b) Give the balanced chemical equation of the reaction involved in formation of Q.            c) Write the two applications of Q other than an oxidizing agent.</p>
<b>Marking Scheme</b>	
<p>a) P= Chlorine Q= Calcium Oxychloride / Calcium hypo chloride (accept bleaching powder also) (1/2, 1/2)</p> <p>b) <math>\text{Cl}_2 + \text{Ca}(\text{OH})_2 \rightarrow \text{CaOCl}_2 + \text{H}_2\text{O}</math> (deduct 1/2 for any single erroring reactants or products /not balanced) (1 mark)</p> <p>c) Purification of water, bleaching of paper/textile industry, disinfectant (any two) (1/2, 1/2)            (don't accept oxidising agent)</p>	

**Subject- Social Science**  
**Assessment Framework**

**Test Construct: Critical Thinking**

To understand the significance of events and make connection with the present situation. To develop awareness related to social responsibility. To develop logical reasoning skill. Evaluate and interpret based on evidence/ sources collected. To develop the skill as an independent thinker to become a responsible citizen with informed opinion.

<i>Content domain</i>	<i>S.No.</i>	<i>Learning outcomes</i>	<i>Learning indicators</i>	<i>Cognitive level</i>
<i>Events and Processes</i>	25.	Recognises and retrieves facts, figures and narrate processes.	Locates places of significant importance in French Revolution, Versailles, Bastille, Marseilles, Paris.	Remember
	26.	Interprets – symbols, cartoons, newspaper clippings etc.	Evaluates primary documents, material artifacts and historic sites important in history from 1789-1804 . • Documents • Writings • Paintings	Evaluate
	27.	Identifies assumptions, biases, prejudices and stereotypes about various aspects.	Identifies the bias in the constitution of 1791 (France) on the political rights of the women.	Evaluate
	28.	Constructs views, arguments and ideas on the basis of collected / given information.	Discusses the importance of multiple perspectives on a historical event to shape a viewpoint of that event e.g., French Revolution.	Evaluate
	29.	Illustrates decision making and problem-solving skills.	Interprets past events and issues within the context in which an event unfolded rather than solely in terms of present-day norms and values.	Analyze
	30.	Demonstrates inquisitiveness, enquiry; i.e., pose questions	Demonstrates the process of enquiry on Treaty of Versailles.	Analyze
<i>Constitutional Design</i>	31.	Explains cause and effect relationship between phenomena, events, and their occurrence.	Explains how the Constitution of a country reflects the experiences of its people.	Understand
	32.	Analyses and evaluates information.	Distinguishes between Mahatma Gandhi and B R Ambedkar's viewpoints on incorporating equality.	Analyze

<i>Resources</i>	33.	Shows sensitivity and appreciation skills.	Interprets the set of values featured in the Preamble of the Indian Constitution.	Evaluate
	34.	Recognises and retrieves facts, figures and narrate processes.	Identifies the elements of constitutional design using the example of the South African Constitution.	Remember
	35.	Analyses and evaluates information.	Analyses the reasons for the variation in the land use patterns in different states in India.	Analyze
	36.	Interprets – symbols, cartoons, newspaper clippings etc.	Interprets: pie charts showing land use patterns in India at different time periods and depicts their changes.	Evaluate
	37.	Classifies and compares events, facts, data and figures.	Compares data / pie charts on land use patterns in India at different time periods.	Understand
<i>Development</i>	38.	Extrapolates and predicts events and phenomena.	Deduce the impact of the soil erosion on land use pattern of India.	Understand
	39.	Recognises and retrieves facts, figures, and narrate, processes.	Defines the following terms: resources; biotic and abiotic resource; renewable and non-renewable resource; potential resources, stock, developed resources, reserves, sustainable development, barren and waste land, fallow lands, denudation, Badlands.	Remember
	40.	Interprets – symbols, cartoons, newspaper clippings etc.	Interprets data on: • national income of different countries to (i) compare their average income and (ii) the existing disparities • per capita income among the different states in India	Evaluate
	41.	Recognises and retrieves facts, figures, and narrate, processes.	Defines: Per Capita Income, Literacy Rate, Infant Mortality Rate, Attendance Ratio, Life Expectancy, Gross Enrolment Ratio, Human Development Index.	Remember
	42.	Shows sensitivity and appreciation skills.	Express personal opinion on causes and consequences of uneven and unsustainable development, income and wealth inequality through case studies, real life issues, newspaper, documentaries, films etc.	Create
	43.	Analyses and evaluates information.	Analyses Body Mass Index (BMI) to ascertain the requirement of nutrition.	Evaluate
	44.	Illustrates decision making and problem-solving skills.	Suggest the methods to reduce infant mortality rate, improve sex ratio.	Create

### Sample Items

#### Item 1

<b>Content domain</b>	Events and Processes
<b>Learning Outcome</b>	Analyses and evaluates information.
<b>Learning indicator</b>	Distinguishes between Mahatma Gandhi and B R Ambedkar's viewpoints on incorporating equality.
<b>Cognitive level</b>	Analyze
<b>Marks Allotted</b>	1 mark
<b>Item Stem</b>	<b>Assertion (A):</b> Gandhiji thought of satyagraha as a tactic for acute political struggle and as a solution for injustice and harm. <b>Reason (R):</b> He felt that it was equally applicable to large-scale political struggles and to one-on-one interpersonal conflicts.
<b>Correct answer</b>	Both A and R are true, and R is the correct explanation of A.
<b>Distractor 1</b>	Both A and R are true, but the R is not the correct explanation of A
<b>Distractor 2</b>	A is true but R is false
<b>Distractor 3</b>	Both A and R are false

#### Item 2

<b>Content domain</b>	Events and Processes
<b>Learning Outcome</b>	Identifies assumptions, biases, prejudices and stereotypes about various aspects.
<b>Learning indicator</b>	Identifies the bias in the constitution of 1791 (France) on the political rights of the women.
<b>Cognitive level</b>	Understand
<b>Marks Allotted</b>	1 mark

<b>Item Stem</b>	<p>Read statements A and B</p> <p>A. The voting rights of people in the French Constitution of 1791 represented a significant step forward for democracy and the principle of popular sovereignty, but they were still limited in many respects by the social and political realities of the time.</p> <p>B. The French constitution (1971) believed in or was based on the principle that all people are equal and deserve equal rights and opportunities.</p> <p>Based on the statement choose the <b>incorrect</b> option given below:</p>
<b>Correct answer</b>	All Women capable of paying three days of labour as tax were given voting rights.
<b>Distractor 1</b>	The Constitution of 1791 gave political rights only to the richer sections of society.
<b>Distractor 2</b>	Distinguished between the propertied <i>active</i> citizens and the poorer <i>passive</i> citizens
<b>Distractor 3</b>	Power was shared between the institutions – the legislature, executive and judiciary

### Item 3

<b>Content domain</b>	Development
<b>Learning Outcome</b>	Shows sensitivity and appreciation skills.
<b>Learning indicator</b>	Express personal opinion on causes and consequences of uneven and unsustainable development, income and wealth inequality through case studies, real life issues, newspaper, documentaries, films etc.
<b>Cognitive level</b>	Understand
<b>Marks Allotted</b>	1 mark
<b>Item Stem</b>	<p>Countries like India and other developing nations depend on importing oil from abroad because they do not have enough stocks of their own. If prices of oil increase this becomes a burden for everyone.</p> <p>What will be the suggested measure to overcome this challenge for such countries?</p> <p>i) To explore new sources of oil reserves.</p> <p>ii) To use economic power</p> <p>iii) To use military power</p> <p>iv) To identify non-conventional sources of energy</p>

<b>Correct answer</b>	i) and iv)
<b>Distractor 1</b>	i) and II)
<b>Distractor 2</b>	iii) and iv)
<b>Distractor 3</b>	i) and iii)

#### Item 4

<b>Content domain</b>	Development
<b>Learning Outcome</b>	Illustrates decision making and problem-solving skills.
<b>Learning indicator</b>	Suggest the methods to reduce infant mortality rate, improve sex ratio.
<b>Cognitive level</b>	Create
<b>Marks Allotted</b>	3 Marks
<b>Item Stem</b>	<b>Read the data given below and answer the questions that follow:</b>

#	Infant mortality rate	Total	Male	Females
1	Madhya Pradesh	47	48	45
2	Assam	44	41	46
3	Odisha	41	40	41
4	Uttar Pradesh	41	39	43
5	Chhattisgarh	38	39	37
6	Rajasthan	38	37	40

\*Source: Based on Indian Census 2017 Studies- <https://www.findeasy.in/indian-states-by-infant-mortality-rate/>

- A. As per the data given above which state has the highest girl infant mortality?  
 B. Suggest any two measures to reduce the infant mortality rate.

#### Marking Scheme

- A. Assam (1 Mark)  
 B. Suggested Measures (2 Marks)

- Increase awareness and education about maternal and child health:** Educating parents and caregivers about the importance of proper nutrition, safe sleeping practices, and timely vaccinations can help reduce infant mortality. Governments can work with healthcare professionals, community health workers, and other stakeholders to provide education and awareness programs that focus on maternal and child health.
- Improve access to clean water and sanitation:** Access to clean water and sanitation is essential for preventing infections and other health complications that can lead to infant mortality. Governments can invest in water and sanitation infrastructure, provide education and awareness about hygiene, and promote the use of clean water and sanitation facilities.

## Item 5

<b>Content domain</b>	Resources																														
<b>Learning Outcome</b>	Analyses and evaluates information																														
<b>Learning indicator</b>	Analyses the reasons for the variation in the land use patterns in different states in India.																														
<b>Cognitive level</b>	Analyze																														
<b>Marks Allotted</b>	5 Marks																														
<b>Item Stem</b>	<p>Analyze the pie chart given below and answer the following question:</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p style="text-align: center;"><b>General land use categories–1960–61      General land use categories–2014–15</b></p> <p style="text-align: center;"><i>Reporting Area: 100 Per cent</i></p> <table border="1" style="width: 100%; text-align: center; margin-top: 10px;"> <thead> <tr> <th>Category</th> <th>1960-61 (%)</th> <th>2014-15 (%)</th> </tr> </thead> <tbody> <tr> <td>Forest</td> <td>18.11</td> <td>23.3</td> </tr> <tr> <td>Barren and unculturable waste land</td> <td>18.11</td> <td>5.5</td> </tr> <tr> <td>Area under non-agricultural uses</td> <td>4.95</td> <td>8.7</td> </tr> <tr> <td>Permanent pasture and grazing land</td> <td>4.71</td> <td>3.3</td> </tr> <tr> <td>Area under misc. tree crops and groves</td> <td>1.50</td> <td>1</td> </tr> <tr> <td>Current fallow</td> <td>3.73</td> <td>4.9</td> </tr> <tr> <td>Fallow other than current fallow</td> <td>3.50</td> <td>3.6</td> </tr> <tr> <td>Culturable waste land</td> <td>6.23</td> <td>4.0</td> </tr> <tr> <td>Net sown area</td> <td>46.26</td> <td>45.5</td> </tr> </tbody> </table> <p style="font-size: small; margin-top: 10px;"><i>Source : Directorate of Economics and Statistics, Ministry of Agriculture, 2017</i></p> </div> <p>A. Compare the change in land use pattern of India in a barren and culturable wasteland in different time periods and mention and explain any one reason behind the change?</p> <p>B. Compare the land use pattern in the forest category in different time periods and explain any two reasons behind the change.</p>	Category	1960-61 (%)	2014-15 (%)	Forest	18.11	23.3	Barren and unculturable waste land	18.11	5.5	Area under non-agricultural uses	4.95	8.7	Permanent pasture and grazing land	4.71	3.3	Area under misc. tree crops and groves	1.50	1	Current fallow	3.73	4.9	Fallow other than current fallow	3.50	3.6	Culturable waste land	6.23	4.0	Net sown area	46.26	45.5
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	<p>C. Though the population and demand have increased by three times since 1960, the net sown area hasn't increased in 2014-15. Explain any two reasons behind the same.</p>
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**Marking Scheme**

<p><b>Score of 5</b> Uses all keywords given below: Increase in population, Encroachment of land, programmes by government, Green revolution, HYV seeds, technological reforms, improvement in Indian agriculture.</p>	<p>A) Increase in population and demand for settlements and infrastructural growth are the reasons for encroachment of land from barren and culturable waste land. B) (i) National Mission for a Green India, National Afforestation Programme (NAP), Compensatory Afforestation Fund Management and Planning Authority, National Action Programme to Combat Desertification, (ii) In India joint forest management (JFM) programme furnishes a good example for involving local communities in the management and restoration of degraded forests. C) (i) Green revolution, the use of HYV seeds and technological reforms has played an important role in improving the agriculture. (Any one) (ii) Considering the importance of agriculture in India, the Government of India made concerted efforts to modernise agriculture. Establishment of Indian Council of Agricultural Research (ICAR), agricultural universities, veterinary services and animal breeding centres, horticulture development, research and development in the field of meteorology and weather forecast, etc. were given priority for improving Indian agriculture. (Any one)</p>
<p><b>Score of 4</b> Does not use all keywords given below: Increase in population, Encroachment of land, programmes by government, Green revolution, HYV seeds,</p>	<p>A) Increase in population and demand for settlements and infrastructural growth are the reasons for encroachment of land from barren and culturable waste land. B) (i) National Mission for a Green India, National Afforestation Programme (NAP), Compensatory Afforestation Fund Management and Planning Authority, National Action Programme to Combat Desertification, (ii) In India joint forest management (JFM) programme furnishes a good example for involving local communities in the management and restoration of degraded forests. C) (i) Green revolution, the use of HYV seeds and technological reforms has played an important role in improving the agriculture. (Any one)</p>

technological reforms, improvement in Indian agriculture.	(ii) Considering the importance of agriculture in India, the Government of India made concerted efforts to modernise agriculture. Establishment of Indian Council of Agricultural Research (ICAR), agricultural universities, veterinary services and animal breeding centres, horticulture development, research and development in the field of meteorology and weather forecast, etc. were given priority for improving Indian agriculture. Answers all the 3 questions.
<b>Score of 3</b> Explanation without appropriate keywords	If any one or two questions are explained properly with keywords or all the 3 questions are explained to some extent without appropriate keywords. a) Compare the change in land use pattern of India in barren and culturable waste land in different time periods and mention and explain any one reason behind the change? b) Compare the land use pattern in forest category in different time periods and explain any two reasons behind the change. c) Though the population and demand has increased by three times since 1960, the net sown area hasn't increased in 2014-15. Explain any two reasons behind the same.
<b>Score of 2</b> No Keywords used in the answer	Minimally develops all the aspects of the task or develops one aspect of the task in some depth a) Compare the change in land use pattern of India in barren and culturable waste land in different time periods and mention and explain any one reason behind the change? b) Compare the land use pattern in forest category in different time periods and explain any two reasons behind the change. Though the population and demand has increased by three times since 1960, the net sown area hasn't increased in 2014-15. Explain any two reasons behind the same.
<b>Score of 1</b> No keywords in the answer	Mentions any one point from questions A,B and C If the student attempts only one of these.
No marks	No relevant facts and/or examples/not attempted

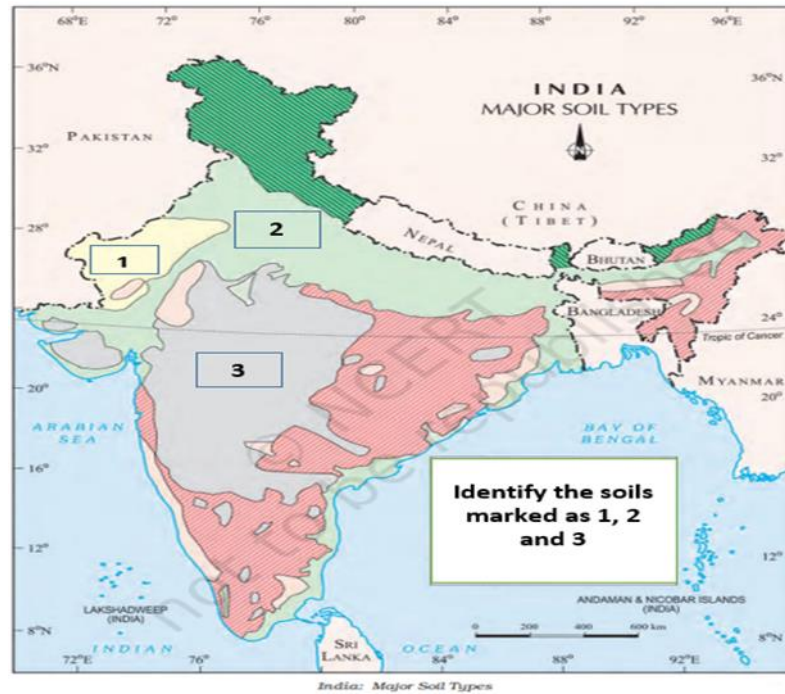
#### Item 6

<b>Content domain</b>	Resources
<b>Learning Outcome</b>	Extrapolates and predicts events and phenomena
<b>Learning indicator</b>	Deduce the impact of the soil erosion on land use pattern of India.
<b>Cognitive level</b>	Understand
<b>Marks Allotted</b>	3 Marks

**Item Stem**

Identify the soils of India marked as 1, 2, and 3 in the given map based on the clues provided.

- A. In some areas of the soil, the salt content is very high, and common salt is obtained by evaporating the water.
- B. Soil formed due to the deposition of silt.
- C. Soil also known as regur soil.



**Marking Scheme**

- A. Arid Soil- 1 Mark
- B. Alluvial Soil- 1 Mark
- C. Black Soil- 1 Mark