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

Subject: English   **Assignment No.: 9**
Allotment Date: 12 February 2026

PART-1
BASIC (GENERAL QUESTIONS)

S. NO.	QUESTIONS	MARKS	NATURE
1	You are making an effort to spread the message of communal harmony. Prepare a poster with catchy slogans to be displayed in the school premises. (Word limit: 50 words)	6	Information

2	Read the extracts given below and answer the questions that follow.
	 The workmen went and built the thing.
	They did so since he was the King.
	The King rode down the thoroughfare
	To edify spectators there.
	Under the arch he lost his crown.
	The arch was built too low. A frown
	Appeared upon his placid face.
	The King said, 'This is a disgrace.
	The chief of builders will be hanged.'
	The rope and gallows were arranged.
	   i. What did the king order?
	   ii. Why did the king go to thoroughfare?
	   iii. Why did the king frown ?
	   iv. Find the poetic device in "The workmen went and built the king".
		4	Understanding

3	What do you think is the theme of the play " Mother's Day" ?Comment on the ending of the play.	5	HOTS
4	What is the importance of Lake Mansarover ? What contrast did author find at Mansarover ?	5	Analytical Skill

PART II
STANDARD(COMPETENCY BASED QUESTIONS)

1.		MARKS	HOTS
	He had no premonition that night call would prove unusual , still less that it would influence his whole future in	5	

	Blaenelly." What was the unusual event in store for Andrew ?		
2.	How does the play " Mother's Day uses satire to highlight the issues faced by mother's in a patriarchal society ?	**5**	HOTS
3.	Identify the clauses in the following sentences and state whether they are independent or dependent clauses. 1. I know that you are a good boy. 2. This is the book which she gave me. 3. I shall wait here till you come back. 4. Make hay while the sun shines. 5. You may go whenever you like.	**5**	CRITICAL THINKING AND PROBLEM SOLVING
4.	Prepare a speech for the morning assembly on the topic " How health is affected by Lifestyle ?" (150-200 words)	**5**	EVALUATION

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

Subject: Hindi   **Assignment No.: 9**
Allotment Date: 12 February 2026

S. NO.	QUESTIONS	MARKS	NATURE
1	प्रश्न **1.** निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर दिए गए प्रश्नों के उत्तर निर्देशानुसार लिखिए। **(10)** जब समाचार-पत्रों मेंसर्वसाधारण के लिए कोई सूचना प्रकाशित की जाती है, तो उसको विज्ञापन कहतेहैं। यह सूचना नौकरियों से संबंधित हो सकती है, खाली मकान को किराए पर उठानेकेसंबंध मेंहो सकती हैया किसी औषधि के प्रचार सेसंबंधित हो सकती है। कुछ लोग विज्ञापन केआलोचक हैं। वेइसेनिरर्थक मानतेहैं। उनका मानना हैकि यदि कोई वस्तुयथार्थरूप मेंअच्छी है, तो वह बिना किसी विज्ञापन के ही लोगों के बीच लोकप्रिय हो जाएगी, जबकि खराब वस्तुएँविज्ञापन की सहायता पाकर भी भंडाफोड़ होने पर बहुत दिनों तक टिक नहीं पाएँगी, परंतुलोगों की यह सोच गलत है। आज के युग मेंमानव का प्रचार-प्रसार का दायरा व्यापक हो चुका है। अतः विज्ञापनों का होना अनिवार्यहो जाता है। किसी अच्छी वस्तुकी वास्तविकता सेपरिचय पाना आज के विशाल संसार मेंविज्ञापन के बिना नितांत असंभव है। विज्ञापन ही वह शक्तिशाली माध्यम है, जो हमारी जरूरत की वस्तुएँप्रस्तुत करता है, उनकी माँग बढ़ाता हैऔर अंततः हम उन्हेंजुटानेचल पड़तेहैं। यदि कोई व्यक्ति या कंपनी किसी वस्तुका निर्माण करती है, उसेउत्पादक कहा जाता है। उन वस्तुओंऔर सेवाओंको खरीदनेवाला उपभोक्ता	10	Information

कहलाता है। विज्ञापन इन दोनो को जोड़नेका कार्यकरता है। वह उत्पादक को उपभोक्ता केसंपर्क मेंलाता हैतथा माँग और पूर्ति में संतुलन स्थापित करनेका प्रयत्न करता है। पुरानेजमानेमेंकिसी वस्तुकी अच्छाई का विज्ञापन मौखिक तरीकेसेहोता था। काबुल

का मेवा, कश्मीर की जरी का काम, दक्षिण भारत के मसालेआदि वस्तुओंकी प्रसिद्धि मौखिक रूप सेहोती थी। उस समय

आवश्यकता भी कम होती थी तथा लोग किसी वस्तुके अभाव की तीव्रता का अनुभव नहीं करतेथे। आज समय तेजी का है। संचार-

क्रांति नेजिंदगी को स्पीड देदी है। मनुष्य की आवश्यकताएँबढ़ती जा रही हैं, इसलिए विज्ञापन मानव-जीवन की अनिवार्यता बन

गया है।

(i) विज्ञापन का मुख्य उद्देश्य क्या है? (1)

क) वस्तुओंका निर्माण करना

ख) वस्तुओंको खरीदना

ग) उत्पादक और उपभोक्ता को जोड़ना

घ) वस्तुओंका भंडारण करना

(ii) पुरानेजमानेमेंवस्तुओंकी अच्छाई का विज्ञापन कैसेहोता था? (1)

क) समाचार-पत्रों के माध्यम से

ख) मौखिक तरीकेसे

ग) टेलीविजन पर

घ) रेडियो पर

(iii) निम्नलिखित कथनों पर विचार कीजिए - (1)

कथन (I) : विज्ञापन उत्पादक और उपभोक्ता के बीच संबंध स्थापित करता है।

कथन (II) : अच्छी वस्तुओंको लोकप्रिय बनानेके लिए विज्ञापन की आवश्यकता नहीं होती।

कथन (III) : आधुनिक युग मेंकिसी वस्तुकी वास्तविकता सेपरिचित होनेके लिए विज्ञापन आवश्यक है।

कथन (**IV**) : पुरानेसमय मेंवस्तुओंका विज्ञापन मौखिक रूप सेहोता था।

गद्यांश के अनुसार कौन-सा/सेकथन सही हैं?

क) केवल कथन (**I**), (**III**) और (**IV**) सही हैं।

ख) केवल कथन (**II**), (**III**) और (**IV**) सही हैं।

ग) केवल कथन (**I**) और (**II**) सही हैं।

घ) केवल कथन (**II**) और (**IV**) सही हैं।

(**iv**) पुरानेसमय मेंकाबुल के मेवेऔर कश्मीर की जरी का काम कैसेप्रसिद्ध होता था? (**1**)

(**v**) विज्ञापन क्यों अनिवार्यहो गया है? (**2**)

(**vi**) विज्ञापन किस प्रकार उत्पादक और उपभोक्ता को जोड़नेका कार्यकरता है? (**2**)

2	प्रश्न 2. 'स्वच्छता : आज की अनिवार्य आवश्यकता है' पर रचनात्मक लेख लिखिए।	5	Understanding
3	प्रश्न 2. निम्नलिखित पद्यांश को ध्यानपूर्वक पढ़कर दिए गए प्रश्नों के उत्तर निर्देशानुसार लिखिए। (8) निज रक्षा का अधिकार रहे जन-जन को सबकी सुविधा का भार किंतु शासन को। मैं आर्यों का आदर्श बताने आया, जन-सम्मुख धन का तुच्छ जताने आया।	5	HOT

सुख-शांति हेतु मैं क्रांति मचाने आया,

विश्वासी का विश्वास बचाने आया,

मैं आया उनके हेतु कि जो तापित हैं,

जो विवश, विकल, बल-हीन, दीन शापित हैं।

हो जाएँ अभय वे जिन्हें कि भय भासित हैं,

जो कौणप-कुल से मूक-सदृश शासित हैं।

मैं आया, जिसमें बनी रहे मर्यादा,

बच जाए प्रबल से, मिटै न जीवन सादा।

सुख देने आया, दुःख झेलने आया।

मैं मनुष्यत्व का नाट्य खेलने आया,

मैं यहाँ एक अवलंब छोड़ने आया,

गढ़ने आया हुँ, नहीं तोड़ने आया।

जगदुपवन के झंखाड़ छाँटने आया।

मैं राज्य भोगने नहीं, भुगाने आया।

हंसों को मुक्ता-मुक्ति चुगाने आया।

भव में नव वैभव व्याप्त कराने आया।

नर को ईश्वरता प्राप्त कराने आया।

संदेश यहाँ मैं नहीं स्वर्ग का लाया,

इस भूतल को ही स्वर्ग बनाने आया।

अथवा आकर्षण पुण्यभूमि का ऐसा,

अवतरित हुआ मैं, आप उच्च फल जैसा।

(क) प्रस्तुत पद्यांश के अनुसार शासक का क्या कार्य होता है? (1)

(i) प्रजा के लिए धन की व्यवस्था करना

(ii) प्रजा के लिए सभी प्रकार के सुख-साधनों का प्रबंध करना

(iii) प्रजा के लिए मनोरंजन की व्यवस्था करना

(iv) प्रजा के लिए धरती को स्वर्ग बनाना

(ख) निम्नलिखित कथनों पर विचार कीजिए (1)

1. राम इस धरती पर भयाक्रांत लोगों को अभय दान करने आए थे।

2. राम इस धरती को स्वर्ग समान बनाने आए थे।

3. राम इस धरती पर स्वर्ग का संदेश लेकर आए थे। उपर्युक्त कथनों में से कौन-सा/से कथन सही है/हैं?

(i) केवल 1   (ii) केवल 3   (iii) 1 और 2   (iv) 2 और 3

ग) सुमेलित कीजिए (1)

सूची I   सूची II

A. धरती को बनाने की   1. रक्षा करने हेतु

B. बलहीन, दीन और शापित की   2. शासन

C. देशवासियों की सुख-सुविधा का भार   3. स्वर्ग

	कूट A B C (i) 2 2 1　　　(ii) 1 2 3　　　(iii) 213　　　(iv) 312 सूची I　सूची II A. धरती को बनाने की　　3. स्वर्ग B. बलहीन, दीन और शापित की　　1. रक्षा करने हेतु C. देशवासियों की सुख-सुविधा का भार　　2. शासन (घ) श्रीराम इस धरती पर किनके लिए आए हैं? (1) (ङ) मनुष्यत्व का नाटक किस प्रकार खेला गया? (2) च) श्रीराम ने कविता में अपने आने का उद्देश्य क्या बताया? (2)		
4	प्रश्न –1. (क) मीरा जगत को देख कर रोटी क्यों है ? (ख) मायके आई बहन के लिये कवि ने घर को परिताप का घर क्यों कहा है ? (ग) आपके विचार से चंपा ने ऐसा क्यों कहा होगा की मे तो नही पढ़ूंगी ?	5	Interdisciplinary
5	(क) ईश्वर के स्वरूप के विषय में कबीर क्या कहते हैं? (ख) चंपा काले-काले अच्छर नहीं चीन्हती कविता में गाँधी जी का प्रसंग किस संदर्भ में आया तथा क्यों? (ग) आओ, मिलकर बचाएँ कविता में दिल के भोलेपन के साथ-साथ अक्खड़पन और जुझारूपन को भी बचाने　की आवश्यकता पर क्यों बल दिया गया है?	5	Analytical Skill
6	नमक का दरोगा कहानी "धन पर धर्म की विजय" कि कहानी है तर्क सहित उत्तर दे	5	Critical Thinking and Problem Solving

7	1. "पथेर पांचाली" फिल्म की शुटिंग का काम ढाई साल तक क्यों चला ? 2. करजन को इस्तीफ़ा क्यों देना पड़ा ? 3. आपके और यंहा के निवासियो के बीच में कोई तीसरी शक्ति और भी है – यंहा तीसरी शक्ति किसे कहा गया है ?	5	Evaluation
8	पत्रकारीय लेखन का सबसे जाना-पहचाना रूप समाचार लेखन है। समाचार को कैसे लिखा जाता है?	5	Communication Skills

Subject: CHEMISTRY   **Assignment No. :9**

Allotment Date: **Marks: (20+20=40)**

PART I

BASIC(GENERAL QUESTIONS)

S. NO.	QUESTIONS	MARKS	NATURE		
				1X5=5	Knowledge
1	1. A pure substance which contains only one type of atom is called ————. (a) An element (b) a compound (c) a solid (d) a liquid 2. The smallest particle that can take part in chemical reactions is ————. (a) Atom (b) molecule (c) Both (a) and (b) (d) none of thes 3. Given: C (graphite, s) + O_2 (g) → CO_2 (g) ; ΔrH o = –393.5 kJ mol-1 CO (g) + ½ O_2 (g) → CO_2 (g) ; ΔrH o = –283.0 kJ mol-1 The enthalpy of following reaction will be: C (graphite, s) + ½ O2 (g) → CO (g) (A) –676.5 kJmol-1 (B) –110. 5 kJmol-1 (C) –196. 75 kJmol-1 (D)110. 5 kJmol-1 4. Which of the following participate in the sulphonation of benzene? (a) SO_2 (b) SO_3H^+ (c) SO_3 (d) SO_3H^- 5. Which one of the following is not an isomer of 3-Methylbut-1-yne? (a) Pent-1-yne	1X5=5	Knowledge		

	(b) Buta-1,3-diene (c) Pent-2-yne (d) Penta-1,3-diene		
2	**Directions:** These questions consist of two statements, each printed as Assertion and Reason. While answering these questions, you are required to choose any one of the following four responses. (a) If both Assertion and Reason are correct and the Reason is a correct explanation of the Assertion. (b) If both Assertion and Reason are correct but Reason is not a correct explanation of the Assertion. (c) If the Assertion is correct but Reason is incorrect. (d) If both the Assertion and Reason are incorrect. Q.1. Assertion: Cyclopentadienyl anion is aromatic. Reason: Cyclopentadienyl anion contains 6 π electrons. Q.2. Assertion : Sodium acetate on Kolbe's electrolysis gives methane. Reason : Methyl free radical is formed at anode.	2	Understanding
3	Give reason- a.Second ionization enthalpy is always higher than first ionization enthalpy b.The size of cation is smaller than its parent atom	2	Understanding
4	a. Define Dipole moment. b. Write down mathematical expression for Dipole moment c .Dipole moment of	3	Analytical
5	The IE_2 of Mg is higher than that of Na. On the other hand, the IE_2 of Na is much higher than that of Mg.Explain	3	Understanding
6	Draw Newman and Sawhorse projections for the eclipsed and staggered conformations of ethane. Which of these conformations is more stable and why?	5	Interdisciplinary

	PART II **STANDARD(COMPETENCY BASED QUESTIONS)**				
1	1. Which of the following is a homogeneous mixture? (a) Mixture of soil and water (b) Sugar solution (c) Mixture of sugar, salt and sand (d) Iodised table salt 2. The significant figures in 0.00051 are ————. (a) 5 (b) 3 (c) 2 (d) 26 3. Which of the following compounds will exhibit cis-trans isomerism? (a) Butanol (b) 2- Butyne (c) 2-Butenol (d) 2-Butene . 4. Consider the following molecules: (I) CO_2 (II) H_2O (III) BF_3 (IV) NH_3 Out of these, molecule(s) having sp3 hybridization of central atom is/are- (A)I, II, III, IV (B)I, II (C)II, IV (D)IV only 5. Which of the following molecule is paramagnetic having bond order two? (A) C_2 (B) N_2 (C) O_2 (D)F_2	**1X5=5**	Understanding		
2	**Directions:** These questions consist of two statements, each printed as Assertion and Reason. While answering these questions, you are required to choose any one of the following four responses. (a) If both Assertion and Reason are correct and the Reason is a correct explanation of the Assertion. (b) If both Assertion and Reason are correct but	**2**	Understanding		

Reason is not a correct explanation of the Assertion.
(c) If the Assertion is correct but Reason is incorrect.
(d) If both the Assertion and Reason are incorrect.

Q.1. Assertion : Acetylene is acidic in nature.
Reason : Acetylene is sp hybridised.

Q.2. 16. Assertion: Chlorine has most negative electron gain enthalpy among halogens.
 Reason: Chlorine has smallest size and highest electronegativity.

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3	Write the structures and names of products obtained in the reactions of sodium with a mixture of 1-iodo-2-methylpropane and 2-iodopropane.	2	Analytical Skills
4	a.What do you mean by the term hybridization? b.Explain hybridization of PCl_5 and SF_6 under following headings i. Electronic configuration ii.Geometry along with its structure	3	Understanding
5	How will you convert benzene into (i) Toulene (ii) Nitrobenzene	3	HOT
6	.Explain a.Hydrogen bonding and its type. b.Shapes of following molecules on the bases of VESPR theory(Draw structures also) i.H_2O ii.NH_4	5	HOT

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

Subject: Physics   **Assignment No.: 9**
Allotment Date: 12 February 2026

PART I

BASIC (GENERAL BASED QUESTION)

S. NO.	QUESTIONS	MARKS	NATURE

1	**Multiple choice questions**
	
	 a) The wavelength of yellow light 5893 Armstrong in terms of nanometre
	
	   a) 58.93nm
	   b) 59.9nm
	   c) 589.3nm
	   d) 5893nm
	 b) X-Rays were discovered by
	
	   a) Coolidge
	   b) Roentgen
	   c) Maxwell
	   d) Fermi
		1
		
		 1
			Observation
			
			 Understanding

2	Q3 State the number of significant figures in the following
	
	   a) 0.005 m^2
	   b) 2.63×10^{28}Kg
	 Q4. A cube is subjected to equal pressure on all sides. Prove that the fractional change in volume is equal to $\frac{P}{K}$, where K is bulk modulus.
		2
		
		 2
			Evaluation
			
			 Understanding

3	Q5 a) A train moves with a speed of 15 m/s for 20 seconds. Find the distance travelled. b) A force of 50 N acts on a body but produces no displacement. Q6 To prove in an elastic one-dimensional collision, the relative velocity of approach before collision is equal to the relative velocity of separation after collision. Q7. a) What is recoil velocity? b) A bullet of mass 100 g is fired from a rifle of mass 20 Kg with a speed of 50 m/s. Calculate the velocity of recoil of the rifle.	3 3 3	HOT Understanding
4	Q8. Define apparent weight of a body. Find the apparent weight of a person standing on a weighing machine placed in a lift ,when lift is i) moving upward or downward with constant velocity, ii) moving upward with an acceleration 'a' ,iii) moving	5	Observation and

	downward with an acceleration 'a' and iv) falls freely hence, define weightlessness.		Interdisciplinary Understanding
	PART II **STANDARD(COMPETANCE BASED QUESTION)**		
5	**ASSERTION REASON BASED QUESTION** 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. **Q.1.ASSERTION**: The work done by the spring force in a cyclic process is zero **REASON:** Spring force is a conservative force. **Q.2 ASSERTION:** No work is done if the displacement is zero **REASON:** Work done is a scaler quantity which cannot be negative like mass. Q3 **ASSERTION** : Kilowatt hour is the unit of power **REASON:** One kilowatt hour is equivalent to 3.6×10^{5}J	**1** **1** **1**	Real life application Understanding Information
6	Q4 A simple pendulum is taken from Earth to the Moon. Will its frequency increase, decrease, or remain the same? Explain your reasoning without directly using the formula. Q5 In SHM, velocity is maximum at the mean position and zero at extreme positions. Using energy considerations, explain why this happens. Q6A 2 kg block rests on a frictionless horizontal surface. It is pulled by a constant horizontal force of 10 N for a distance of 5 m. (a) How much work is done by the force? (b) What is the change in the kinetic energy of the block? (c) What is the final speed of the block if it starts from rest?	**2** **2** **2**	Real life relevance Reasoning Critical Thinking
7	Q7. A gas is taken from state A to state B along two different paths: • Path 1: The gas absorbs 500 J of heat and does 300 J of work. • Path 2: The gas does 100 J of work. Find: 1. Change in internal energy in path 1	**3**	high-order HOTS type numerical critical thinking

	2. Heat absorbed or rejected in path 2
	3. Which quantity depends on path and which does not?
	
	Q8 According to kinetic theory, pressure is due to molecular collisions.
	  1. What would happen to pressure at absolute zero temperature?
	  2. Do molecules completely stop moving?
	  3. Why is absolute zero practically unattainable?
		3	Critical Thinking

8	**Q9**. A long steel wire and a copper wire of equal length and equal cross-sectional area are suspended from a rigid support. Equal loads are gradually applied to both wires.
	It is observed that the copper wire elongates more than the steel wire.
	If the load is doubled (within elastic limit), predict:
	  1. What will happen to the stress in each wire?
	  2. What will happen to the strain in each wire?
	  3. Will the ratio of their extensions change?
		5	critical thinking
			
			analysing and reasoning
			
			Observation and explanation

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

Subject: Mathematics   **Assignment No.: 9**
Allotment Date: 12 February 2026

PART I

BASIC (GENERAL QUESTION)

S. NO.	QUESTIONS	MARKS	NATURE
1	If a, b, c are in AP then (a) b = a + c (b) 2b = a + c (c) b² = a + c (d) 2b² = a + c	1	Information
2	Three numbers form an increasing GP. If the middle term is doubled, then the new numbers are in Ap. The common ratio of GP is (a) $2 + \sqrt{3}$ (b) $2 - \sqrt{3}$ (c) $2 \pm \sqrt{3}$ (d) None of these	1	Understanding
3	The locus of a point, whose abscissa and ordinate are always equal is (a) x + y + 1 = 0 (b) x – y = 0 (c) x + y = 1 (d) none of these.	1	Analytical Skill
4	The equation of straight line passing through the point (1, 2) and parallel to the line y = 3x + 1 is (a) y + 2 = x + 1 (b) y + 2 = 3 × (x + 1) (c) y – 2 = 3 × (x – 1) (d) y – 2 = x – 1	1	Communication Skills
5	Three consecutive vertices of a rhombus are (5,3), (2,7) and (-2,4). Find the fourth vertex.	**2**	HOT

6	Find the probability that a leap year selected at random, will contain 53 Sundays.	**2**	Understanding
7	In how many ways the letters of the word BANANA can be arranged?.	**2**	Understanding
8	Show that, in the random experiment of throwing a die once, event of "getting odd number" and event of "getting even number" are two exhaustive events.	**2**	HOT
9	Solve 4x+3 $< 6x + 7$, when x is an integer.	**2**	Information
10	In how many ways a committee of 5 can be selected from 6 men and 5 women, consisting of 3 men and 2 women?	**3**	Understanding
11	Find the coordinates of a point on x-axis at a distance of $5\sqrt{2}$ units from (3,4,-3).	**3**	HOT

<div align="center">

PART II

STANDARD (COMPETENCY BASED QUESTIONS)

</div>

12	What can be said regarding if a line if its slope is negative (a) θ is an acute angle (b) θ is an obtuse angle (c) Either the line is x-axis or it is parallel to the x-axis. (d) None of these	1	
13	The sum of 10 items is 12 and the sum of their squares is 18. The standard deviation is (a) 1/5 (b) 2/5 (c) 3/5 (d) 4/5	1	HOT
14	The eccentricity of an ellipse is 5/8 and the distance between its foci is 10 cm, then the length of its latus rectum is: (a) 39/4 (b) 39/2 (c) 23/2 (d) 23/4	1	Understanding
15	The third term of a geometric progression is 4. The product of the first five terms is: (a) 4^3 (b) 4^5 (c) 4^4 (d) none of these	1	

			Understanding

16	**Assertion-Reason Based Questions**
	
	Direction: The following questions are Assertion-Reason type questions. Each of these questions contains two statements: Statement-1 (Assertion) and Statement-2 (Reason). Each of these questions also has four alternative choices, only one of which is the correct answer. You have to select the correct choice.
	
	    (a) Statement –1 is false, Statement-2 is true.
	    (b) Statement –1 is true, Statement-2 is true, and Statement -2 is a correct explanation for Statement-1.
	    (c) Statement –1 is true, Statement-2 is true, and Statement -2 is a not a correct explanation for Statement-1.
	    (d) Statement –1 is true, Statement-2 is false.
	
	Assertion: If points A,B,C are collinear then area of $\Delta ABC = 0$
	
	Reason: AB+BC = AC
		1	HOT

17	One card is drawn from a well shuffled deck of 52 card. If each outcome is equally likely, calculate the probability that the card will be: (i) not an ace (ii) a diamond	3	HOT
18	A manufacturer has 600 litres of a 12% solution of acid. How many litres of the 30% acid solution is to be added to it so that acid content in the resulting mixture will be more than 15% but less than 18%?	3	Critical Thinking and Problem Solving
19	**Case study:** The side of a given square is 10 cm. The mid-points of its sides are joined to form a new square. Again, the mid-point of the sides of this new square are joined to form another square. This process is continued indefinitely as shown in the figure.	4	Critical Thinking and Problem Solving
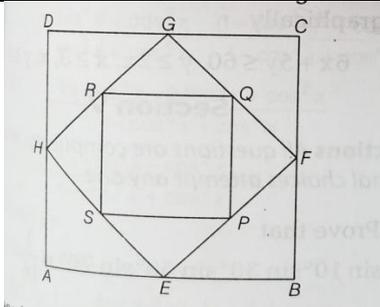
Based on the above information, answer the following:

    (i)   Find EF:

    (ii)   Find PQ:

    (ii)   Find the sum of perimeter of 10 squares obtained

            by using the formula.

| 20 | A tea party is arranged for 16 persons along two sides of a long table with 8 chairs on each side. Four persons wish to sit in one particular side and two on another side. In how many ways can they be seated? | 5 | Critical Thinking and Problem Solving |

Subject: Biology   **Assignment No.: 9**
Allotment Date: 12 February 2026

PART I
BASIC (GENERAL QUESTIONS)

S. NO.	QUESTIONS	MARKS	NATURE
1	MCQ BASED QUESTIONS The _____ is a membrane-bound structure located within the muscles cells. Its main function is to store calcium ions. Sarcoplasmic reticulum Fibrin Myosin None of the above	1	Information
2	The _____ secretes a fluid that cushions and lubricates the joints Cutaneous membrane Synovial membrane Mucous membrane None of the above	1	Information
3	VERY SHORT ANSWER QUESTIONS Answer the following questions based on the equation given below: What is the function of Myoglobin in muscles?	2	Understanding
4	(a) What is the functional unit of a muscle? (b) Name the tissue connecting muscle to bone.	2	Information
5	SHORT ANSWER QUESTIONS Explain the Sliding Filament Theory of muscle contraction in brief.	3	Remembering
6	What is the role of Calcium ions (Ca^{2+}) and Troponin in initiating muscle contraction?	3	Interdisciplinary
7	Define Tetanus and Muscle Fatigue. What causes fatigue in muscle fibres?	3	Understanding
8	Describe the exact role of Calcium ions (Ca^{2+}) and ATP in the process of muscle contraction, starting from nerve impulse to relaxation.	5	Critical thinking
	PART II STANDARD (COMPETENCY BASED QUESTIONS)		

9	ASSERTION REASON BASED QUESTION	1	Understanding based question
	• Assertion (A): During muscle contraction, the I-band shortens, but the A-band length remains the same.		
	• Reason (R): The thin (actin) filaments slide inward between the thick (myosin) filaments, but the myosin filaments themselves don't change length.		
10	• Assertion (A): All locomotions are movements, but all movements are not locomotions.	1	Real life application based on CBQ
	• Reason (R): Locomotion involves a change in body position or place, while movement can occur without a change in location (e.g., limb movement while sitting).		
11	• Assertion (A): Smooth muscles are involuntary and lack striations.	1	Information based question
	• Reason (R): The orderly arrangement of actin and myosin filaments causes striations, which is absent in smooth muscles.		
12	Define sarcomere and state its significance in muscle contraction	2	Application based CBQ
13	Name the types of movable joints found in the human body (e.g., ball-and-socket, hinge) and give one example for each.	2	Real life relevance based CBQ
14	How many bones are in a single human limb, and what is the function of the pectoral girdle?.	2	Understanding based CBQ
15	Describe the Pectoral Girdle and Pelvic Girdle, highlighting key differences.	3	Critical thinking based question
16	What are Synovial Joints? Give examples (e.g., Pivot joint between atlas & axis, Ball & Socket joint in hip/shoulder).	3	Evaluation based CBQ
17	Explain the sliding filament theory of muscle contraction, detailing the roles of actin, myosin, troponin, tropomyosin, ATP, and calcium ions in the process.	5	Analytical skill based CBQ

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

Subject: Economics **Assignment No.: 9**
Allotment Date: 12 February 2026

PART I

BASIC (GENERAL QUESTIONS)

S. NO.	QUESTIONS	MARKS	NATURE
1	In which market AR = MR? (a) Monopoly (b) Monopolistic Competition (c) Both (a) and (b) (d) Perfect Competition	1	Remembering
2	In perfect competition, which of the following remains constant? (a) AR (b) MR (c) Both AR and MR (d) None of the both	1	Understanding
3	In perfect competition: (a) AR = MR (b) AR > MR (c) MR < MC (d) MR = MC = 0	1	Information
4	Which of the following is **not** a feature of perfect competition? (a) Large number of buyers and sellers (b) Homogeneous products (c) Price maker firms (d) Perfect knowledge	1	Evaluation Skill
5	**Case-Based Question** **Case:** Due to an increase in income, the demand for branded clothes rises while the supply remains unchanged. **Question:** What will be the effect on the equilibrium price?	1	Remembering
6	Excess demand in a market leads to: (a) Fall in price (b) Rise in price	1	Interdisciplinary

	(c) No change in price (d) Decrease in supply			
7	Which of the following causes a leftward shift of the supply curve? (a) Improvement in technology (b) Decrease in cost of production (c) Increase in input prices (d) Increase in number of sellers	1	Understanding
8	How is AR=MR, under perfect competition?	3	Calculation Skills
9	**Case-Based Question** **Case:** The market for wheat experiences a rise in demand due to an increase in population. At the same time, the government announces a subsidy on fertilizers, reducing the cost of production for farmers. **Questions:** (i) Identify the changes that will occur in the demand and supply curves. (ii) Explain the likely impact of these changes on equilibrium price and equilibrium quantity.	4	Understanding/A nalyse
10	Explain the implications of following features of perfect competition: (i) perfect mobility (ii) freedom of entry and exit of firms	6	Problem Solving
	PART II **STANDARD (COMPETENCY BASED QUESTIONS)**		
1	In a perfectly competitive market, the market price is determined by: (a) A single firm (b) Government (c) Industry demand and supply (d) Cost of production of a firm	1	HOT
2	**Statement-Based Question** **Statement:** In a perfectly competitive market, individual firms are price takers. **Question:** What does the term *price taker* imply?	1	Interdisciplinary

3	**Case-Based Question** **Case:** In a vegetable market, there are a large number of sellers selling identical tomatoes. No single seller can influence the market price, and buyers have complete knowledge of prices. **Question:** Which feature of perfect competition is highlighted in this case?	1	Critical Thinking and Problem Solving
4	**Assertion (A):** In perfect competition, the demand curve of a firm is perfectly elastic. **Reason (R):** A firm can sell any quantity of output at the market price. (a) Both A and R are true and R is the correct explanation of A (b) Both A and R are true but R is not the correct explanation of A (c) A is true but R is false (d) A is false but R is true	1	Critical Thinking
5	**Assertion (A):** There is free entry and exit of firms in a perfectly competitive market. **Reason (R):** Firms earn supernormal profits in the long run. (a) Both A and R are true and R is the correct explanation of A (b) Both A and R are true but R is not the correct explanation of A (c) A is true but R is false (d) A is false but R is true	1	Analytical Thinking
6	**Statement-Based Question** **Statement:** Equilibrium price is determined at the point where market demand equals market supply. **Question:** What happens to the price if market demand exceeds market supply at the prevailing price?	1	Logical Reasoning
7	**Assertion (A):** When price is above the equilibrium price, there is excess supply in the market. **Reason (R):** At higher prices, quantity supplied exceeds quantity demanded. (a) Both A and R are true and R is the correct explanation of A (b) Both A and R are true but R is not the correct explanation of A (c) A is true but R is false (d) A is false but R is true	1	Reasoning

8	Why is a firm under perfect competition a price taker? Explain.	3	Critical Thinking and Problem solving
9	**Statement-Based Question** **Statement:** "Equilibrium price in a market is determined by the interaction of demand and supply forces." **Question:** Explain the process of determination of equilibrium price with the help of a demand and supply schedule. Also explain what happens to the price when it is higher or lower than the equilibrium price.	4	Critical Thinking skill
10	Explain how equilibrium price and quantity are affected when there is: (i) Increase in demand with no change in supply, and (ii) Increase in supply with no change in demand. Use diagrams to support your answer and justify how the market restores equilibrium in each case.	6	Evaluation Skill/Problem Solving

Subject: History   **Assignment No.: 9**
Allotment Date: 12 February 2026

PART I

BASIC (GENERAL QUESTIONS)

S. NO.	QUESTIONS	MARKS	NATURE
1.	i, Which invention played a crucial role in spreading Renaissance ideas across Europe? a) Gunpowder b) Compass c) Printing press d) Astrolabe ii. Which factor most strongly contributed to the rise of cities in Mesopotamia? a) Availability of metals b) Development of irrigation agriculture c) Nomadic pastoralism d) Climatic stability iii. Which language replaced the Sumerian language after 2400 BCE? a) Mesopotamian language b) Akkadian language c) Chinese language d) Middle Eastern language iv. The term 'feudalism' in medieval Europe primarily refers to: a) A religious system	1x6=6	Remembering

b) A military alliance

c) A system of land ownership and obligations

d) Urban trade organisation

v. Which sector was promoted to strengthen Japan's economy?

a) Cottage industries

b) Heavy industries

c) Plantation agriculture

d) Handicrafts

vi. **Match the following:**

Column A	Column B
1. Leonardo da Vinci	a. The Divine Comedy
2. Michelangelo	b. Mona Lisa
3. Raphael	c. School of Athens
4. Dante	d. Sistine Chapel

2.	**PART-B** *Answer in short:* What do you understand by 'Open Door Policy'?	**3**	Understanding
3.	**PART-C** *Answer in detail:* Today, as a developed country, Japan faces the challenge of using its political and technological capabilities to maintain its position as a leading world power. Elaborate this statement. OR "To what extent can the Roman Empire's cultural diversity be regarded as a strength or a weakness when contrasted with the relatively more uniform Iranian Empire? Support your answer with historical evidence."	**8**	Applying
4.	**PART-D** *Map Question:* On the map of West Asia mark and locate the following famous cities of Mesopotamia: a) Uruk b) Mari d) Babylon	**3**	Identifying
	PART II		

	STANDARD (COMPETENCY BASED QUESTIONS)		

1.	**PART-A**
	Objective Type Questions:
	
	i. Assertion (A): The Black Death weakened feudalism in Europe.
	Reason (R): Labour shortages increased the bargaining power of peasants.
	
	ii. Match List I with List II
	
	List I **List II**
	
	a) Meiji Restoration 1) Warrior class
	b) Samurai 2) 1868
	c) Constitution 3) 1889
	d) Tokugawa Rule 4) Feudal government
	
	iii. Which of the following statements are true about the Printing Revolution?
	    1. Books became cheaper and more accessible.
	    2. Literacy levels gradually increased.
	    3. The Church fully supported the printing of all texts.
	a) 1 and 2 only
	b) 2 and 3 only
	c) 1 and 3 only
	d) All of the above
	
	Chronological Order Question:
	iv. Arrange the following events of Roman history in correct chronological order:
	1. Establishment of the Roman Republic
	2. Julius Caesar's assassination
	3. Division of the Roman Empire into Eastern and Western
	4. Founding of Constantinople
	
	Options:
	a) 1 → 2 → 4 → 3
	b) 2 → 1 → 3 → 4
	c) 1 → 3 → 2 → 4
	d) 4 → 3 → 2 → 1
		1x4=4	Applying

2.	**PART-B** *Answer in short:* The daily life of Japanese was transformed with the development of Japan. How?	3	HOT
3.	"Critically analyse the factors responsible for the emergence of cathedral towns in medieval France and justify how their architectural design reflected the socio-economic, religious, and political priorities of the period."	3	Evaluating

4.	**PART-C** ***Answer in detail:*** "Examine how technological innovations in the 11th century transformed agricultural productivity and rural life. To what extent did these changes reshape the social and economic structure of medieval Europe?" OR "Analyse the major achievements of Deng Xiaoping and evaluate their impact on China's economic and political transformation."	8	Analysing, Evaluating & (HOT)
5.	**PART-D** ***Source Based Question:*** Read the following extract and answer the questions that follow: Niccolo Machiavelli wrote about human nature in the fifteenth chapter of his book, The Prince (1513).So, leaving aside imaginary things, and referring only to those which truly exist, I say that whenever men are discussed (and especially princes, who are more exposed to view), they are noted for various qualities which earn them either praise or condemnation. Some, for example, are held to be generous, and others miserly. Some are held to be benefactors, others are called grasping; some cruel, some compassionate; one man faithless, another faithful; one man effeminate and cowardly, another fierce and courageous; one man courteous, another proud; one man lascivious, another pure; one guileless, another crafty; one stubborn, another flexible; one grave, another frivolous; one religious, another sceptical; and so forth. Machiavelli believed that 'all men are bad and ever ready to display their vicious nature partly because of the fact that human desires are insatiable'. The most powerful motive Machiavelli saw as the incentive for every human action is self-interest. **Questions:** (i) "Analyse how Machiavelli's view that human behaviour is driven primarily by self-interest shapes his advice to rulers in *The Prince*. How does this perspective influence the moral and political responsibilities he expects from a successful leader?" (ii) Machiavelli believed that humans often act according to their "insatiable desires." Reflect on a real-life situation (in school, society, or world events) where this idea helps explain people's actions. What could be the consequences of such behaviour?	2x1=2	Application and understanding Based

Subject: Political Science   Assignment No.: 9
Allotment Date: 12 February 2026

PART I

BASIC (GENERAL QUESTIONS)

S. NO.	QUESTIONS	MARKS	NATURE
1.	**Objective Type Questions**: **(i) The electoral procedure of the Vice President of India is mentioned under article** (a) 56 (b) 60 (c) 61 (d) 66 **(ii) What is the main advantage of proportional representation?** (a) It ensures that every vote counts equally. (b) It leads to more stable governments. (c) It is easier to administer. (d) It is more representative of the diverse views of the electorate **(iii) The members of parliament are free to raise any matter, which according to them is important, during** (a) Adjournment motion (b) Question hour (c) Zero hour (d) No confidence motion **OR** **'Long Walk to Freedom' is an autobiography of** (a) Mahatma Gandhi. (b) Nelson Mandela. (c) Salman Rushdie. (d) Aung San Suu Kyi. **(iv) Article 368 of Indian constitution provides that** (a) An amendment bill can be introduced in either house of parliament. (b) Provision for free and compulsory education for children. (c) Seats shall be reserved for the Scheduled Castes and the Scheduled Tribes in every Municipality. (d) Uniform civil code for the citizens.	**(6x1=6)**	Information

	(v) Which of the following is a criticism of the first-past-the-post system? (a) It leads to a more proportional representation of parties in the legislature (b) It often results in a winner taking all situation, even if they do not have a majority of the popular vote (c) It is more complex and difficult for voters to understand (d) It is more expensive to administer than other systems **(vi) Which Article provide the privilege of special status to the North-Eastern State of Nagaland?** (a) Article 371A (b) Article 371B (c) Article 371C (d) Article 371D		
2	**VERY SHORT ANSWER TYPE QUESTIONS:** Name the amendment which has been passed through political consensus How social equality is ensured in the Indian Constitution? **OR** How does the Indian Constitution promote the idea of universal franchise?	**2**	Understanding
3	**SHORT ANSWER TYPE QUESTIONS:** How does Parliament ensure accountability of the executive branch of government? **OR** How does the concept of "reasonable restrictions" apply to freedom of expression in constitutional discussions in India?	**4**	HOTS
4	**Read the extract carefully and answer the questions that follow:** What is defection? If a member remains absent in the House when asked by the party leadership to remain present or votes against the instructions of the party or voluntarily leaves the membership of the party, it is deemed as defection. Experience of the past twenty years shows that the anti-defection amendment has not been able to curb defections, but it has given additional powers to the party leadership and the presiding officers of the legislatures over the members. **Questions:** (i) What does Defection mean? (ii) What are the amendments related to Anti-Defection? (iii) Who has the authority to take decision in case of a defection?	**(2+1+1=4)**	Interdisciplinary & Analytical Thinking
5	**LONG ANSWER TYPE QUESTIONS:** Discuss in brief the powers of the Supreme Court of India.	**6**	Critical Thinking

	PART II **STANDARD (COMPETENCY BASED QUESTIONS)**		

6	**ASSERTION REASON BASED QUESTION:**
	Directions (Q. Nos. 1 & 2) In the questions given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.
	(a) Both A and R are true and R is the correct explanation of A
	(b) Both A and R are true, but R is not the correct explanation of A
	(c) A is true, but R is false
	(d) A is false, but R is true
	(i) Assertion (A): A bicameral legislature ensures a double check on every decision.
	   Reason: Bills and policies are discussed and voted on in both houses.
	
	(ii) Assertion (A): The President of India has the power to grant a pardon or reduce the sentence of any convicted person.
	   Reason (R): This power is granted to maintain the President's ceremonial role.
		(1X2=2)	CBQ
			Information
			Real life application
			Based on CBQ
			Understanding Based CBQ

7	**VERY SHORT ANSWER TYPE QUESTIONS:** Explain the concept of judicial independence and why it's essential for democracy. **OR** Why do we need two houses in the Parliament of India? Why India have chosen FPTP system of Election?	**2** **2**	Application based CBQ Real life relevance based CBQ Understanding based CBQ
8	**SHORT ANSWER TYPE QUESTIONS:** How social equality is ensured in the Indian Constitution? **OR** Do you think that equality means always treating all in an identical way? Explain the significance of the Kesavananda Bharati case and its impact on the Indian Constitution's basic structure.	**4** **4**	Critical thinking based Question Evaluation based CBQ
9	**Study the cartoon carefully and answer the questions that follow:**	**(1+1+2=4)**	Critical and Analytical thinking

Questions:
(i) What does the above cartoon represent?
(ii) Who allocates ranks and Portfolios to the ministers?
(iii) What are the powers of Prime Minister of India?

| 10 | **LONG ANSWER TYPE QUESTION:**
Discuss the significance and utility of Political Theory.
<div align="center">OR</div>Define Political Theory. Explain its characteristics and scope. | **6** | Analytical Skill based CBQ |
| | | | |

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Subject: Psychology   **Assignment No.: 9**
Allotment Date: 12 February 2026

PART I

BASIC(GENERAL QUESTIONS)

S. NO.	QUESTIONS	MARKS	NATURE
1	What is the process of focusing on specific stimuli while ignoring others? a) Perception b) Attention c) Memory d) Learning	1	Remembering
2	Which of the following is a goal of psychology? a) To understand human behavior b) To predict human behavior c) To control human behavior d) All of the above	1	Understanding
3	Who is considered the father of modern psychology? a) Sigmund Freud b) B.F. Skinner c) Wilhelm Wundt d) Jean Piaget	1	Information
4	What is the primary method of data collection in psychology? a) Experimentation b) Observation c) Survey d) Case study	1	Evaluation Skill
5	What is the scientific study of behavior and mental processes called? a) Psychology b) Sociology c) Anthropology d) Philosophy	1	Remembering
6	How does the concept of perception in psychology relate to the physiological responses studied in biology?	1	Interdisciplinary

7	What is the main function of the nervous system? a) To control movement b) To regulate emotions c) To process information d) All of the above	1	Understanding
8	Identify the main difference between bottom-up and top-down processing in perception. Give one real-world example of each.	3	Communication Skills
9	Compare sensory memory and short-term memory in terms of capacity and duration, and discuss why both are necessary for perceiving a moving image.	4	Understanding/Analyse
10	Design a short classroom activity (5-7 minutes) that incorporates dual-coding and retrieval practice to teach the concept of perceptual constancy. Justify each component with theory and explain how you would assess learning.	6	Problem Solving
	PART II **STANDARD (COMPETENCY BASED QUESTIONS)**		
1	What is the process of focusing on specific stimuli while ignoring others? a) Perception b) Attention c) Memory d) Learning	1	HOT
2	What is the relationship between free will and determinism? How do psychological theories inform our understanding of human agency?	1	Interdisciplinary
3	Assertion: Personality is shaped by genetics and environment. Reason: Research has shown that both genetic and environmental factors contribute to personality development. A) Both assertion and reason are true, and the reason is the correct explanation. B) Both assertion and reason are true, but the reason is not the correct explanation. C) Assertion is true, but the reason is false. D) Assertion is false, but the reason is true.	1	Critical Thinking and Problem Solving
4	Assertion (A): The brain is the center of all psychological processes. Reason (R): The brain is responsible for controlling all bodily functions. a) Both A and R are true, and R is the correct explanation of A.	1	Evaluation

	b) Both A and R are true, but R is not the correct explanation of A. c) A is true, but R is false. d) A is false, but R is true.		
5	Match the following psychological concepts with their definitions: 1. Nature-nurture debate 2. Cognitive bias 3. Classical conditioning 4. Introspection Definitions: A) A debate about the relative contributions of genetics and environment to human behavior B) A systematic error in thinking and decision-making C) A learning process in which a neutral stimulus is paired with an unconditioned stimulus D) A method of self-observation and reflection	1	Analytical Thinking
6	What might be the reasons behind Amit's difficulties adjusting to campus life?	1	Logical Reasoning
7	Assertion: Learning is a lifelong process. Reason: People can learn new skills and acquire new knowledge at any age. A) Both assertion and reason are true, and the reason is the correct explanation. B) Both assertion and reason are true, but the reason is not the correct explanation. C) Assertion is true, but the reason is false. D) Assertion is false, but the reason is true.	1	Reasoning
8	Rahul, a 16-year-old student, has been experiencing difficulties in his academic performance. He is struggling to concentrate in class, and his grades have been declining. His parents are worried about his performance and are considering seeking professional help. Questions: 1. What could be the possible reasons for Rahul's declining academic performance? 2. How would you approach this situation, and what steps would you take to help Rahul? 3. What role do you think parents and teachers can play in helping Rahul overcome his difficulties?	3	Critical Thinking and Problem solving
9	Explain how context-dependent memory can be used to improve exam performance, citing a specific study.	4	Interdisciplinary
10	Evaluate the impact of sleep on memory consolidation for declarative versus procedural information. Use at least two empirical findings to support your evaluation and suggest how a teacher might schedule study sessions accordingly.	6	Evaluation Skill/Problem Solving

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

Subject: NCC　　　　　　　　　　　　　　　　**Assignment No.: 9**
Allotment Date: 12 February 2026

PART I

BASIC (GENERAL QUESTIONS)

S. NO.	QUESTIONS	MARKS	NATURE
1	The back bearing of an object is 250 degree & its magnetic bearing is _____ degree. a) 60 b) 70 c) 80 d) 90	1	Remembering
2	How many degrees can be measured with the help of a Service Protractor? a) 180 b) 240 c) 360 d) 410	1	Understanding
3	The color red on a topographical map indicates: a) Forest b) Roads and settlements c) Water bodies d) Agricultural land	1	Information
4	The role of _____ is to provide fire power in the battle area so that the enemy does not interfere with our operations. (a) Engineers (b) Artillery (c) Armoured (d) Mechanized Infantry	1	Evaluation Skill
5	A _____ is a handheld, portable, two-way radio transceiver. a) Radio b) Walkie – talkie	1	Remembering

	c) Telephone		
	d) Fax		
6	In 'Bhumi Shashtra', the rifle will be kept in such a manner that the magazine will be facing _____. (a) Up (c) Left (b) Right (d) Any of these	1	Interdisciplinary
7	The main purpose of field signals is: a) To decorate uniforms b) Silent communication in battle c) For NCC parades only d) To confuse the enemy	1	Understanding
8	communication can be the expression of ideas. When a candidate goes for the interview, explain in how many styles can he communicate?	3	Communication Skills
9	Explain any four tactical hand signals used in battle craft.	4	Understanding/Analyse
10	What are types of solid waste? Explain about three of the same.	6	Problem Solving
	PART II **STANDARD (COMPETENCY BASED QUESTIONS)**		
1	The function of the extractor in a rifle is to extract the _____. (a) Magazine (c) Empty Case (b) Bullet (d) Round	1	HOT

2	There are three ways of communication; Aggressive, Passive and _____. (a) Verbal (c) Active (b) Non-Verbal (d) Assertive	1	Interdisciplinary
3	Who was the father of Tipu Sultan? (a) Ranadullah Khan (c) Hyder Ali (b) Mir Muin-ud-Din (d) Tipu Mastan Aulia	1	Critical Thinking and Problem Solving
4	Social hierarchy practiced in India for centuries is called _____. (a) Caste System (c) Land System (b) Dowry System (d) Monetary System	1	Evaluation
5	Which of the following is a personal hygiene measure? (a) Hands of cooks medically examined (c) Anti malaria precaution (b) Disposal of waster food (d) Provision of soakage pit	1	Analytical Thinking
6	Ground which gives cover from enemy fire is called: a) Concealment ground b) Dead ground c) Observation post d) Defensive line	1	Logical Reasoning
7	The term dead ground refers to: a) Ground under water b) Ground not visible to enemy c) Ground with no vegetation d) Frozen land	1	Reasoning

8	Define Marking Time, Forward March and Halt in Quick Time.	3	Critical Thinking and Problem solving
9	Write down the Characteristics of 7.62 mm SLR.	4	Interdisciplinary
10	Explain Diamond section formation.	6	Evaluation Skill/Problem Solving

Subject: Physical Education   **Assignment No.: 9**
Allotment Date: 12 February 2026

PART I
BASIC (GENERAL QUESTIONS)

S. No.	QUESTIONS	MARKS	NATURE
1.	Define kinesiology and biomechanics in detail. Explain how these two scientific studies are interrelated and contribute to understanding human movement in sports.	3	Conceptual Based
2.	"Kinesiology and biomechanics play a vital role in improving sports performance." Justify this statement with suitable examples.	3	Conceptual Based
3.	Describe the significance of biomechanics in improving sports techniques. Give two examples from different sports where biomechanics is used effectively.	3	Conceptual Based
4.	What is the principle of leverage? Explain with an example how the human body acts as a system of levers in sports movements.	3	Application Based
5.	Differentiate between abduction and adduction with the help of examples from sports like gymnastics or basketball.	3	Knowledge Based
6.	Explain how the concepts of planes and axes are applied in various sports activities like gymnastics, swimming, and athletics.	5	Conceptual Based

PART II
STANDARD (COMPETENCY BASED QUESTIONS)

S. No.	QUESTIONS	MARKS	NATURE
1.	A coach observes that a long jumper is unable to cover enough distance despite high speed on the runway. As a physical education expert, explain how the knowledge of kinesiology and biomechanics can help improve the jumper's technique.	3	Analytical

2.	A gymnast performs a cartwheel. Identify the types of body movements involved and explain their importance in maintaining body coordination.	3	Application-based
3.	A physical education teacher demonstrates a cartwheel to students. Explain the axis and plane involved in this movement and its biomechanical application in improving coordination.	3	Conceptual Based
4.	A tennis player rotates his forearm to serve. Explain the biomechanical importance of supination and pronation in this action.	3	Application
5.	In a football training session, players are unable to control their kicks effectively. Explain how biomechanical principles can be applied to enhance the accuracy and force of their kicks.	3	Analytical
6.	A basketball player raises his arm sideways to block a shot. Identify the type of movement performed and explain its functional advantage.	5	Application
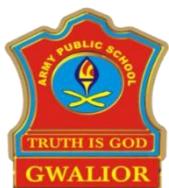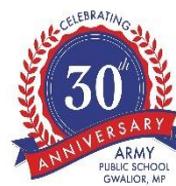
Subject: Painting   **Assignment No.: 9**
Allotment Date: 12 February 2026

S. NO.	QUESTIONS	MARKS	NATURE
1.	Which are the two types of sculptures found in Indian temples?	2	Understanding
2.	What is the difference between a round sculpture and relief sculpture?	2	Information
3.	Which are the two classifications of Indian temples in North and South India?	2	Understanding
4.	Name the four main categories of Indo-Islamic architecture.	2	Information
5.	Name a few Bronze sculptures from different regions of India that exemplify the expertise in metal casting in different periods.	2	Understanding
6.	Name the dynasties under which the following monuments were made along with the medium.	2	Information
	Case Base-		
7.	Elaborate Indo-Islamic Architecture.		Understanding
8.			Information

Subject: Data Science **Assignment No.: 9**
Allotment Date: 12 February 2026

S.NO.	QUESTIONS	MARKS	SKILLS/COMPETENCIES
1	**A. Multiple choice questions**. 1. Mr. X conducted a study of the way restaurant owners granted or refused access to a couple. This is an example of observing behaviour in terms of: a) Individuals b) Incidents c) Short time periods d) Long time periods 2. Which of these is NOT an advantage of observational study? a) Captures real-life behaviour b) Time-consuming c) Provides qualitative insights d) Useful for studying phenomena 3. Observer's reliability is improved by: a) Ignoring training b) Training observers c) Random guessing d) None of the above 4. Which of the following is a method of data collection by sensing? a) Use of speed guns to measure the speed of vehicles by traffic police. b) Performing surveys to calculate population of the country. c) Performing experiments and observing the results. d) None of the above 5. Which of these is not true?	6X1=6	**Information**

	a) Observational study is cheap.		
	b) Observational study replaces interviewing.		
	c) Observational study is time consuming.		
	d) Observational study requires operational definition.		
	6. Which function is used to create the vector with more than one element?		
	a) Library ()		
	b) plot ()		
	c) c ()		
	d) par ()		
2	**B. Fill in the blanks.** (i) A _____ is a two-dimensional rectangular data structure in R.. (ii) Observational study is preferred when experiments are _____. (iii) A sample that truly represents the population is known as a _____ sample. (iv) Devices that collect and measure health-related data are known as_____. (v) Data frames are created using the _____ function. (vi) A _____ interval gives a range of values within which the true population parameter is expected to lie.	6X1=6	**Critical Thinking**
3	**C. Write T for true and F for false.** (i) Observational study can establish cause-effect relationships. (ii) A monthly family budget is an example of forecasting. (iii) R supports arithmetic operations on vectors and matrices.	4X1=4	**Understanding**

	(iv) Sampling bias occurs when every member of the population has an equal chance of selection.		
4	**D. Answer the following questions.** (i) Write an R program to create two numeric matrices and perform arithmetic operations like addition, subtraction, multiplication, and division. (ii) Explain why forecasting is important in business planning. (iii) Why should sampling bias to be avoided in surveys? (iv) What is the role of sensors in healthcare?	**4X1=4**	**Evaluation**

Subject: Multimedia   **Assignment No.: 9**

Allotment Date: 12 February 2026

S.No.	QUESTIONS	MARKS	NATURE
1	1. Which device is considered one of the earliest forms of animation? A. Camera B. Zoetrope C. Television D. Projector	1	Analytical Skill
2	**The Phenak is to scope was invented in which century?** A. 16th century B. 17th century C. 19th century D. 20th century	1	Analytical Skill
3	**Stop-motion animation uses:** A. Drawings on paper B. Digital models C. Still objects photographed frame by frame D. Live actors	1	Understanding
4	**Which country is famous for developing anime?** A. China B. South Korea C. Japan D. USA	1	Understanding
5	The first fully computer-animated feature film was: A. Shrek B. Toy Story C. Finding Nemo D. Monsters, Inc.		Understanding I
6	**What is 2D texturing mainly used for?** A. Creating 3D models B. Adding surface details and colors C. Rigging characters D. Rendering final output	1	Understanding

7	**A texture map is best described as:** A. A 3D object B. A lighting setup C. An image applied to a surface D. A camera angle	1	Information
8	**Which software is commonly used for 2D texturing?** A. Maya B. Blender C. Photoshop D. Unity	1	Critical Thinking
9	**Which file format is most commonly used for 2D textures?** A. .mp4 B. .jpg C. .exe D. .txt	1	Information
10	**What does resolution in 2D texturing refer to?** A. Number of textures used B. Pixel density of the texture C. File format D. Rendering quality	1	Critical Thinking
11	**Define the following Terms in one line.** **(Answer any 5)** | S.No.	Term	Define in one line
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1	Flip Book Animation	
2	Traditional Animation	
3	Cut-out Animation	
4	Clay Animation	
5	Stop Motion Animation	
6	Computer Animation			5x1 =5	Understanding
12	**Answer the following questions in about 20-30 words.** 1. What is Modeling? 2. Define sound editing. 3. Explain special VFX in animation. 4. What is Story Board? 5. Define Rendering?	5x2= 10	Critical Thinking and Problem Solving