



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



Subject: English
Allotment Date: 30 October 2025

Assignment No. :5

S. NO.	QUESTIONS	MAR KS	NATURE
	PART-1 BASIC (GENERAL QUESTIONS):		
1	<p>As Artificial Intelligence (AI) has emerged as one of the most transformative technologies of the 21st century, revolutionizing various aspects of our lives from healthcare to transportation, finance to entertainment. At its core, AI refers to the simulation of human intelligence processes by machines, encompassing activities such as learning, reasoning, and problem-solving.</p> <p>One of the most significant impacts of AI lies in its ability to augment human capabilities across diverse domains. In healthcare, AI-powered diagnostic tools can analyze medical images with remarkable accuracy, aiding clinicians in early disease detection and treatment planning. Similarly, in finance, AI algorithms analyze vast amounts of data to identify trends and patterns, informing investment decisions and risk management strategies. Moreover, in education, personalized learning platforms leverage AI to tailor education content to individual students' needs, enhancing learning outcomes.</p> <p>However, along side its transformative potential, AI also raises ethical and societal concerns. One pressing issue is job displacement due to automation. As AI technologies automate routine tasks, there's a growing concern about the future of work and the potential widening of socioeconomic inequalities . Addressing these challenges requires proactive efforts to retrain and upskill the workforce, ensuring that individuals can adapt to the changing labour market dynamics.</p> <p>Furthermore, the ethical implications of AI extend beyond employment to issues such as bias and privacy. AI systems are only as unbiased as the data they're trained on, raising concerns about algorithmic fairness and discrimination. Moreover, the widespread collection and analysis of personal data by AI systems raise privacy concerns, necessitating robust regulations and frameworks to safeguard individuals' rights.</p> <p>In addition to ethical considerations, the rapid advancement of AI also poses existential risks. As AI systems become increasingly sophisticated, questions about control and autonomy arise. Ensuring that AI remains aligned with human values and goals is crucial to prevent unintended consequences or the emergence of super intelligent systems beyond human control.</p> <p>Despite these challenges, the potential benefits of AI are vast, provided that it's developed and deployed responsibly. Collaborative efforts between policymakers, technologists, and ethicists are essential to</p>	11 M	Understanding

establish guidelines and regulations that promote the ethical and responsible development of AI.

In conclusion, Artificial Intelligence holds immense promise to transform society positively, empowering individuals and organizations to tackle complex challenges. However, realizing this potential requires navigating ethical dilemmas, addressing societal concerns, and ensuring that AI remains aligned with human values. By fostering collaboration and innovation, we can harness the power of AI to create a more prosperous and equitable future for all.

1. What is the primary definition of Artificial Intelligence (AI) in the passage?
 - a) The simulation of human emotions by machines
 - b) The simulation of human intelligence processes by machines
 - c) The creation of robots that can think for themselves
 - d) The development of advanced computer hardware
2. Describe the use of AI in various domains.
3. Which ethical concern is NOT mentioned in the passage regarding AI?
 - a) Job displacement
 - b) Bias in algorithms
 - c) Data privacy
 - d) Climate change
4. What is one suggested solution to address job displacement due to AI?
 - a) Implementing stricter regulations on AI development
 - b) Ignoring the issue and letting the market adjust naturally
 - c) Retraining and upskilling the workforce
 - d) Banning AI technology altogether
5. How can society proactively address job displacement caused by AI automation to prevent widening socioeconomic inequalities, and what role do retraining and upskilling play in this process?
6. Which term best describes the overall tone of the passage towards AI?
 - a) Optimistic
 - b) Pessimistic
 - c) Neutral
 - d) Critical
7. What does the passage suggest is necessary to prevent unintended consequences of AI?
 - a) Halting all AI research and development
 - b) Establishing guidelines and regulations
 - c) Promoting AI without considering ethical implications
 - d) Outsourcing AI development to other countries
8. Which statement best summarizes the passage's stance on the potential benefits of AI?
 - a) AI has no potential benefits and should be avoided.
 - b) The potential benefits of AI are vast, but they come with significant risks.

	<p>c) AI has the potential to solve all societal problems effortlessly. d) AI benefits are limited and not worth pursuing.</p> <p>9. What does the passage suggest about the role of collaboration in AI development? a) Collaboration is unnecessary and hinders progress. b) Collaboration is essential for responsible AI development. c) Collaboration only benefits large corporations. d) Collaboration is too complex to achieve effectively.</p> <p>10. What is the main message conveyed by the passage? a) AI is perfect and has no flaws. b) AI is a threat to humanity and should be stopped. c) AI has the potential for significant benefits but requires ethical and responsible development. d) AI development should be left entirely to technologists without any regulation or oversight.</p>		
<p>2</p>	<p>Read the following extracts carefully and answer the questions that follow—</p> <p style="text-align: center;">The Trees</p> <p>"The trees inside are moving out into the forest, the forest that was empty all these days where no bird could sit no insect hide no sun bury its feet in shadow the forest that was empty all these nights will be full of trees by morning."</p> <p>1: Why is the forest empty? (i) the humans have destroyed the forests for building cities and other uses (ii) the birds have flown away to other places (iii) there are animals in the forest (iv) the trees are being shifted to the nearby forest</p> <p>2: 'No sun bury its feet in the shadow', explain this line. (i) The sun was shining very brightly but there were no shadow of objects. (ii) The sun was shadowed by the cloud. (iii) Sunlight could directly reach the ground as there were no trees. (iv) The sun was about to set behind the cloud.</p> <p>3: What cannot happen in a treeless forest? (i) the sun cannot shine brightly. (ii) the sun can shine brightly. (iii) there will be no rains.</p>	<p>4 M</p>	<p>Evaluation</p>

	<p>(iv) no birds can make their nests.</p> <p>4: How will the empty forest be full of trees by morning?</p> <p>(i) The poet is planning to plant many trees, throughout the night</p> <p>(ii) The magic of God will fill these trees with forests.</p> <p>(iii) The plants in the jungle will grow into trees.</p> <p>(iv) The poet imagines the trees in the houses will move into the empty forest to settle there forever</p>																	
3	<p>Answer the following questions in 30- 40 words:</p> <p>i) Why did Griffin not get a suitable house to live in?</p> <p>ii) The people of Coorg have a tradition of courage and bravery. How has it been recognized in modern India?</p>	2x2.5 =5	Evaluation															
	PART-2 STANDARD (COMPETENCY BASED QUESTIONS):																	
1	<p>Grammar:</p> <p>1. Choose the correct option to complete the given sentence. Can you give me -----book please? a) some b) a c) the d) an</p> <p>2. Find the error in the given sentence and choose the correct option- The team's ebullient spirit were evident in their enthusiastic performance.</p> <table border="1" data-bbox="279 1164 1117 1366"> <thead> <tr> <th>OPTION</th> <th>ERROR</th> <th>CORRECTION</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>were</td> <td>Was</td> </tr> <tr> <td>B</td> <td>were</td> <td>are</td> </tr> <tr> <td>C</td> <td>their</td> <td>his</td> </tr> <tr> <td>D</td> <td>the</td> <td>a</td> </tr> </tbody> </table>	OPTION	ERROR	CORRECTION	A	were	Was	B	were	are	C	their	his	D	the	a	2	Understanding
OPTION	ERROR	CORRECTION																
A	were	Was																
B	were	are																
C	their	his																
D	the	a																
	<p>1. Change the following sentence into indirect speech "I will help you with your home work, "she said to me.</p> <p>a) She said to me that I will help her with her homework. b) She told that she would help me with my homework. c) She told me that she will help me with my homework. d) She told me that I would help her with my homework.</p> <p>2. Complete the given narrative by filling in the blank with the correct option.</p> <p>We ----- going to this club every week since it started.</p> <p>a) have been b) has been c) had been d) was been</p>	2	Problem Solving															

	<p>Answer the following questions in 100-120 words.</p> <p>Imagine you have spent your summer vacations with your friend, Pranjol's family amongst tea gardens in Assam. Write a diary entry regarding your impressions about the visit</p>	5	HOT												
	<p>A recent study examined the relationship between participation in extracurricular activities and academic performance among class 10 students. The table below presents the average test scores in different subjects for students involved in extracurricular activities and those who are not. Summarise the information by analysing and make comparison where relevant in a paragraph in 120-150 words. (5 marks)</p> <table border="1" data-bbox="355 660 1075 972"> <thead> <tr> <th>Subject</th> <th>Average Score(Participants)</th> <th>Average Score(Non-Participants)</th> </tr> </thead> <tbody> <tr> <td>Mathematics</td> <td>85%</td> <td>78%</td> </tr> <tr> <td>Science</td> <td>88%</td> <td>82%</td> </tr> <tr> <td>English</td> <td>90%</td> <td>85%</td> </tr> </tbody> </table>	Subject	Average Score(Participants)	Average Score(Non-Participants)	Mathematics	85%	78%	Science	88%	82%	English	90%	85%	5	Interdisciplinary
Subject	Average Score(Participants)	Average Score(Non-Participants)													
Mathematics	85%	78%													
Science	88%	82%													
English	90%	85%													
	<p>You are Pragya/Pratik of 24/7, Mall Road, Darjeeling. Write a letter in 100- 120 words to the Editor of the Daily Newspaper expressing your views on: 21st century skills, the need of the hour.</p>	5	Analytical skill												
	<p>Change it into indirect speech: "What a terrible sight it is!" said the traveller.</p>	1	Critical thinking												



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



Subject: Hindi

Assignment No. :5

Allotment Date: 30 October 2025

PART I
BASIC (GENERAL QUESTIONS)

S. NO.	QUESTIONS	MARKS	NATURE
1.	<p>निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़िए और पूछे गए प्रश्नों के उत्तर गद्यांश के आधार पर लिखिए-</p> <p>कहा जाता है कि हमारा लोकतंत्र यदि कहीं कमजोर है तो उसकी एक बड़ी वजह हमारे राजनीतिक दल हैं। वे प्रायः अव्यवस्थित हैं, अमर्यादित हैं और अधिकांशतः निष्ठा और कर्मठता से संपन्न नहीं हैं। हमारी राजनीति का स्तर प्रत्येक दृष्टि से गिरता जा रहा है। लगता है उसमें सुयोग्य और सच्चरित्र लोगों के लिए कोई स्थान नहीं है। लोकतंत्र के मूल में लोकनिष्ठा होनी चाहिए, लोकमंगल की भावना और लोकानुभूति होनी चाहिए और लोकसंपर्क होना चाहिए। हमारे लोकतंत्र में इन आधारभूत तत्वों की कमी होने लगी है, इसलिए लोकतंत्र कमजोर दिखाई पड़ता है।</p> <p>हम प्रायः सोचते हैं कि हमारा देश-प्रेम कहाँ चला गया, देश के लिए कुछ करने, मर-मिटने की भावना कहाँ चली गई ? त्याग और बलिदान के आदर्श कैसे, कहाँ लुप्त हो गए? आज हमारे लोकतंत्र को स्वार्थांधता का घुन लग गया है। क्या राजनीतिज्ञ, क्या अफसर, अधिकांश यही सोचते हैं कि वे किस तरह से स्थिति का लाभ उठाएँ, किस तरह एक-दूसरे का इस्तेमाल करें। आम आदमी अपने आपको लाचार पाता है और ऐसी स्थिति में उसकी लोकतांत्रिक आस्थाएँ डगमगाने लगती हैं।</p> <p>लोकतंत्र की सफलता के लिए हमें समर्थ और सक्षम नेतृत्व चाहिए, एक नई दृष्टि, एक नई प्रेरणा, एक नई संवेदना, एक नया आत्मविश्वास, एक नया संकल्प और समर्पण आवश्यक है। लोकतंत्र की सफलता के लिए हम सब अपने आप से पूछें कि हम देश के लिए, लोकतंत्र के लिए क्या कर सकते हैं? और हम सिर्फ पूछकर ही न रह जाएँ, बल्कि संगठित होकर समझदारी, विवेक और संतुलन से लोकतंत्र को सफल और सार्थक बनाने में लग जाएँ।</p>	5	Analytical Thinking

	<p>प्रश्न: 1.हमारे लोकतंत्र की कमजोरी का कारण क्या है?</p> <p>प्रश्न: 2.आज राजनीति का स्तर क्यों गिरता जा रहा है?</p> <p>प्रश्न: 3.लोकतंत्र के आधारभूत तत्व कौन-से हैं ? इनकी कमी का लोकतंत्र पर क्या असर पड़ा है ?</p> <p>प्रश्न: 4.आम आदमी की लोकतांत्रिक आस्थाएँ क्यों डगमगाने लगती हैं ?</p> <p>प्रश्न: 5.लोकतंत्र को सफल बनाने के लिए क्या करना चाहिए?</p>		
2	<p>दिए गए मुहावरों का वाक्यों में प्रयोग करिए </p> <p>1.अब पछताए होत क्या जब चिड़िया चुग गई खेत ...</p> <p>2.अपने पैरों पर खड़ा होना</p> <p>3.अंगूठा दिखाना</p> <p>4.दीवार खड़ी करना</p> <p>5.जिगर के टुकड़े-टुकड़े होना 6.नाक ऊँची करना 7.उल्लू सीधा करना'</p>	7	Critical Thinking
3.	<p>स्वच्छता के प्रति जागरूकता फैलाने हेतु सरकार की ओर से 50 शब्दों में एक विज्ञापन तैयार कीजिए।</p>	3	Creative & Communication
4.	<p>निम्नलिखित समस्त पदों का विग्रह कीजिए और समास का नाम भी लिखिए –</p> <p>1. कर्मभूमि</p> <p>2. ऋणमुक्त</p> <p>3. राजीवलोचन</p> <p>4. क्रोधाग्नि</p> <p>5. त्रिनेत्र</p>	5	Critical Thinking
	<p>PART II</p> <p>STANDARD (COMPETENCY BASED QUESTIONS)</p>		
5.	<p>दिए गए संकेत बिंदुओं के आधार पर लगभग 100 -120 शब्दों में अनुच्छेद लिखिए </p> <p>अब अबला नहीं सबला है नारी</p> <p>संकेत बिंदु</p> <ul style="list-style-type: none"> • बदलता समय • किसी से कम नहीं • नारी के बढ़ते कदम 	5	Analytical and Critical Thinking

6	स्टेट बैंक ऑफ इंडिया की मानसरोवर गार्डन शाखा के प्रबंधक को प्रार्थना पत्र लिखिए जिसमें खाता खोलने का अनुरोध किया गया हो।	5	Understanding
7	आपको चरित्र प्रमाण-पत्र की आवश्यकता है। चरित्र प्रमाण-पत्र प्राप्त करने के लिए अपने विद्यालय के प्रधानाचार्य abc.school@gmail.com को ईमेल लिखिए।	5	Communication skill
8	निम्नलिखित का भाव स्पष्ट कीजिए- प्रश्न 1. अब तो बहरहाल छोटे लड़कों की घुड़सवारी से अगर यह फ़ारिग हो तो उसके ऊपर बैठकर चिड़ियाँ ही अकसर करती हैं गपशप। प्रश्न 2. मट्टी से मट्टी मिले, खो के सभी निशान, किसमें कितना कौन है, कैसे हो पहचान' इन पंक्तियों के माध्यम से लेखक क्या कहना चाहता है? स्पष्ट कीजिए।	2.5x2=5	HOT



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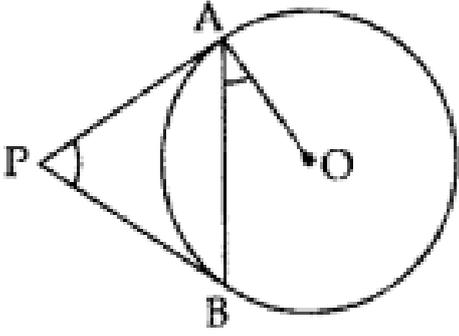
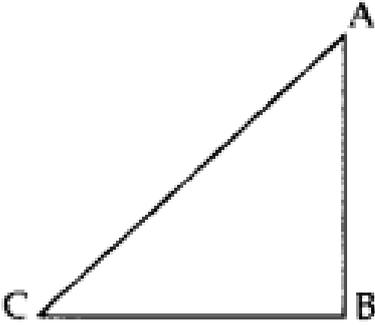
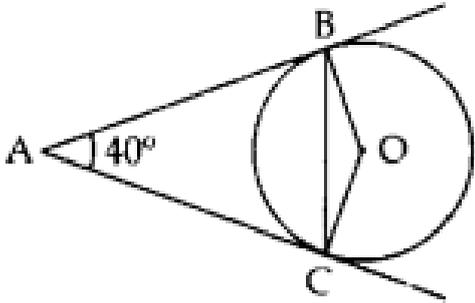
Subject: Mathematics

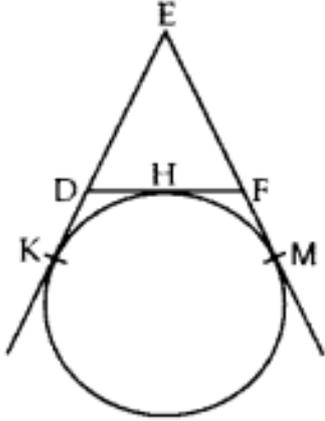
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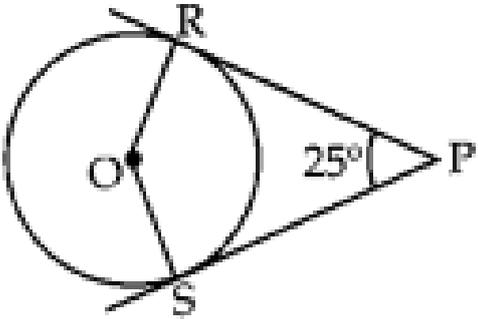
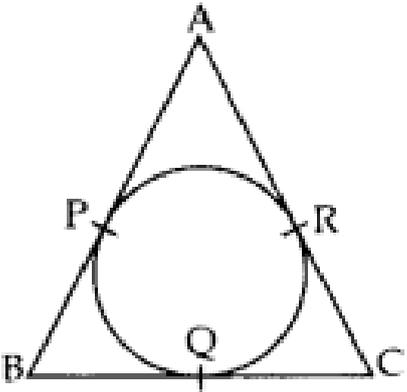
Allotment Date: 30 October 2025

PART I
BASIC (GENERAL QUESTIONS)

S. NO.	QUESTIONS	MARKS	NATURE
1.	The angle of elevation of the top of a building from a point on the ground, which is 30 m away from the foot of the building, is 30°. The height of the building is: (a) 10 m (b) $30/\sqrt{3}$ m (c) $\sqrt{3}/10$ m (d) 30 m	1	Critical Thinking
2.	The distance between two parallel tangents of a circle of radius 4 cm is (a) 2 cm (b) 4 cm (c) 6 cm (d) 8 cm	1	Remember
3.	If a tower 6m high casts a shadow of $2\sqrt{3}$ m long on the ground, then the sun's elevation is: (a) 60° (b) 45° (c) 30° (d) 90°	1	Understanding
4.	The length of tangent from an external point P on a circle with centre O is (a) always greater than OP (b) equal to OP (c) always less than OP (d) information insufficient	1	Application
5.	A ladder 15 m long just reaches the top of a vertical wall. If the ladder makes an angle of 60° with the wall, then calculate the height of the wall	2	Understanding
6.	A ladder, leaning against a wall, makes an angle of 60° with the horizontal. If the foot of the ladder is 2.5 m away from the wall, find the length of the ladder	2	Critical thinking

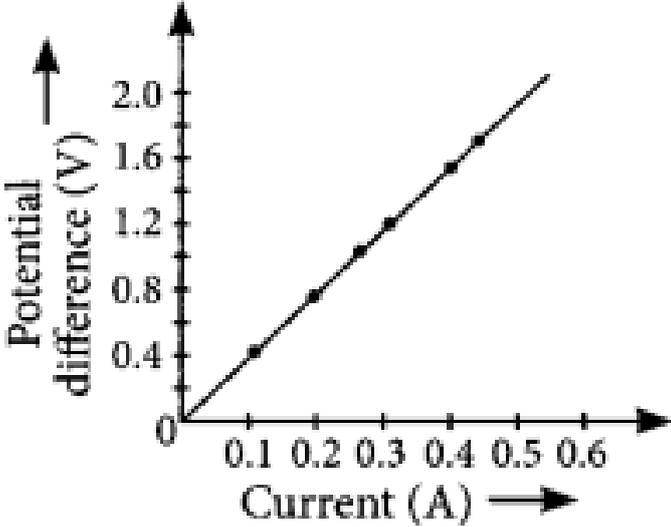
7.	<p>In the given figure, PA and PB are tangents to the circle with centre O. If $\angle APB = 60^\circ$, then calculate $\angle OAB$,</p> 	2	Understanding
8.	<p>In the given figure, a tower AB is 20 m high and BC, its shadow on the ground, is $20\sqrt{3}$ m long. Find the Sun's altitude.</p> 	2	Application
9.	<p>In the given figure, AB and AC are tangents to the circle with centre O such that $\angle BAC = 40^\circ$. Then calculate $\angle BOC$.</p> 	2	Evaluation
10.	<p>The angles of depression of two ships from the top of a light house and on the same side of it are found to be 45° and 30°. If the ships are 200 m apart, find the height of the light house.</p>	3	Analytical
11.	<p>In the given figure, a circle touches the side DF of AEDF at H and touches ED and EF produced at K&M respectively. If EK =</p>	3	Application based

	<p>9 cm, calculate the perimeter of AEDF (in cm).</p> 		
PART II STANDARD (COMPETENCY BASED QUESTIONS)			
12.	<p>ASSERTION REASON BASED QUESTION</p> <p>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.</p> <p>Assertion: $\cot A$ is the product of \cot and A.</p> <p>Reason: The value of $\sin \theta$ increases as θ increases.</p> <p>Assertion (A): If the perimeter of a circle is equal to that of a square, then the ratio of their areas is 14:11</p> <p>Reason (R): If the perimeter of a circle is equal to that of a square, then their areas are equal.</p>	1	Understanding
13.	<p>From a point on the ground, which is 15 m away from the foot of the tower, the angle of elevation of the top of the tower is found to be 60°. The height of the tower (in m) standing straight is:</p> <p>(a) $15\sqrt{3}$ (b) $10\sqrt{3}$ (c) $12\sqrt{3}$ (d) $20\sqrt{3}$</p>	1	Evaluation
14.	<p>If angle between two radii of a circle is 130°, then the angle between the tangents at the ends of the radii is:</p> <p>(a) 90° (b) 50° (c) 70° (d) 40°</p>	1	Understanding
15.	<p>The angle of elevation of the top of a building 30 m high from the foot of another building in the same plane is 60°, and also the angle of elevation of the top of the second</p>	1	Application

	<p>tower from the foot of the first tower is 30°, then the distance between the two buildings is:</p> <p>(a) $10\sqrt{3}$ m (b) $15\sqrt{3}$ m (c) $12\sqrt{3}$ m (d) 36 m</p>		
16.	<p>In the given figure, if $\angle ZRPS = 25^\circ$, the value of $\angle ZROS$ is</p>  <p>(a) 135° (b) 145° (c) 165° (d) 155°</p>	1	Understanding
17.	<p>The horizontal distance between two poles is 15 m. The angle of depression of the top of first pole as seen from the top of second pole is 30°. If the height of the second pole is 24 m, find the height of the first pole.</p>	3	Critical thinking based Question
18.	<p>In the given figure, the sides AB, BC and CA of a triangle ABC touch a circle at P, Q and R respectively. If $PA = 4$ cm, $BP = 3$ cm and $AC = 11$ cm, find the length of BC (in cm).</p> 	3	Analytical Skill based
19.	<p>CASE STUDY</p>  <p>A group of students of class X visited India Gate on an education trip. The teacher and students had interest in history as well. The teacher narrated that India Gate, official name Delhi Memorial, originally called All-India War Memorial, monumental sandstone arch in New Delhi, dedicated to the troops of British India who died in wars fought between 1914 and 1919. The teacher also said that India Gate, which is located at the eastern end of the Rajpath (formerly called the Kingsway), is about 138 feet (42 metres) in height.</p>	4	Critical Thinking

	<p>1. What is the angle of elevation if they are standing at a distance of 42m away from the monument?</p> <p>a) 30° b) 45° c) 60° d) 0°</p> <p>2. They want to see the tower at an angle of 60°. So, they want to know the distance where they should stand and hence find the distance.</p> <p>a) 25.24 mb) 20.12 mc) 42 md) 24.64 m</p> <p>3. If the altitude of the Sun is at 60°, then find the height of the vertical tower that will cast a shadow of length 20 m.</p> <p>4. The ratio of the length of a rod and its shadow is 1:1. Then find the angle of elevation of the Sun .</p>		
20.	<p>Two ships are there in the sea on either side of a light house in such a way that the ships and the light house are in the same straight line. The angles of depression of two ships as observed from the top of the light house are 60° and 45°. If the height of the light house is 200 m, find the distance between the two ships.</p>	5	Application Based

	<p>Q7A current of 10 A flows through a conductor for two minutes.</p> <p>(i) Calculate the amount of charge passed through any area of cross section of the conductor.</p> <p>(ii) If the charge of an electron is 1.6×10^{-19} C, then calculate the total number of electrons flowing</p>	3	Evaluation
5	<p>Q8(a) Complete and balance the following chemical equations:</p> <p>(i) $\text{Al}_2\text{O}_3 + \text{HCl} \rightarrow$</p> <p>(ii) $\text{K}_2\text{O} + \text{H}_2\text{O} \rightarrow$</p> <p>(iii) $\text{Fe} + \text{H}_2\text{O} \rightarrow$</p> <p>(b) An element 'X' displaces iron from the aqueous solution of iron sulphate. List your observations if the element 'X' is treated with the aqueous solutions of copper sulphate, zinc sulphate and silver nitrate. Based on the observations arrange X, Zn, Cu and Ag in increasing order of their reactivities.</p>	5	Observation and evaluation
<p>PART II</p> <p>STANDARD (COMPETANCE BASED QUESTION)</p>			
7	<p>ASSERTION REASON BASED QUESTION</p> <p>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:</p> <p>(a) Both assertion and reason are true and reason is the correct explanation of assertion.</p> <p>(b) Both assertion and reason are true but reason is not the correct explanation of assertion.</p> <p>(c) Assertion is true but reason is false.</p> <p>(d) Both Assertion and Reason are false.</p> <p>Q.1. Assertion (A): If a graph is plotted between the potential difference and the current flowing through a conductor, the graph is a straight line passing through the origin.</p> <p>Reason (R): The current is directly proportional to the potential difference across the conductor.</p> <p>Q.2 Assertion (A): Learning a skill like dancing or playing a musical instrument is an acquired trait.</p> <p>Reason (R): Acquired traits are developed during an individual's lifetime and are not transferred to the next generation.</p> <p>Q3 Assertion(A): When a resistance wire is stretched so as to make its length double, its resistance becomes four times its original value.</p> <p>Reason (R): Resistance of a conductor is directly proportional to its length and inversely proportional to its cross-sectional area.</p>	1 1 1	Information Understanding Real life application
8	<p>Q4. All the variations in a species do not have equal chances of survival. Why?</p> <p>Q5 A copper wire has diameter 0.5 mm and resistivity 1.6×10^{-8} Ω m. Calculate the length of this wire to make it resistance 100 Ω. How much does the resistance change if the diameter is doubled without changing its length?</p> <p>Q6. Explain Mendel's experiment with peas on inheritance of characters considering only one visible contrasting character</p>	2 2 2	Real life relevance Application Understanding

9	<p>Q7a List two differences in tabular form between dominant trait and recessive traits. What percentage/proportion of the plants in the F₂ generation/progeny were round, in Mendel's cross between round and wrinkled pea plants?</p> <p>Q8 A V-I graph for a nichrome wire is given below. What do you infer from this graph? Draw a labelled circuit diagram to obtain such a graph.</p> 	3 3	Critical thinking Critical Thinking
10	<p>If we cross pure-breed tall (dominant) pea plant with pure-breed dwarf (recessive) pea plant we will get pea plants of F₁ generation.</p> <p>If we now self-cross the pea plant of F₁ generation, then we obtain pea plants of F₂ generation.</p> <p>(a) What do the plants of F₁ generation look like?</p> <p>(b) State the ratio of tall plants to dwarf plants in F₂ generation.</p> <p>(c) State the type of plants not found in F₁ generation but appeared in F₂ generation, mentioning the reason for the same..</p>	5	Analytical Skill Understanding and application Observation and explanation Quantitative skills



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



Subject: Social Science
Allotment Date: 30 October 2025

Assignment No. :5

(PART-A BASIC GENERAL QUESTION) (20 MARKS)			
S.NO.	QUESTIONS	MARKS	NATURE
1.	<p style="text-align: center;">(MULTIPLE CHOICE QUESTIONS)</p> <p>I. Which place in India has an artificial lake to conserve water that dates to 11th century?</p> <p style="margin-left: 40px;">a. Delhi b. Bhopal c. Mumbai d. Kolhapur</p> <p>II. When many countries of Europe came together to form the European Union, was chosen as its headquarters.</p> <p style="margin-left: 40px;">a. Brussels b. Paris c. London d. Zurich</p> <p>III. The emergence of is directly connected to the rise of political parties.</p> <p style="margin-left: 40px;">a. Monitory democracies b. Direct democracies c. Representative democracies d. Constitutional democracies</p> <p>IV. Which among the following is not a component of a political party?</p> <p style="margin-left: 40px;">a) The leaders b) The active members c) The voters d) The followers</p> <p>V. Against which of the following forms of discrimination did Mahatma Gandhi launch a satyagraha in South Africa?</p> <p style="margin-left: 40px;">A. racism B. sexism C. ageism D. casteism</p>	1 × 6 = 6	Information
2.	(VERY-SHORT ANSWER TYPE QUESTIONS)	2 × 1 = 2	Understandi ng

	Assess the requirements for a regional party to become a national party		
3.	<p align="center">(SHORT ANSWER TYPE QUESTION)</p> <p>I. 'Coal is the most important and abundant fossil fuel in India.' Justify the statement by evaluating the significant role it plays in the growth of the Indian economy in its different forms.</p> <p>II. Evaluate the utility of public services in contributing to the overall well-being of individuals and society.</p>	3 × 2 = 6	Interdisciplinary
4.	<p align="center">(LONG ANSWER TYPE QUESTION)</p> <p>(A): Do you agree that the period of 1848 was considered as a phase of the Revolution of the Liberals in Europe? Elucidate with suitable examples.</p> <p align="center">OR</p> <p>(B): Analyze the reasons for the growth of nationalist tensions in the Balkan region before the First World War.</p>	5 × 1 = 5	Descriptive

(PART-B STANDARD COMPETENCY QUESTION) (20 MARKS)

5.	<p align="center">(MULTIPLE CHOICE QUESTIONS)</p> <p>I. Observe the map below showing the distribution of thermal and nuclear power plants across India.</p>  <p>Air Quality Index (AQI) is used to measure real-time air pollution levels. A high AQI represents poor air quality.</p>	1 × 5 = 5	HOTS
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Accordingly, which of the following regions marked on the map is **LIKELY** to experience comparatively better AQI?

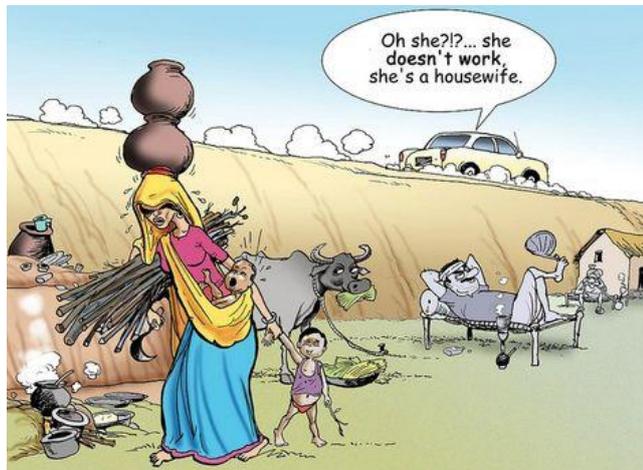
- (a) P
- (b) Q
- (c) R
- (d) S

II. Rina, a 28-year-old woman from a marginalized community, is uneducated but adept at making traditional handicrafts. Her family toils hard to afford two square meals everyday.

Accordingly, which development objective would be the **MOST** crucial for improving Rina's and her kin's well-being?

- (a) increasing access to clean energy in Rina's community
- (b) reducing the impact of climate change on Rina's community
- (c) creating more training opportunities for Rina and other artisans
- (d) ensuring that Rina has the same rights and opportunities as men in her community

III. Given below is a cartoon created by Neelabh Banerjee, the renowned Indian cartoonist, illustrator and comics artist.



What is the cartoon trying to depict?

- (a) the sexual division of labour in India
- (b) natural and unchangeable gender divisions
- (c) income generating activities done by women in rural India
- (d) the ability of men to contribute equally to domestic work as women

IV. Look at the world map given below and answer the following question.



Which of the following deductions can DEFINITELY be made from the map?

- A. Argentina is the largest federal country in South America.
- B. Germany has states that share power with the centre.
- C. Asia has the maximum number of federal nations.
- D. China does not have provincial administrations.

V. A multinational company (MNC) is a corporate organization that owns and controls production in more than one country.

Accordingly, which of following countries has the BEST potential for an MNC to be set up?

- A. Country W has a rich culture and ample biodiversity.
- B. Country X provides loans to foreign companies easily at high interest rates.
- C. Country Y has an educated workforce ready to work for affordable remuneration.
- D. Country Z has a rule which allows people from a specific religion to conduct business freely

<p>6.</p>	<p>(VERY-SHORT ANSWER TYPE QUESTIONS)</p> <p>In a hypothetical democratic nation with a population that is religiously homogenous, should there still be multiple political parties? Justify</p>	<p>$2 \times 1 = 2$</p>	<p>Application Based</p>
<p>7.</p>	<p>(SHORT ANSWER TYPE QUESTION)</p> <p>i. Read the following excerpt about the Right to Protest in India and answer the question that follows.</p> <p>The Constitution of India guarantees the fundamental right to protest, which is derived from the broader rights of freedom of speech and expression, and freedom to assemble peacefully. However, this right is subject to reasonable restrictions in the interest of India's sovereignty. Violent actions during protests are in violation of citizens' fundamental duties, emphasising that the right to protest encompasses only peaceful demonstrations.</p> <p>Examine the elements of Satyagraha employed during the 20th-century Indian freedom struggle in light of their</p>	<p>$3 \times 2 = 6$</p>	<p>Real life Application Based</p>

alignment with the Right to Protest granted by the Indian constitution as mentioned in the passage.

- ii. Compare Tables “A” & “B” and answer the question given below.

Table- A

Share of sectors in employment in %				
Year	Tertiary	Secondary	Primary	Year
1977-78	18	11	71	1977-78
2017-18	31	25	44	2017-18

Table –B

Share of Sectors in GDP in %			
Year	Tertiary	Secondary	Primary
1973-74	50	10	40
2013-14	68	21	11

A remarkable fact about India is that while there has been a change in the share of the three sectors in GDP, a similar shift has not taken place in employment. Why didn't a similar shift out of primary sector happen in case of employment? Substantiate your answer

8.

(CASE BASED TYPE QUESTION)

Read the following source and answer the questions that follow:

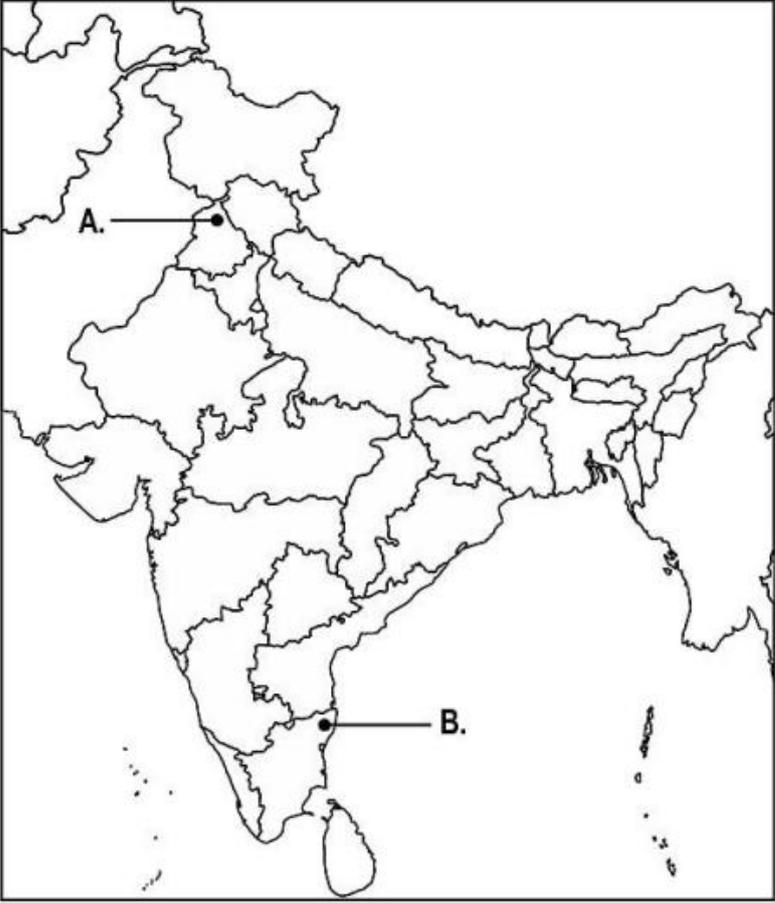
Local Self Government

The local government structure goes right up to the district level. A few gram panchayats are grouped together to form what is usually called a panchayat samiti or block or mandal. The members of this representative body are elected by all the panchayat members in that area. All the panchayat samitis or mandals in a district together constitute the zilla (district) parishad. Most members of the zilla parishad are elected. Members of the Lok Sabha and MLAs of that district and some other officials of other district level bodies are also its members. Zilla parishad chairperson is the political head of the zilla parishad. Similarly, local government bodies exist for urban areas as well. Municipalities are set up in towns. Big cities are constituted into municipal corporations. Both municipalities and municipal corporations are controlled by elected bodies consisting of people's representatives. Municipal chairperson is the political head of the municipality. In a municipal corporation, such an officer is called the mayor. This new system of local government is the largest experiment in democracy conducted anywhere in the world.

- I. Explain the relationship between gram panchayats and panchayat samitis.
- II. How is the structure of municipal corporation different from municipality?
- III. How does the local government structure promote democracy? Examine.

4 × 1 = 4

Critical Thinking

<p>9.</p>	<p align="center">(MAP BASED QUESTION)</p> <p>(a) Two places A and B have been marked on the given outline map of India. Identify them and write their correct names on the lines drawn near them.</p> <p>i. The place where the Jallianwala Bagh massacre took place</p> <p>ii. The 1927 Indian National Congress session was held at this place</p> <p>(b) On the same map of India, locate and label any two of the following with suitable symbols.</p> <p>I. a dam built on the river Sutlej</p> <p>II. a software technology park in Northern India</p> <p>III. a nuclear power plant in the state of Maharashtra</p> 	<p>4 × ½ = 2</p>	<p>Understanding</p>
<p>10.</p>	<p align="center">(PICTURE BASED QUESTION)</p> <p>Analyze the given picture and answer the following question:-</p>	<p>4 × ½ = 2</p>	<p>Application Based</p>



- I. During which years did the Great Irish Potato Famine occur?
- II. About how many people died of starvation in Ireland during the famine?
- III. What crop were Irish peasants most dependent on before the famine?
- IV. From which continent was the potato originally introduced to Europe?



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



Subject: Computer
Allotment Date: 30 October 2025

Assignment No. :5

S.NO.	QUESTIONS	MARKS	SKILLS/COMPETENCIES
1	<p>A. Multiple choice questions.</p> <p>(i) Which attribute is needed to tell the form where its contents will be sent?</p> <p>a. Action b. Type c. Value d. None of these</p> <p>(ii) What tag is used to add a new row to tables?</p> <p>a. <colspan> b. <td> c. <tr> d. <table></p> <p>(iii) If you want a check box to be checked by default when the form shows up, Which attribute you will include.</p> <p>a. checked b. maxlength c. size d. None of these</p> <p>(iv) Which attribute defines the width of the text area box?</p> <p>a. rows b. Cols c. identical d. None of these</p> <p>(v) You can use this followed by your e-mail address and the form data will be sent directly to you on the e-mail id mentioned.</p> <p>a. tomail: b. mailto: c. mailyou: d. mailme:</p>	2.5	Information

<p>2</p>	<p>B. Fill in the blanks. (i) _____ tag is used to create data cells in a table row. (ii) Multi-line text input controls are created using HTML _____ tag. (iii) _____ menus are also called Select lists. (iv) _____ are intended for allowing multiple selections in response to a choice given. (v) An HTML _____ adds interactivity to the web page.</p>	<p>2.5</p>	<p>understanding</p>
<p>3</p>	<p>C. Write T for true and F for false. (i) <colspan> attribute is used to stretch a column horizontally. (ii) An action attribute is needed to tell the form where its contents will be sent to. (iii) <tr> and </tr> tags are used to create table. (iv) The <tr> tag is a container tag. (v) Radio buttons are intended for allowing single selection in response to a choice given.</p>	<p>2.5</p>	<p>understanding</p>
<p>4</p>	<p>D. Answer the following questions. (i) What are values which can be given to method attribute of the Form tag? (ii) How <Textarea> tag is helpful? (iii) With the <Form> tag, what does 'action' attribute do? (iv) What is the difference between rowspan and colspan? (v) What is the function of Reset button?</p>	<p>2.5</p>	<p>Evaluation</p>



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



Subject: WORK EDUCATION
Allotment Date: 30 October 2025

Assignment No. : 5

S. NO.	QUESTIONS	NATURE
1.	"Warli Art" origin state is -	Understanding
2.	"Warli Art" is a form of Tribal Art?	Knowledge
3.	Which Range of India are famous for creating "Warli Art"?	Understanding
4.	Till which year the "Warli Art" was not recognized properly?	Knowledge
5.	The "Warli Art" culture is centered around basically-	Understanding
6.	Which types of tradition are shown by using Geometric Pattern of "Warli Art"?	Knowledge
7.	Which two types of basic colours are used in "Warli Art"?	Understanding
8.	What is the central motif in each ritual painting is the square, known as the "chalk" or "chukat".	Knowledge
9.	Now a days "Warli Art" is being used by-	Understanding
10.	What was the main way of life which is depicted in "Warli" painting?	Knowledge



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



Subject: HEALTH & PHYSICAL EDUCATION
Allotment Date: 30 October 2025

Assignment No. : 5

S.NO.	Multiple choice questions (question 1 to 4)	SKILLS	MARKS 1X10=10
1.	How many players are there in a handball team (including goalkeeper)? a) 5 b) 7 c) 9 d) 11	Self-awareness	1
2.	How long is a standard handball match for adults? a) 30 minutes b) 45 minutes c) 60 minutes d) 70 minutes	Self-awareness	1
3.	What is the shape of the handball court? a) Square b) Circular c) Rectangular d) Oval	Decision making	1
4.	How many steps can a player take without dribbling in handball? a) 2 b) 3 c) 4 d) Unlimited	Self-thinking	1
5	Fill in the blanks (question 5 TO 7) The standard size of a handball court is _____ wide. (40x20 meters ,40x30 meters)	Self-awareness	1
6	A handball match consists of two halves of _____ minutes each. (30 minutes,35 minutes)	Self-thinking	1
7.	The goal area line is also known as the _____ line. (6 meter, 8 meter)	Decision making	1
8	True and False (Question 8 to 10) A player can hold the ball for more than 3 seconds without dribbling.	Problem solving	1
9	Only the goalkeeper is allowed inside the 6-meter area.	Decision making	1
10	Each team can have only 5 players on the court at one time.	Problem solving	1



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



Subject: MARKETING & SALES
Allotment Date: 30 October 2025

Assignment No. : 5

S. NO.	QUESTIONS	MARKS	NATURE
I	<p>Fill in the blanks:- (Any 5)</p> <p>1. Selecting the prospects by the salesperson is also called _____.</p> <p>2. A person who might become your future customer is called a _____.</p> <p>3. Planning the presentation is also called _____.</p> <p>4. Selling offers a _____ in marketing.</p> <p>5. A salesman helps in _____.</p> <p>6. A good salesman must possess effective _____ skills.</p>	2.5	Conceptual knowledge
II	<p>Multiple Choice Questions:- (Any 5)</p> <p>1. Which of the following is not a quality of a good prospect? a) Capability to pay b) Needs the product c) Can influence the decision-maker d) Legally buy the product</p> <p>2. A presentation can be made more effective with the help of: a) Visual aids b) Personal examples c) Long speeches. d) None of these</p> <p>3. When an objection is raised by the customer, the salesman should: a) Ignore it b) Interrupt c) Continue presentation d) Listen and handle it</p> <p>4. After sale services help in: a) Building loyalty b) Ensuring satisfaction c) Repeat purchases d) All of the above</p> <p>5. The skill essential for using digital tools and CRM systems is: a) Selling skill b) People skill c) IT skill d) Communication skill</p> <p>6. In a selling career, challenges include: a) Low competition b) No targets c) Price competition d) None</p>	2.5	Critical Thinking and accuracy
III	<p>Short Answer Type Questions:-</p> <p>1. What do you mean by Prospecting?</p> <p>2. Define Presentation and mention its importance.</p> <p>3. What is meant by Handling Objections?</p> <p>4. List any two Roles played by a salesperson.</p> <p>5. What are People Skills?</p> <p>6. Why is Training important for salesmen?</p>	12	Comprehension and expression

IV	Long Answer Type Questions:- (Any 2) 1. Explain the various steps in the sales process in detail. 2. Describe different techniques of closing a sale with suitable examples. 3. Explain the importance and techniques of after-sale services.	8	Critical Thinking and Problem solving
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ARMY PUBLIC SCHOOL GWALIOR
CLASS X
ACADEMIC SESSION: 2025-26
WORKSHEET (SELF ASSESSMENT)



Subject: MULTIMEDIA

Assignment No. : 5

Allotment Date: 30 October 2025

S.No.	QUESTIONS	MARKS	NATURE
1	What is Texture?	1	Information
2	What is Seamless Texture?	1	Information
3	What is modelling?	1	Critical Thinking
4	Define background Texture.	1	Information
5	What is Bump maps?	1	Information
6	Define: (a) Gradient Texture (b) Patterned Texture (c) Soft Texture (d) Hard Texture (e) Smooth Texture (f) Bumpy Texture (g) Ziggy Texture (h) Rough Texture (i) Layered Texture (j) Mixed Media Texture	10x1= 10	Understanding
7	What is Layer Editor in Auto Desk Maya?	2	Understanding
8	Define the Term UVs Mapping?	2	Understanding
9	What is Object Modeling?	2	Analytical
11	Classify 2D and 3D Animation?	2	Understanding
12	What is Rigging and Rendering?	2	Understanding



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



Subject: Artificial Intelligence
Allotment Date: 30 October 2025

Assignment No. :5

S. NO.	QUESTIONS	MARKS	NATURE
I	<p>Multiple Choice Questions: -</p> <ol style="list-style-type: none">Which of the following refers to "Where" among "4W" Canvas?<ol style="list-style-type: none">StakeholdersNature of the problemContext/situation/locationSolution or benefits to the stakeholdersWhich of the following are the methods of data collection?<ol style="list-style-type: none">Surveys and rumoursAI models and applicationsWeb scraping and sensorsImagination and InternetWhich one of the following is an example of unsupervised learning model?<ol style="list-style-type: none">ClusteringRegressionClassificationRule basedRegression only works with which kind of data?<ol style="list-style-type: none">Step function dataIntermittent dataContinuous dataLinear dataIn which of the following, the machine is trained with huge amounts of data which helps it in training itself around the data?<ol style="list-style-type: none">Machine learningDeep learningNLPAIBar chart, pie chart and line chart are some of the techniques of<ol style="list-style-type: none">Data ExplorationData CollectionData AccessingData VisualizationAn unsupervised learning data model works on which kind of data?	1x10=10	Conceptual knowledge

	<p>a. Unlabelled b. Training c. Labelled d. Testing</p> <p>8. Which of the following model work on continuous data like weather analysis, forecasting, stock prices, etc.? a. Clustering b. Regression c. Classification d. Perfect models</p> <p>9. What are the two types of unsupervised learning model? a. Clustering and dimensionality reduction b. Classification and regression c. Rule based and learning based d. Classification and clustering</p> <p>10. Which among the following tends to perform better with large amounts of data? a. Larger neural networks b. Machine learning algorithms c. Learning based algorithms d. Deep learning algorithms</p>		
III	<p>Short Answer Type Questions: -</p> <p>1. Name all the stages of an AI project cycle. 2. What is a problem statement template, and what is its significance? 3. What precautions to be taken while acquiring data for developing an AI project? 4. Explain data exploration stage. 5. Write four important features of a neural network.</p>	2x5=10	Comprehension and expression



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



Subject: Data Science
Allotment Date: 30 October 2025

Assignment No. :5

S. NO.	QUESTIONS	MARKS	NATURE
I	<p>MCQs:-</p> <p>1. Consider the numbers below. Which of the following could be valid measures of probability? Select all that apply. (a) 0.6 (b) -0.3 (c) 32 (d) 2/7</p> <p>2. Which of the following variables for your classmates can be categorized as discrete? (a) Height (b) Length of Hair (c) Number of Siblings (d) Color of eyes</p> <p>3. Which of the following features have variability? (a) your height (b) How tall is each student in your class (c) The number of sides of a polygon (d) The number of books of the bags of your classmates</p> <p>4. Increasing the quantity of relevant data leads to (a) Increased certainty (b) Decreased certainty (c) Certainty remains the same (d) certainty is not dependent on data</p> <p>5. The Synonyms of probability include (a) Likelihood (b) Chance (c) Possibility (d) All of these</p> <p>6. The sample space for tossing 4 coins together is (a) 8 (b) 16 (c) 4 (d) 32</p> <p>7. The probability of drawing a red queen from a deck of cards is (a) 1/26 (b) 1/52 (c) 1/2 (d) 4</p> <p>8. The sum of all values in a probability distribution table can be (a) zero (b) Fractional value (c) negative value (d) One</p>	1x10=10	Conceptual knowledge
III	<p>Short Answer Type Questions: -</p> <p>Subjective Type Questions</p> <p>1. Define experiment, outcome, sample space, and event in terms of probability taking the example of rolling a pair of standard six-sided dice and adding the numbers that result.</p>	2x6=12	Comprehension and expression

	<p>2. Define the term random variable. Discuss the types of random variables that are used in statistics.</p> <p>3. What is the difference between an outcome and an event in probability? Explain with examples.</p> <p>4. How do we distinguish between descriptive and inferential statistics? Explain with examples.</p> <p>5. Differentiate between a discrete and a continuous random variable. How are these variables represented?</p> <p>6. Give step-by-step description of a statistical problem-solving process. What are the important points to be considered while following these steps involved ?</p>		
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