



**ARMY PUBLIC SCHOOL GWALIOR**  
**CLASS - X**  
**ACADEMIC SESSION 2025-26**  
**WORKSHEET (SELF –ASSESSMENT)**



Subject: English

Assignment No.: 7

Allotment Date: 31 December 2025

S. NO.	QUESTIONS	MARKS	NATURE
	<b>Part-1 Basic (General Questions)</b>		
<b>1</b>	<p><b>Read the passage carefully.</b></p> <p>1. Urban green spaces, such as parks, gardens, and forests, are crucial for improving the quality of life in cities. These areas provide benefits like reducing air pollution, moderating urban temperatures, and offering recreational opportunities. Green spaces absorb approximately 40% more carbon dioxide than built-up areas, helping to mitigate the urban heat island effect, where cities can be 5-7°C warmer than nearby rural areas.</p> <p>2. Research shows that urban green spaces positively impact mental and physical health. People who live within 1 kilometer of a green space have a 15% lower risk of mental health issues like anxiety and depression. Additionally, access to parks promotes physical activity, reducing the risk of chronic diseases such as obesity and cardiovascular disorders.</p> <p>3. Despite their importance, many cities are losing green spaces due to rapid urbanization. Over the past 20 years, cities globally have experienced a 30% decrease in available public green areas, largely because of construction and development pressures.</p> <p>4. Urban planners are increasingly working to address this issue by implementing initiatives to protect existing green spaces and create new ones. These include vertical gardens, rooftop parks, and the development of green corridors. Cities that prioritize these solutions have seen improvements in air quality and overall public health.</p> <p>5. Experts emphasize the need for sustainable urban planning to ensure future cities remain livable. By maintaining and expanding green spaces, cities can better cope with the challenges posed by climate change, air pollution, and population growth.</p> <p><b>Answer the following questions, based on the passage above.</b></p> <p>i. What percentage of carbon dioxide do green spaces absorb more than built-up areas, as mentioned in paragraph 1? (A) 20% (B) 30% (C) 40% (D) 50%</p> <p>ii. Select the option that is true for the assertion and reason given below :</p>	<b>10</b>	<b>Information</b>

	<p><b>Assertion</b> : Green spaces help reduce the risk of chronic diseases.</p> <p><b>Reason</b> : Access to parks and natural areas encourages physical activity, improving overall health.</p> <p>(A) Both the assertion and reason are true, and the reason is the correct explanation of the assertion.</p> <p>(B) Both the assertion and reason are true, but the reason is not the correct explanation of the assertion.</p> <p>(C) The assertion is true, but the reason is false.</p> <p>(D) The assertion is false, but the reason is true.</p> <p>iii. What percentage decrease in public green areas have cities experienced globally over the past 20 years, as mentioned in the passage?</p> <p>iv. According to the passage, what are two major benefits of urban green spaces?</p> <p>v. Read the given prompt and select the correct option in the brackets to fill in the blank:  Many cities are implementing creative solutions to restore urban green areas and counter the impacts of urbanization. The percentage of carbon dioxide absorbed more by green spaces compared to built-up areas is _____ (20% / 30% / 40%).</p> <p>vi. What are some of the methods mentioned in the passage that urban planners are using to protect and expand green spaces?</p> <p>vii. Complete the sentence suitably.  Urban green spaces help promote public health by _____.</p> <p>viii. Complete the following with a suitable reason :  Urban planners emphasize the importance of green spaces because _____.</p> <p>ix. In the context of paragraph 5, why is sustainable urban planning essential for the future of cities?</p>		
<p><b>2</b></p>	<p><b>Read the following extracts carefully and answer the questions that follow:</b></p> <p>Belinda giggled till she shook the house,  And Blink said Weeck! which is giggling for a mouse,  Ink and Mustard rudely asked his age,  When Custard cried for a nice safe cage.  Suddenly, suddenly they heard a nasty sound,  And Mustard growled, and they all looked around.  <i>(The Tale of Custard, the Dragon)</i></p> <p>i. In what way does the dragon’s desperate wish to remain in a cage challenge the traditional behaviour of dragons?</p> <p>ii. What is the significance of the use of the words ‘giggled’ and ‘weeck’ to describe laughter in the poem and to what effect is this word choice used by the poet? Answer in about 40 words.</p>	<p><b>4</b></p>	<p><b>Understanding</b></p>

	<p>iii. What can you infer from the repetition 'suddenly, suddenly' in the above extract?</p> <p>(a) There was an immediate change in the scene.  (b) It focuses on the hasty attack and the loud noise.  (c) It emphasises that an unexpected noise was heard.  (d) It draws our attention to the loud cry that occurred.</p> <p>iv. Identify the contrasting belief about dragons that does not apply to Custard in the poem.</p>																	
	<b>PART-2 STANDARD (COMPETENCY BASED QUESTIONS):</b>																	
<b>3</b>	<p><b>Answer the following questions in 30- 40 words:</b></p> <p>i.What were the destructions caused by the hailstorm?  <i>(A Letter to God)</i></p> <p>ii. How did Anne Frank's friends behave just before the declaration of the exam results?  <i>(From the Diary of Anne Frank)</i></p>	<b>2x3=6</b>	<b>Evaluation</b>															
<b>4</b>	<p>i.Fill in the blank by choosing the correct option to complete.  Social media played a huge part in adding fuel to the communal fire that _____ in Leicester city igniting communal riots between two religious communities.  (a) kept flaring (b) flared up  (c) had flared up (d) would flare up</p> <p>ii. Read the conversation between a doctor and his patient. Complete the sentence by reporting the dialogue.  Inspector : What are the arrangements made by the school for feeding these children?  Principal : Each one of the students is given a nutritious mid-day meal every day.  To the query of the inspector about the arrangements made by the school to feed the children, the Principal replied that _____.</p>	<b>2</b>	<b>Interdisciplinary</b>															
<b>5</b>	<p>i.Select the correct option to fill in the blank for the given line, from an article from a health magazine. She _____ put her mind on her work for she had a very sick feeling in the bottom of her stomach.  (a) could not (b) might not  (c) need not (d) dare not</p> <p>ii. Select the option that identifies the error and supplies the correction for the following line, from a news report :  According to a health survey, carbonated drinks are harmful to health and children are so addicted to fizzy drinks as adults to nicotine.</p> <table border="1" data-bbox="236 1697 1107 1877"> <thead> <tr> <th>Option</th> <th>Error</th> <th>Correction</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>A</td> <td>The</td> </tr> <tr> <td>B</td> <td>To</td> <td>For</td> </tr> <tr> <td>C</td> <td>So</td> <td>As</td> </tr> <tr> <td>D</td> <td>addicted</td> <td>addictive</td> </tr> </tbody> </table>	Option	Error	Correction	A	A	The	B	To	For	C	So	As	D	addicted	addictive	<b>2</b>	<b>Analytical skill</b>
Option	Error	Correction																
A	A	The																
B	To	For																
C	So	As																
D	addicted	addictive																

6	<p>Complete the given narrative, by filling in the blank with the correct option :</p> <p>Priest : Trust and compassion can reform a person more than punishment.</p> <p>Ira : Don't you think the reverse of this approach is more effective? When a priest told Ira that trust and compassion can reform a person more than punishment, she asked him if _____.</p> <p>(a) didn't he think that the reverse of that approach was more effective.</p> <p>(b) did he not think that the reverse of that approach could be more effective.</p> <p>(c) he didn't think that the reverse of that approach is more effective.</p> <p>(d) he didn't think that the reverse of that approach was more effective.</p>	1	<b>Problem Solving</b>
7	<p><b>Answer the following questions in 100-120 words.</b></p> <p>"The sun shall never set on so glorious a human achievement."</p> <p>If you had to use the message of the above quote from Nelson Mandela (Nelson Mandela Long Walk to Freedom) to portray the liberation of women and what it signifies (The Trees), what would you include in it? Also, evaluate what we can take from the notion.</p>	5	<b>HOT</b>
8	<p>Read the following lines on the harmful effects of carbonated drinks.</p> <p>'According to a health report, the soft carbonated drinks are harmful to health. A latest research has revealed that it is not safe for children. Unfortunately children are addicted to soft drinks nowadays.</p> 	5	<b>Critical Thinking</b>
9	<p>Write a letter to the editor of national daily highlighting the problem of traffic jam near the zoo crossing and suggesting some remedy for it.</p>	5	<b>Communicational Skill</b>



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**Subject: Hindi**  
**Allotment Date: 31 December 2025**

**Assignment No.: 7**

**PART I**

**BASIC (GENERAL QUESTIONS)**

S. NO.	QUESTIONS	MARKS	NATURE
1.	<p><b>निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़िए और पूछे गए प्रश्नों के उत्तर गद्यांश के आधार पर लिखिए।</b></p> <p>कविवर रवींद्रनाथ टैगोर को नोबल पुरस्कार मिला। देश-विदेश से बधाई के संदेश आए। उनके पड़ोसी ने उन्हें बधाई नहीं दी। टैगोर, को यह व्यवहार अखरा, लेकिन उन्होंने उसे भुलाने की कोशिश की, पर भुला नहीं पाए। बार-बार उनके सामने उसका चेहरा आ जाता था। वह जब-जब उसके बारे में सोचते क्रोध से भर जाते। अगली सुबह वह समुद्र के किनारे टहल रहे थे। सूर्य की किरणों में सागर चाँदी-सा चमक रहा था। तभी उनकी नज़र करीब ही पानी से भरे गड्ढे पर पड़ी। वहाँ भी सूर्य की किरणें बराबर पड़ रही थीं। तभी उनको ख्याल आया कि सूर्य ने तो सब पर बराबर किरणें फैलाई हैं। उसने तो समुद्र और गड्ढे में कोई अंतर नहीं किया। टैगोर को अपनी गलती का अहसास हुआ कि यदि दूसरा अपनी उदारता छोड़ रहा है तो वे क्यों छोड़ें? तत्काल उन्होंने उसके घर जाकर उनके चरण-स्पर्श किए। उसकी आँखें गीली हो गईं। वह बोला कि आप जैसे देवतुल्य को यह पुरस्कार मिलना ही चाहिए था। यह कहकर उसने टैगोर के चरण-स्पर्श किए। दोनों के बीच की दूरी मिट गई।</p> <p>प्रश्न: 1. रवींद्रनाथ टैगोर को किस से सम्मानित किया गया ?</p> <p>प्रश्न: 1. रवींद्रनाथ को पड़ोसी का व्यवहार क्यों अखरा?</p>	5	Analytical  Thinking

	<p>प्रश्न: 3. टैगोर को अपनी गलती का अहसास कब हुआ?</p> <p>प्रश्न: 4. पड़ोसी ने अपने व्यवहार की भूल किस प्रकार सुधारी?</p> <p>प्रश्न: 5. गद्यांश से आपको क्या शिक्षा मिलती है?</p>		
2	<p><b>दिए गए मुहावरों का वाक्यों में प्रयोग करिए  </b></p> <p>i. घुड़कियाँ खाना-</p> <p>ii लोहे के चने चबाना-</p> <p>iii सुध-बुध खोना-</p> <p>iv तराजू पर तोलना</p> <p>v त्योरियाँ चढ़ाना-</p>	5	Critical Thinking
3.	<p>सरल वाक्य से संयुक्त वाक्य में परिवर्तन <b>करिए  </b></p> <ol style="list-style-type: none"> <li>1. दंगा शुरू होते ही पुलिस की कई गाड़ियाँ आ गईं।</li> <li>2. संन्यासी प्रवचन देकर चले गए।</li> <li>3. बिजली जाते ही गली में अँधेरा छा गया।</li> <li>4. मेरे बार-बार फ़ोन करने पर भी डॉक्टर नहीं आए।</li> <li>5. किसान बड़े सवेरे उठकर खेत में चला गया।</li> </ol>	5	Analytical and Critical Thinking
4	<p><b>प्रश्न 1 – पढ़ाई में मेहनत कर मैं ..... हो सकता हूँ। मुहावरे से रिक्त स्थान की पूर्ति कीजिए :-</b></p> <p>I. अंधों में काना राजा II. एक पंथ दो काज III. अपना हाथ जगन्नाथ IV. पैरों पर खड़ा होना</p> <p><b>प्रश्न 2 – ‘विपत्ति में उसकी अकल ..... उपयुक्त मुहावरे से रिक्त स्थान की पूर्ति कीजिए :-</b></p> <p>I. खो जाना II. ठनक जाना III. चकरा जाना IV. आग बबूला हो जाना</p>	5	Understanding & Communication skill

	<p><b>प्रश्न 3 – सच्चे शरूवीर देश की रक्षा में प्राणों की ..... हैं। रिक्त स्थान की पूर्ति सटीक मुहावरे से कीजिए :-</b></p> <p>I. बाजी लगा देते हैं।  II. जान लगा देते हैं।  III. ताकत लगा देते हैं।  IV. आहुति लगा देते हैं।</p> <p><b>प्रश्न 4 – गरीब माँ-बाप अपना ..... कर बच्चों को पढ़ाते हैं और वे चिंता नहीं करते। रिक्त स्थान की पूर्ति सटीक मुहावरे से कीजिए :-</b></p> <p>I. गला काट।  II. पेट काट।  III. खून बहा।  IV. मन लगा।</p> <p><b>प्रश्न 5 – विद्वान और वीर होकर भी रावण की ..... पड़ गया था कि उसने माता सीता का अपहरण किया। मुहावरे से रिक्त स्थान की पूर्ति कीजिए :-</b></p> <p>I. अंधों में काना राजा  II. एक पंथ दो काज  III. अक्ल पर पत्थर  IV. पैरों पर खड़ा होना</p>		
	<p><b>PART II</b>  <b>STANDARD (COMPETENCY BASED QUESTIONS)</b></p>		
5	<p>ऑनलाइन बैंकिंग विषय पर दिए गए संकेत बिंदुओं के आधार पर अनुच्छेद लिखिए।</p> <ul style="list-style-type: none"> <li>• अभिप्राय,</li> <li>• घर बैठे सुविधाएँ,</li> <li>• प्रयोग में सावधानी।</li> </ul>	5	Understanding

6	आपका नाम अक्षत/अक्षिता है। आपका चयन अंतर्राष्ट्रीय अंडर-19 क्रिकेट टीम के लिए हो गया है। विदेशी टीम के साथ मैच खेलने जाने के लिए आपको दो सप्ताह के अवकाश की आवश्यकता है। अवकाश हेतु निवेदन करते हुए अपने विद्यालय के प्रधानाचार्य को एक पत्र लिखिए।	5	Communication skill
7	विलंब से चलने वाली गाड़ियों की सूचना लगभग 70 -80 शब्दों में तैयार कीजिए।	5	Analytical skill
8	(i) 'हरिहर काका' पाठ में हरिहर काका की तुलना मझाधार में फँसी नाव पर सवार लोगों से किस आधार पर की गई है? स्पष्ट कीजिए।  (ii) 'सपनों के-से दिन' पाठ में अंग्रेजों द्वारा गाँव के नवयुवकों को फ़ौज में भर्ती करने के लिए नौटंकी द्वारा उन्हें आकर्षित करने का उल्लेख किया गया है। वर्तमान समय में प्रचार-प्रसार के तरीकों में क्या परिवर्तन आया है?	2.5x2=5	HOT

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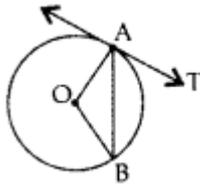
**Subject: Mathematics**  
**Allotment Date: 31 December 2025**

**Assignment No.: 7**

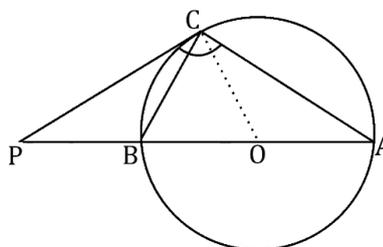
**PART I**

**BASIC (GENERAL QUESTIONS)**

S. NO.	QUESTIONS	MARKS	NATURE
1.	A quadratic polynomial, whose zeroes are -3 and 4, is (a) $x^2 - x + 12$ (b) $x^2 + x + 12$ (c) $2x^2 - 2x - 6$ (d) $2x^2 + 2x - 24$	1	Critical Thinking
2.	If $P(E) = 0.07$ , then what is the probability of 'not E'? (a) 0.93 (b) 0.95 (c) 0.89 (d) 0.90	1	Remember
3.	The pairs of equations $x + 2y - 5 = 0$ and $-4x - 8y + 20 = 0$ have: (a) Unique solution (b) Exactly two solutions (c) Infinitely many solutions (d) No solution	1	Understanding
4.	The points (-5, 1), (1, p) and (4, -2) are collinear if the value of p is (a) 3 (b) 2 (c) 1 (d) -1	1	Application
5.	<b>The shadow of a tower standing on level ground is found to be 40 m longer when the Sun's altitude is <math>30^\circ</math> than when it is <math>60^\circ</math>. Find the height of the tower.</b>	2	Understanding
6.	If the area of a circle is equal to sum of the areas of two circles of diameters 10 cm and 24 cm, calculate the diameter of the larger circle.	2	Critical thinking
7.	Find the area of a quadrant of a circle, where the circumference of circle is 44 cm. (Use $\pi = 22/7$ )	2	Understanding



8.	<p><math>\Delta ABC \sim \Delta PQR</math>. If AM and PN are altitudes of <math>\Delta ABC</math> and <math>\Delta PQR</math> respectively and <math>AB^2 : PQ^2 = 4 : 9</math>, then AM:PN =</p>	2	Application												
9.	Evaluate: $2 \tan^2 45^\circ + \cos^2 30^\circ - \sin^2 60^\circ$	2	Evaluation												
10.	A chord of a circle of radius 14 cm subtends a $60^\circ$ angle at the centre. Find the area of the corresponding minor segment. [use $\sqrt{3} = 1.73$ ]	3	Analytical												
11.	<p>Find the mean of the following data using assumed mean method.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Class</th> <th>0-5</th> <th>5-10</th> <th>10-15</th> <th>15-20</th> <th>20-25</th> </tr> </thead> <tbody> <tr> <td>Frequency</td> <td>8</td> <td>7</td> <td>10</td> <td>13</td> <td>12</td> </tr> </tbody> </table>	Class	0-5	5-10	10-15	15-20	20-25	Frequency	8	7	10	13	12	3	Application based
Class	0-5	5-10	10-15	15-20	20-25										
Frequency	8	7	10	13	12										
<p><b>PART II</b> <b>STANDARD (COMPETENCY BASED QUESTIONS)</b></p>															
12.	<p><b>ASSERTION REASON BASED QUESTION</b> Directions: In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as: (a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A). (b) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A). (c) Assertion (A) is true but reason (R) is false. (d) Assertion (A) is false but reason (R) is true 1. <b>Assertion:</b> The sum of series with the <math>n^{th}</math> term <math>t_n = (9 - 5n)</math> is 220 when no. of terms <math>n = 6</math>.</p>	1	Understanding												

	<p><b>Reason: ):</b> Sum of first <math>n</math> terms in an A.P. is given by the formula:</p> $S_n = \frac{n}{2} \times [2a + (n - 1)d]$		
13.	<p>There are 312, 260 and 156 students in class X, XI and XII respectively. Buses are to be hired to take these students to a picnic. Find the maximum number of students who can sit in a bus if each bus takes equal number of students (a) 52 (b) 56 (c) 48 (d) 63</p>	1	Evaluation
14.	<p>If triangles ABC and DEF are similar and AB=4 cm, DE=6 cm, EF=9 cm and FD=12 cm, the perimeter of triangle ABC is: (a) 22 cm (b) 20 cm (c) 21 cm (d) 18 cm</p>	1	Understanding
15.	<p>It is proposed to build a single circular park equal in area to the sum of areas of two circular parks of diameters 42 m and 40 m in a locality. The radius of the new park would be (a) 58 m (b) 29 m (c) 41 m (d) 54 m</p>	1	Application
16.	<p>If the ratio of areas of two circles is 16:25 the ratio of their circumference is (a) 4:5 (b) 5:4 (c) 25:16 (d) 3:5</p>	1	Understanding
17.	<p>Five years ago, Nuri was thrice as old as Sonu. Ten years later, Nuri will be twice as old as Sonu. How old are Nuri and Sonu?</p>	3	Critical thinking based Question
18.	<p>The tangent at point C of a circle and a diameter AB when extended intersect at P. If <math>\angle PCA = 110^\circ</math>, find <math>\angle CBA</math>.</p> 	3	Analytical Skill based

19.	<p>Due to heavy floods in a state, thousands were rendered homeless. 40 schools collectively decided to provide place and the canvas for 1600 tents and share the whole expenditure equally. The lower part of each tent is cylindrical with base radius 2.8 m and height 4.2 m and upper part is conical with the same base radius, but height 2.1 m. If the canvas used to make the tents cost ₹ 110 per m<sup>2</sup>, find the amount shared by each school to set up the tents.</p>	<b>5</b>	Critical Thinking
20.	<p>A weather researcher observed temperature variations in a region over a span of several years. In the 3rd year, the recorded temperature was 20 degrees Celsius, and in the 6th year, it was 32 degrees Celsius. Assuming a uniform increase or decrease in temperature each year, answer the following questions</p> <p>(i) What is the uniform increase or decrease in temperature each year?</p> <p>(ii) What would be the temperature in the 10th year if the pattern continues?</p> <p>(iii) What was the temperature in the 1<sup>st</sup> year?</p>	<b>4</b>	Case Study

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**ARMY PUBLIC SCHOOL GWALIOR**  
**CLASS - X**  
**ACADEMIC SESSION 2025-26**  
**WORKSHEET (SELF –ASSESSMENT)**



Subject: Science

Assignment No.: 7

Allotment Date: 31 December 2025

**PART I**

**BASIC (GENERAL BASED QUESTION)**

S. NO.	QUESTIONS	MARKS	NATURE
1	MCQ BASED QUESTION Q1. Carbon forms a large number of compounds due to: a) High electro positivity b) Catenation c) Presence of 2 valence electrons d) Radioactivity	1	Understanding
	Q2 Which metal is the <b>best conductor of electricity</b> ? a) Aluminium b) Silver c) Gold d) Copper	1	Observation
2	Q3 What happens when magnesium ribbon is burnt in air? Write the chemical equation.	2	Interdisciplinary
	Q4. What is the difference between <b>acquired traits</b> and <b>inherited traits</b> ? Give one example of each.\	2	Understanding
3	Q5 Write the molecular formula of the first four members of the homologous series of alkanes. What is the difference in molecular mass between successive members of this series?	3	HOT
	Q6 How does excessive use of fertilizers and pesticides affect the environment? Suggest two alternatives to reduce their harmful effects.	3	Understanding
	Q7 A 15 $\Omega$ resistor and a 30 $\Omega$ resistor are connected in series with a 12 V battery. Calculate: a) The total resistance	3	

	b) The current in the circuit c) The voltage across each resistor		Evaluation
5	Q8 a)What is a food web? b) Explain how interconnected food chains help maintain stability in an ecosystem. c) Give examples of at least <b>three organisms</b> forming a simple food web (in words, no diagram).	5	Observation and  Analysing
	<b>PART II STANDARD(COMPETANCE BASED QUESTION)</b>		
7	<b>ASSERTION REASON BASED QUESTION</b> Directions: In each of the following questions, a statement of Assertion is given and a corresponding statement of Reason is given just below it. Of the statements, given below, mark the correct answer as: (a) Both assertion and reason are true and reason is the correct explanation of assertion. (b) Both assertion and reason are true but reason is not the correct explanation of assertion. (c) Assertion is true but reason is false. (d) Both Assertion and Reason are false. <b>Q.1Assertion (A):</b> Ozone layer protects life on Earth. <b>Reason (R):</b> Ozone layer absorbs harmful ultraviolet (UV) radiation from the sun. <b>Q.2 Assertion (A):</b> Current flowing through a conductor is directly proportional to the potential difference across its ends. <b>Reason (R):</b> Resistance of a conductor remains constant if temperature does not change. <b>Q3 Assertion (A):</b> Metals are malleable and ductile. <b>Reason (R):</b> Positive metal ions are fixed tightly and cannot move in the metal lattice.	1  1  1	Real life application  Information  Understanding
8	Q4Write the balanced chemical equation for the reaction: Calcium hydroxide reacts with carbon dioxide to form calcium carbonate and water. Also name the type of reaction.	2  2  2	Real life relevance  Application

	<p>Q5 a) Define refractive index. b) How does the refractive index of a medium depend on the speed of light?</p> <p>Q6. Why do we say that the accumulation of non-biodegradable substances in the environment is more harmful than biodegradable ones?</p>		Critical Thinking
9	<p>Q7. Plastic is a carbon compound widely used in daily life but is a major environmental problem. Explain why plastics are so durable and suggest two ways to reduce plastic pollution.</p> <p>Q8 When the direction of current in a current-carrying conductor is reversed, the direction of the magnetic field also reverses. What does this reveal about the relationship between electricity and magnetism?</p>	<p><b>3</b></p> <p><b>3</b></p>	<p>Real life relevance</p> <p>Critical Thinking</p>
10	<p>Q8 a) Explain the magnetic field produced by a current-carrying straight conductor. b) Describe its pattern, the rule used to find its direction, and the factors affecting the strength of the field. c) Draw or describe the necessary diagram in words..</p>	<b>5</b>	<p>critical thinking</p> <p>analysing and reasoning</p> <p>Observation and explanation</p>



**ARMY PUBLIC SCHOOL GWALIOR**  
**CLASS - X**  
**ACADEMIC SESSION 2025-26**  
**WORKSHEET (SELF –ASSESSMENT)**



**Subject: Social Science**

**Assignment No.: 7**

**Allotment Date: 31 December 2025**

S. NO.	QUESTIONS	MARKS	NATURE
1.	<p>A country called DHOLPUR has 6 families (family A, B, C, D, E and X) and the per capita income of this country is 8000. Find out the income of family X if Family A, B, C, D and E have 2000, 1000, 20000, 3000 and 10000 respectively.</p> <p><b>Answer the following questions on the basis of the above data:</b></p> <p><b>i) What is the income of Family X?</b></p> <p>a) 3000 b) 10000 c) 12000 d) 6000</p> <p><b>ii) Which of the following inferences is not true:</b></p> <p>a) Dholpur has unequal distribution of income b) Family C is the richest family c) Both A and B d) Family B is the most literate of all</p>	1	Understanding
2.	<p><b>In which year was the Act of Union signed and between which nations?</b></p> <p>a) 1704, Ireland and Britain</p>	1	Information

	<p>b) 1707, Britain and Scotland</p> <p>c) 1708, Britain and Ireland</p> <p>d) 1709, Scotland and Britain</p>														
3.	<p><b>Assertion:</b> India needs to produce more high value crops</p> <p><b>Reason:</b> High value crops can bring a lot of foreign exchange to India.</p> <p>a) Both A and R are true and R is the correct explanation of A</p> <p>b) Both A and R are true but R is not the correct explanation of A</p> <p>c) A is true but R is False</p> <p>d) Both A and are R are false</p>	1	Understanding												
4.	<p><b>The process of transformation of things available in our environment involves an interactive relationship between nature, (X) and institutions. Identify (X)</b></p> <p>a) Resources</p> <p>b) Unlimited Wants</p> <p>c) Technology</p> <p>d) Globalisation</p>	1	Information												
5.	<p><b>Which of the following options represent potential measures that can be taken to mitigate the threats posed on the tiger population and biodiversity?</b></p> <p>i. Banning hunting, giving legal protection to their habitats, and restricting trade in wildlife</p> <p>ii. Prohibiting the visit of public into forest area.</p> <p>iii. Establishing wildlife sanctuaries and National Parks</p> <p>iv. Converting forests into Reserved and Protected forests</p> <p><b>Options:</b></p> <p>(a) Statement i and ii are correct.</p> <p>(b) Statement ii, iii &amp; iv are correct</p> <p>(c) Statement ii is correct.</p> <p>(d) Statement (i), (iii) &amp; (iv) are correct.</p>	1	Understanding												
6.	<p><b>Read the following data and select the appropriate option from the following</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Category</th> <th style="text-align: center;">Male</th> <th style="text-align: center;">Female</th> </tr> </thead> <tbody> <tr> <td>Literacy rate for rural population</td> <td style="text-align: center;">76%</td> <td style="text-align: center;">54%</td> </tr> <tr> <td>Literacy rate for rural children in age group 10-14 years</td> <td style="text-align: center;">90%</td> <td style="text-align: center;">87%</td> </tr> <tr> <td>Percentage of rural children aged 10-14 attending school</td> <td style="text-align: center;">85%</td> <td style="text-align: center;">82%</td> </tr> </tbody> </table>	Category	Male	Female	Literacy rate for rural population	76%	54%	Literacy rate for rural children in age group 10-14 years	90%	87%	Percentage of rural children aged 10-14 attending school	85%	82%	1	Information
Category	Male	Female													
Literacy rate for rural population	76%	54%													
Literacy rate for rural children in age group 10-14 years	90%	87%													
Percentage of rural children aged 10-14 attending school	85%	82%													

	<p><b>How much percentage of girls are not attending school?</b></p> <p>(a) 81%</p> <p>(b) 61%</p> <p>(c) 69%</p> <p>(d) 18%</p>																														
7.	<p><b>Arrange the following statements in sequential order based on the events that took place in India prior to independence.</b></p> <p>i. Poorna Swaraj resolution was passed.</p> <p>ii. Boycott of the Simon Commission</p> <p>iii. Quit India Movement launched.</p> <p>iv. Salt march and the beginning of the Civil Disobedience Movement.</p> <p><b>Options:</b></p> <p>(a) iv, iii, ii, i</p> <p>(b) ii, i, iv, iii</p> <p>(c) i, iv, iii, ii</p> <p>(d) i, ii, iii, iv</p>	1	Understanding																												
8.	<p><b>Match the following items given in column A with those in column B:</b></p> <table border="1" data-bbox="301 1057 1107 1814"> <thead> <tr> <th colspan="2">Column-I</th> <th colspan="2">Column-II</th> </tr> </thead> <tbody> <tr> <td>(i)</td> <td>Call center employee</td> <td>(a)</td> <td>2005</td> </tr> <tr> <td>(ii)</td> <td>Mahatma Gandhi National Rural Employment Guarantee Act</td> <td>(b)</td> <td>Railways</td> </tr> <tr> <td>(iii)</td> <td>Organised sector</td> <td>(c)</td> <td>Tata Iron and Steel Company Limited</td> </tr> <tr> <td>(iv)</td> <td>Public sector</td> <td>(d)</td> <td>Agriculture and farming</td> </tr> <tr> <td>(v)</td> <td>Private sector</td> <td>(e)</td> <td>Tertiary sector</td> </tr> <tr> <td>(vi)</td> <td>Primary sector</td> <td>(f)</td> <td>Job security</td> </tr> </tbody> </table> <p>a) (i)-(a), (ii)-(e), (iii)-(c), (iv)-(b), (v)-(f), (vi)-(d)</p> <p>b) (i)-(d), (ii)-(a), (iii)-(f), (iv)-(b), (v)-(c), (vi)-(e)</p> <p>c) (i)-(e), (ii)-(a), (iii)-(b), (iv)-(c), (v)-(f), (vi)-(d)</p>	Column-I		Column-II		(i)	Call center employee	(a)	2005	(ii)	Mahatma Gandhi National Rural Employment Guarantee Act	(b)	Railways	(iii)	Organised sector	(c)	Tata Iron and Steel Company Limited	(iv)	Public sector	(d)	Agriculture and farming	(v)	Private sector	(e)	Tertiary sector	(vi)	Primary sector	(f)	Job security	1	Understanding
Column-I		Column-II																													
(i)	Call center employee	(a)	2005																												
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(v)	Private sector	(e)	Tertiary sector																												
(vi)	Primary sector	(f)	Job security																												

d) (i)-(e), (ii)-(a), (iii)-(f), (iv)-(b), (v)-(c), (vi)-(d)

9. Study the table given below and answer the questions that follow:

Type of regimes and countries	Growth Rate
All democratic regimes	3.95
All dictatorial regimes	4.42
Poor countries under dictatorship	4.34
Poor countries under democracy	4.28

- If we consider all democracies and all dictatorships for the fifty years between 1950 and 2000, what does the data given in the table show?
- Which type of regime would people prefer if economic growth is the sole aim and why?

10. Study the picture carefully and answer the following questions:



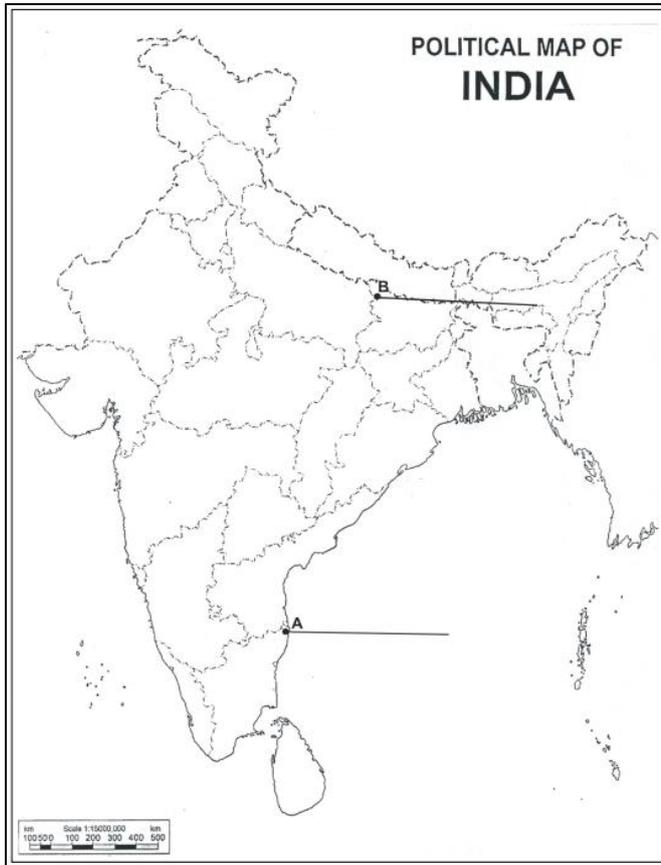
- Identify the style of literature.
- When did this style of literature emerge?
- What does this image reflect about the society?

11. My friend's grandfather had gone to Belgium during the 1950's and 1960's and worked in a chocolate factory. He expressed that 'he witnessed tensions between the Dutch speaking and Frenchspeaking

	communities during this time in Belgium '. Justify his statement with three reasons.		
12.	 <p>Identify the beverage crop and also explain climatic conditions required for its growth?</p>	3	Critical Thinking and Problem Solving
13.	Over the forty years between 1973-74 and 2013-14, while production in all the three sectors has increased, it has increased the most in the tertiary sector. As a result, in the year 2013-14, the tertiary sector has emerged as the largest producing sector in India replacing the primary sector. Why do you think tertiary sector is becoming so popular in India? Substantiate your answer giving any 3 reasons.	3	Analytical Skill
14.	<p>Explain the role of Otto Von Bismarck in the Unification of Germany.</p> <p style="text-align: center;"><b>OR</b></p> <p>Explain the role of Giuseppe Mazzini in the Unification of Italy.</p>	5	HOTS
15.	<p>"Cheap and affordable credit is crucial for the country's development." Explain the statement.</p> <p style="text-align: center;"><b>OR</b></p> <p>Self Help Groups (SHGs) are the building blocks of organization of the rural poor. Support the statement with examples.</p>	5	Information
16.	<p style="text-align: center;"><b><u>(Case-based questions)</u></b></p> <p>Read the case given below carefully and answer the questions that follow:</p> <p style="text-align: center;"><b>NTPC shows the way</b></p> <p>NTPC is a major power providing corporation in India. It has ISO certification for EMS (Environment Management System) 14001. The corporation has a pro-active approach for preserving the natural environment and resources like water, oil, gas and fuels in places where it is setting up power plants. This has been possible through-</p>	4	Evaluation

	<p>a. Optimum utilisation of equipment adopting latest techniques and upgrading existing equipment.</p> <p>b. Minimising waste generation by maximising ash utilisation.</p> <p>c. Providing green belts for nurturing ecological balance and addressing the question of special purpose vehicles for afforestation.</p> <p>(i) Which is the major power providing corporation in India? <b>1</b></p> <p>(ii) Name the institution which issues ISO certification for Environment Management System. <b>1</b></p> <p>(iii) Explain the pro-active approach of NTPC for preserving the natural environment. <b>2</b></p>		
17.	<p style="text-align: center;"><b><u>(Map Skill Based Question)</u></b></p> <p>a. <b>Two features 'A' and 'B' are marked on the given political outline map of India. Identify these features with the help of the following information and write their correct names on the lines marked near them. (1)</b></p> <p>A. The place where the Indian National Congress Session was held.</p> <p><b>B.</b> The place where the movement of Indigo planters was started.</p>	4	Information

b. Locate and label the following with appropriate symbols on the same given political outline map of India. (3)



(i) Sardar Sarovar	Dam
(ii) Bhilai	Iron and Steel Plant
(iii) Pune	Software Technology Park
(iv) Kochi	Major Sea Port
(v) Indore	Cotton Textile Industry
(vi) Naraura	Nuclear Power Plant



**ARMY PUBLIC SCHOOL GWALIOR**  
**CLASS - X**  
**ACADEMIC SESSION 2025-26**  
**WORKSHEET (SELF –ASSESSMENT)**



**Subject: Health and Physical Education**  
**Allotment Date: 31 December 2025**

**Assignment No.: 7**

<b>S.NO.</b>	<b>Multiple choice questions (question 1 to 4)</b>	<b>SKILLS</b>	<b>MARKS</b> <b>1X10=10</b>
1.	How many lanes are there in a standard athletics track? a) 6 b) 7 c) 8 d) 9	Self-awareness	1
2.	Which event is a sprinting event? a) 1500 m b) 5000 m c) 100 m d) Marathon	Self-awareness	1
3.	The distance of a marathon race is: a) 21.097 km b) 40 km c) 41 km d) 42.195 km	Decision making	1

4.	The take-off board is used in which event? a) Triple jump b) Long jump c) High jump d) Both a and b	Self-thinking	1
5	<b>Fill in the blanks (question 5 TO 7)</b> The race that starts from starting blocks is called a ____ race.	Self-awareness	1
6	The implement used in shot put is called a ____.	Self-thinking	1
7.	The landing area in high jump is called the ____.	Decision making	1
8	<b>True and False (Question 8 to 10)</b> A false start results in disqualification immediately in all races.	Problem solving	1
9	Discus throw is a track event.	Decision making	1
10	In relay races, the baton must be exchanged within the exchange zone.	Problem solving	1



**ARMY PUBLIC SCHOOL GWALIOR**  
**CLASS - X**  
**ACADEMIC SESSION 2025-26**  
**WORKSHEET (SELF –ASSESSMENT)**



**Subject: Physical Activity Trainer**  
**Allotment Date: 31 December 2025**

**Assignment No.: 7**

S. No.	QUESTIONS	MARKS	NATURE
1	Which of these are examples of positive feedback? a. Good work                      b. You can draw better c. Some points are missing   d. You need to work with dedication	1	Analytical Skill
2	Sneha works hard to get the best speaker award in the school annual day event. What type of motivation is this? a. Internal                      b. External      c. Both internal and external d. Not any specific type of motivation	1	Analytical Skill
3	How can an antivirus protect your device? a. it can protect it from overheating b. It can increase its performance. c. It can prevent data from getting corrupt. d. It can backup data	1	Interdisciplinary
4	Susheela decides to sell her company tyres in Sri Lanka. It does not sell and she has a loss. She apologises to the p who work for her. She says she will plan better next time. She _____. a. takes responsibility for your mistakes b. thinks before making a decision c. does not give up d. is creative	1	Understanding
5	Development is a term used to describe political goals and a. Social    b. Economic    c. Environmental    d. all of these	1	Analytical Skill
6	Which activities are to be conducted by facilitators a. Athletics event   b. Free play   c. Combative   d. None of these	1	Understanding
7	Points should be kept in mind while analysing the report a. Event Summary                      b. Performance analysis c. Incidents reports                      d. All of these	1	Information
8	What is a potential disadvantage of excess usage of Free Play? a. Enhanced creativity                      b. Conflicts among participants	1	Critical Thinking

	c. Better communication skills      d. Improved techniques		
<b>9</b>	Managing props and equipment is a. Report of listed equipment b. Estimation of fund for new equipment c. Estimation of money for repairing of equipment d. All of these	1	Interdisciplinary
<b>10</b>	Why is it crucial to match the sports type with the equipment used? a.To confuse the players b. To improve the aesthetics of the game c.To enhance player safety and game quality d.To challenge the players	1	Information
<b>11</b>	<b>Short type question</b> (a) Explain the term 'Facilitator'. (b) Explain the process of inventory management.	5x1 =5	Understanding
<b>12</b>	<b>Answer the following questions in about 20-30 words.</b> a) Name any four skill related components. b) Pre-programme planning is a part of administrative paper work plan. Discuss.	2x5= 10	Critical Thinking and Problem Solving



**ARMY PUBLIC SCHOOL GWALIOR**  
**CLASS - X**  
**ACADEMIC SESSION 2025-26**  
**WORKSHEET (SELF –ASSESSMENT)**



**Subject: Marketing and Sales**

**Assignment No.: 7**

**Allotment Date: 31 December 2025**

<b>S. No.</b>	<b>QUESTIONS</b>	<b>NATURE</b>
<b>I</b>	<p style="text-align: center;"><b><u>SECTION A – OBJECTIVE (10 Marks)</u></b></p> <p>Q1. Answer any 4 out of 6 (1×4 = 4 marks)</p> <p>i. Which of the following is an example of self-regulation?</p> <p>a. Laziness</p> <p>b. Emotional control</p> <p>c. Forgetfulness</p> <p>d. Negative stress</p> <p>ii. Linux is a type of:</p> <p>a. Hardware</p> <p>b. Software</p> <p>c. Operating System</p> <p>d. Application file</p> <p>iii. Market targeting means:</p> <p>a. Dividing market</p> <p>b. Identifying customers</p> <p>c. Selecting segments to serve</p>	Recall & Accuracy and decision-making

d. Selling products

iv. Which 'P' of marketing mix includes price strategies?

a. Product

b. Place

c. Promotion

d. Price

v. Which step in selling focuses on understanding customer needs?

a. Approach

b. Prospecting

c. Pre-approach

d. Closing

vi. A salesperson who communicates technical details to buyers is:

a. Trade salesperson

b. Technical salesperson

c. Missionary salesperson

d. Retail salesperson

Q2. Answer any 3 out of 5 (1×3 = 3 marks)

i. The aim of negotiation is to reach a \_\_\_\_\_ outcome.

ii. A group of buyers with shared characteristics form a \_\_\_\_\_.

iii. The last step of selling process is \_\_\_\_\_.

iv. The response of receiver to sender's message is called \_\_\_\_\_.

v. The 4Ps of marketing were introduced by \_\_\_\_\_.

	<p>Q3. Answer any 3 out of 5 (1×3 = 3 marks)</p> <p>i. Define lead pipeline.</p> <p>ii. Name any two after-sale services.</p> <p>iii. The process of identifying prospects is called _____.</p> <p>iv. Which skill helps in building rapport with customers?</p> <p>v. Which pricing strategy is used for exclusive products?</p>	
<p><b>II</b></p>	<p style="text-align: center;"><b><u>SECTION B – SUBJECTIVE (15 Marks)</u></b></p> <p>Q4. Answer any 2 out of 4 (2×2 = 4 marks)</p> <p>(i) Mention two benefits of working independently.</p> <p>(ii) State two tips for effective sales presentation.</p> <p>(iii) Why is training important for salesforce?</p> <p>(iv) State two requirements for good segmentation.</p> <p>Q5. Answer any 2 out of 4 (3×2 = 6 marks)</p> <p>(i) Explain any three components of promotion mix (except advertising).</p> <p>(ii) State any three characteristics of a good prospect.</p> <p>(iii) Discuss three negotiation skills needed by salespeople.</p> <p>(iv) Explain how objections related to price should be handled.</p> <p>Q6. Long Answer – Answer any 1 (5 marks)</p> <p>(i) Explain various types of media used for promotion of goods.</p> <p>OR</p> <p>(ii) Discuss demographic segmentation with suitable examples.</p>	<p>Comprehe nsion, Critical Thinking, Problem- Solving&amp; Expression</p>



**ARMY PUBLIC SCHOOL GWALIOR**  
**CLASS - X**  
**ACADEMIC SESSION 2025-26**  
**WORKSHEET (SELF -ASSESSMENT)**



**Subject: Multimedia**

**Assignment No.: 7**

**Allotment Date: 31 December 2025**

S. No.	QUESTIONS	MARKS	NATURE
1	What is mapping?	1	Information
2	What is Crazy bump?	1	Information
3	What is Diffuse colour map?	1	Critical Thinking
4	Define Layer opacity.	1	Information
5	What is Bump maps?	1	Information
6	Define Term and Hot Keys used in Maya: (a) W (b) E (c) R (d) Y (e) F3 (f) F4 (g) F2 (h) F5 (i) Quad Draw Tool (j) Bezier Curve	10x1= 10	Understanding
7	What is Layered Shader node in Auto Desk Maya?	2	Understanding
8	Define the Term Displacement map?	2	Understanding
9	What is Reflection Map?	2	Analytical
11	What is Layer Editor?	2	Understanding
12	What is Blending mode?	2	Understanding



**ARMY PUBLIC SCHOOL GWALIOR**  
**CLASS - X**  
**ACADEMIC SESSION 2025-26**  
**WORKSHEET (SELF –ASSESSMENT)**



**Subject: Information Technology**  
**Allotment Date: 31 December 2025**

**Assignment No.: 7**

S.NO.	QUESTIONS	MARKS	NATURE
1	<p>i. Which of the following features allows one to apply a group of formats at the same time?</p> <p>(a) Fill (b) Styles (c) Images (d) Drag and Drop</p> <p>ii Pushkar has created a drawing using multiple shapes that are arranged in a particular position and manner in his document. Suggest a feature that can be used to let the objects remain set as a collection.</p> <p>(a) Transparency (b) Posterize (c) Grouping drawing objects (d) Ordering drawing objects</p> <p>iii. In Writer, styles and formatting option is available under _____ menu. (a) Insert (b) Tools (c) Format (d) Window</p> <p>iv. In LibreOffice Writer, what term refers to the vertical or horizontal placement of an object or graphics. (a) Flip. (b) Rotate (c) Align (d) Arrange</p> <p>v. LibreOffice Writer supports _____ types of Styles?</p>	1 x 10=10	Information

	<p>(a) 5 (b) 4</p> <p>(c) 3 (d) 6</p> <p>vi. Which option in LibreOffice Writer allows the creation of a new Styles using drag-and-drop method?</p> <p>a) Templates (b) Design Mode c) Styles Pane (d) None of These</p> <p>vii. Which of the following objects of LibreOffice Base is used to display data retrieved from one or more tables in a presentable manner?</p> <p>(a) Query (b) Form (c) Report (d) Panel</p> <p>viii. Which of the following uniquely identifies a row in a table?</p> <p>(a) Primary key (b) Alternate key (c) Foreign key (d) Candidate key</p> <p>ix. All the field values that are eligible to be the primary key are the _____ keys for that table</p> <p>x. _____ includes risk from machinery and equipment.</p> <p>(a) Chemical Hazards (b) Biological Hazards (c) Environmental Hazards (d) Physical Hazards</p>		
2	i.. In Open Office Writer, what are the styles? List two Open Office Writer style options.	2 X 4 = 8	Understanding and Problem Solving

	<p>ii.. What do you mean by 'What If' Analysis?</p> <p>iii. How many ways to refer cells in other sheets in Calc?</p> <p>iv. Give any two advantages of relating a table in a database.</p>		
<b>3</b>	<p>i. When we insert any object or image in a LibraOffice Writer document, it can be modified as per requirement. What are the various ways to do so.</p> <p>ii. Why is Goal Seek also called the Back-Solving Method?</p> <p>iii. What do you understand by Cell Reference?</p> <p>iv. Explain any two types of relationship that can be created in LibraOffice Base.</p> <p>v. Give any two electrical safety rules that organizations must follow.</p>	2m X 5 = 10	Critical Thinking
<b>4</b>	<p>i. What is the concept of mail merge in word processing software? Discuss in detail. Also give any two major benefits of using mail merge.</p> <p>ii. A Class X student is participating in a school competition where they need to analyse the performance of different sports teams based on match scores and statistics. The student has collected data over several matches and needs to calculate averages, determine rankings, and generate charts for a presentation.</p> <p>a) How are Macros in Calc helpful to him?</p> <p>b) How to enable Macro in Calc?</p> <p>c) Is solution*word a valid macro name? Justify.</p> <p>d) Mention any one operation which cannot be recorded by macro.</p> <p>iii. In context of LibraOffice Base, explain the concept and significance of the following</p> <p>(a) Table</p> <p>(b) Query</p> <p>(c) Form</p>	4m X3= 12	HOT

	(d) Report		
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**ARMY PUBLIC SCHOOL GWALIOR**  
**CLASS - X**  
**ACADEMIC SESSION 2025-26**  
**WORKSHEET (SELF –ASSESSMENT)**



**Subject: Artificial Intelligence**  
**Allotment Date: 31 December 2025**

**Assignment No.: 7**

S.NO.	QUESTIONS	MARKS	NATURE
1	<p>(i) What is the primary focus during the modelling phase of the AI project cycle?</p> <p>a) Collecting additional data b) Testing the final model in real world scenarios c) Deploying the model for practical use d) Selecting and evaluating the best algorithm to build the model</p> <p>(ii) What do frameworks provide in the context of problem solving?</p> <p>a) Random solutions b) Step-by-step guidance c) Legal advice d) Ethical justifications</p> <p>(iii) Which of the following is an example of reinforcement learning?</p> <p>a) Identifying spam emails b) Predicting house prices c) A robot learning to pick objects through trial and error d) Grouping customers based on purchase history</p> <p>(iv) Artificial neural networks are inspired by the structure and function of:</p> <p>a) The human brain b) Quantum computers c) Complex mathematical models d) High-speed processors</p> <p>(v) Which of the following is NOT a sub-category of supervised learning?</p> <p>a) Classification b) Regression c) Clustering d) Predictive Modelling</p> <p>(vi) Which of this is a classification use case example?</p> <p>a) House Price prediction b) Credit card fraud c) Salary prediction</p>	1 x 10=10	Information

	<p>d) None of these</p> <p>(vii) How is the relationship between model performance and accuracy described?</p> <p>a) Inversely proportional</p> <p>b) Not related</p> <p>c) Directly proportional</p> <p>d) Randomly fluctuating</p> <p>(viii) Which metric is most suitable when you want to minimise false positives?</p> <p>a) Accuracy</p> <p>b) Precision</p> <p>c) Recall</p> <p>d) F1 Score</p> <p>(ix) Object detection and handwriting recognition are examples of tasks commonly associated with:</p> <p>a) Computer vision</p> <p>b) Image processing</p> <p>c) Both a and b</p> <p>d) None of these</p> <p>(x) What is the range of pixel values in an 8-bit image?</p> <p>a) 0-100</p> <p>b) 0-255</p> <p>c) 0-512</p> <p>d) 0-1024</p>		
<b>2</b>	<p>Define the following:</p> <p>(i) Keywords</p> <p>(ii) Identifiers</p> <p>(iii) Operators</p> <p>(iv) Variables</p>	2 X 4 = 8	Understanding and Problem Solving
<b>3</b>	<p>(i) What is the concept of Computer Vision?</p> <p>(ii) What is the need of ethical frameworks for AI?</p> <p>(iii) Explain any two applications of Statistical Data.</p> <p>(iv) Describe the principles of Bioethics.</p> <p>(v) Difference between ML and DL.</p>	2m X 5 = 10	Critical Thinking
<b>4</b>	<p>(i) What role does Computer Vision play in self – driving cars?</p> <p>(ii) Describe the applications of facial recognition in Computer Vision.</p> <p>(iii) Discuss the ethical concerns around model evaluation.</p>	4m X3= 12	HOT



**ARMY PUBLIC SCHOOL GWALIOR**  
**CLASS - X**  
**ACADEMIC SESSION 2025-26**  
**WORKSHEET (SELF –ASSESSMENT)**



Subject: Data Science

Assignment No.: 7

Allotment Date: 31 December 2025

S.NO.	QUESTIONS	MARKS	NATURE
1	<p>(i) The measure of dispersion which is not affected by outline is:</p> <p>a) Range b) Standard Deviation c) Variance d) Mean Absolute Deviation</p> <p>(ii) The range of a data set indicates:</p> <p>a) Sum of all the values b) Difference between the first and last value c) Difference between smallest and the largest value d) The count of observations</p> <p>(iii) The measures of Central Tendency include:</p> <p>a) Mean b) Median c) Mode d) All of these</p> <p>(iv) If A and B are mutually exclusive, what is <math>P(A B)</math>?</p> <p>a) 0 b) 1 c) <math>P(A)</math> d) <math>P(B)</math></p> <p>(v) Running text can be categorized as _____.</p> <p>a) Structured Data b) Semi-Structured Data c) Unstructured Data d) None of these</p>	1 x 5=5	Information

<p><b>2</b></p>	<p>Define the following:</p> <ul style="list-style-type: none"> <li>(i) Mean</li> <li>(ii) Mode</li> <li>(iii) Median</li> <li>(iv) Range</li> </ul>	<p>2 X 4 = 8</p>	<p>Understanding and Problem Solving</p>
<p><b>3</b></p>	<ul style="list-style-type: none"> <li>(i) What is Discrete and Continuous data?</li> <li>(ii) List three real life applications of Standard Deviation.</li> <li>(iii) Why is Z-score important?</li> <li>(iv) What is Data merging?</li> <li>(v) Explain Selection bias.</li> </ul>	<p>2m X 5 = 10</p>	<p>Critical Thinking</p>
<p><b>4</b></p>	<ul style="list-style-type: none"> <li>(i) Explain the different ways of Subsetting data.</li> <li>(ii) Explain what is the Statistical Problem – Solving Process.</li> <li>(iii) Explain Percentile, Quartiles and Deciles with examples.</li> </ul>	<p>4m X 3 = 12</p>	<p>HOT</p>