Subject: English   **Assignment No.: 8**
Allotment Date: 31January 2026   **Marks: 20+20=40**

PART 1

BASIC (General Questions)

S. NO.	QUESTIONS	MARKS	NATURE
1	You are Naman / Neeta.You require a 3 BHK Flat in prime location of city Gwalior. Draft an advertisement for the same in not more than 50 words.	4	Information
2	Read the passage given below and prepare notes and abbreviation table. 1. How does television affect our lives? It can be very helpful to people who carefully choose the shows that they watch. Television can increase our knowledge of the outside world; there are high quality programmes that help us understand many fields of study, science, medicine, the different arts and so on. Moreover, television benefits very old people, who can't leave the house, as well as patients in hospitals. It also offers non-native speakers the advantage of daily informal language practice. They can increase their vocabulary and practise listening. 2. On the other hand, there are several serious disadvantages of television. Of course, it provides us with a pleasant way to relax and spend our free time, but in some countries people watch television for an average of six hours or more a day. Many children stare at the TV screen for more hours a day than they spend on anything else, including studying and sleeping. It's clear that TV has a powerful influence on their lives and that its influence is often negative. 3. Recent studies show that after only thirty seconds of television viewing, a person's brain 'relaxes' the same way that it does just before the person falls asleep. Another effect of television on the human brain is that it seems to cause poor concentration. Children who view a lot of television can often concentrate on a subject for only fifteen to twenty	5	Understanding

	minutes. They can pay attention only for the amount of time between commercials.			
3	How can the presence of salt flats in Tibet be explained in " Silk Road" ?Explain it in the light of the continental drift theory.	6		Analytical Skills

6	Connect the following sentences using clauses.
	    i. This is my favourite dress. My uncle gave it on my birthday.
	    ii. This is my favourite mall. I celebrated my birthday here.
	    iii. This book is interesting. I got issued from the Central Library.
	    iv. He has taken my pen. The pen is very lucky for me.
	My friend is a great artist. He lives near DD Mall.
		5		Critical Thinking and Problem Solving

	PART II **STANDARD(COMPETENCY BASED QUESTIONS)**			
1.	Describe the difficulties and disillusionment faced by the author in " The Silk Road".	**6**		Analytical
2.	i.)Why did Tsetan say, " If you die it would be bad for my business ?" ii.)Why did Nick Middleton suffer from cold at Darchen ? iii.)Who was Norbu? Why did he come to do Kora ?How he could be a good companion to Nick Middleton?	**6**		Critical Thinking
3.	Why have the king's ministers been described as practical minded men? What is ironic about description?(Tale of Melon city)	**2**		HOTS
4.	Discuss "Tale of the Melon City" as a political satire.	**6**		Critical Thinking

Subject: Hindi   **Assignment No.: 8**
Allotment Date: 31January 2026   **Marks: 20+20=40**

S. NO.	QUESTIONS	MARKS	NATURE
1	अपठित बोध - प्रश्न **1.** निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर दिए गए प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्प को चुनकर लिखिए **10 × 1 = 10** 'सत्य के अनेक रूप होते हैं, इस सिद्धांत को मैं बहुत पसन्द करता हूँ । इसी सिद्धांत ने मुझे एक मुसलमान को उसके अपने दृष्टिकोण से और ईसाई को उसके स्वयं के दृष्टिकोण से समझना सिखाया। जिन अंधों ने हाथी का अलग-अलग तरह से वर्णन किया, वे सब अपनी दृष्टि से ठीक थे। एक-दूसरे की दृष्टि से सब गलत थे और जो आदमी हाथी को जानता था उसकी दृष्टि से ये सही भी थे और गलत भी । जब तक अलग-अलग धर्म मौजूद हैं, तब तक प्रत्येक धर्म को किसी विशेष बाह्य चिह्न की आवश्यकता हो सकती है। लेकिन जब बाह्य चिह्न आडंबर बन जाते हैं अथवा अपने धर्म को दूसरे धर्मों से अलग बनाने के काम आते हैं, तब वे सामान्य हो जाते हैं। धर्मों के भातृ-मण्डल का उद्देश्य यह होना चाहिए कि वह हिंदू को अधिक अच्छा हिंदू, एक मुसलमान को अधिक अच्छा मुसलमान और एक ईसाई को अधिक अच्छा ईसाई बनाने में मदद करे। दूसरों के लिए हमारी प्रार्थना	10	Information

यह नहीं होनी चाहिए - ईश्वर ! तू उन्हें वही प्रकाश दे, जो तूने मुझे दिया है, बल्कि यह होनी चाहिए - तू उन्हें वह सारा प्रकाश दे, जिसकी उन्हें अपने सर्वोच्च विकास के लिए आवश्यकता है।'

1. सत्य के कितने रूप होते हैं**?**

(क) एक

(ख) दो

(ग) पाँच

(घ) अनेक

2. अंधों ने किस का अलग-अलग रूप दिखाया **?**

(क) साँप

(ख) हाथी

(ग) कछुए

(घ) आदमी

3. निम्नलिखित कथनों पर विचार कीजिए-

कथन **(i):** हाथी को जानने वाले की दृष्टि में वे सभी सही थे।

कथन **(ii):** हाथी को जानने वाले की दृष्टि में वे सभी गलत थे।

कथन **(iii):** हाथी को जानने वाले की दृष्टि में वे सभी समान थे।

कथन **(iv):** हाथी को जानने वाले की दृष्टि में वे गलत और सही दोनों थे।

गद्यांश के अनुसार कौन-सा/से कथन सही है / हैं **?**

(क) कथन **(i)** और **(ii)** सही हैं।

(ख) केवल कथन **(ii)** सही है।

(ग) केवल कथन **(iii)** सही है।

(घ) केवल कथन **(iv)** सही है।

4. प्रत्येक धर्म को किस की आवश्यकता हो सकती थी**?**

	(क) विशेष बाह्य चिहन		
	(ख) बाहरी चिहन की		
	(ग) आंतरिक चिहन की		
	(घ) ये सभी		
	5. बाह्य आडंबर किसे अलग करते हैं?		
	(क) आदमी को		
	(ख) समाज को		
	(ग) व्यवहार को		
	(घ) धर्म को		
	6. हमारी प्रार्थना किस के प्रति होनी चाहिए?		
	(क) नेता के		
	(ख) अधिकारी के		
	(ग) ईश्वर के		
	(घ) देवता के		
	7. प्रकाश की आवश्यकता किसलिए है?		
	8. प्रस्तुत गद्यांश का उचित शीर्षक लिखिए-		
2	(1)'एक मौत ने कुष्ठ रोगियों के इलाज की प्रेरणा दी' विषय पर अपने विचार प्रकट कीजिए।	5	Understanding

	(ii) 'बच्चे देश का सुनहरा भविष्य होते हैं विषय पर रचनात्मक लेख लिखिए।		
3	निम्नलिखित काव्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर दीजिए 'मस्त योगी है कि हम देखकर सबका सुखी हैं, कुछ अजब मन है कि हम देखकर सबका दुःखी हैं। तुम हमारी चोटियों की बर्फ़ को यों मत कुरेदो, दहकता लावा हृदय में है कि हम ज्वालामुखी हैं। लास्य भी हमने किये हैं और ताण्डव भी किये हैं, वंश मीरा और शिव के, विष पिया है और जिये हैं। दूध माँ का या कि चन्दन का कि केसर जो समझ लो, यह हमारे देश की रज है कि हम इसके लिए हैं।' 1. इस पद्यांश में किस देश के वासियों का वर्णन है? (क) विदेश के (ग) जापान के (ख) भारत के (घ) इंग्लैंड के 2. भारतीयों के हृदय में क्या दहकता है? (क) लावा (ख) आग (ग) ज्वाला (घ) रोशनी 3. ताण्डव किस के द्वारा किया नृत्य है?	5	HOT

	(क) नर्तकी (ख) नट (ग) शिव (घ) समाज 4. चंदन और केसर की तुलना किससे की है? निम्नलिखित कथनों पर विचार कीजिए- कथन (i): चंदन और केसर की तुलना देश की रज से की है। कथन (ii): चंदन और केसर की तुलना नमक से की है। कथन (iii): चंदन और केसर की तुलना आसमान से की है। कथन (iv): चंदन और केसर की तुलना पानी से की है। निम्नलिखित विकल्पों पर विचार कीजिए तथा सही विकल्प चुनकर लिखिए विकल्प:- (क) केवल कथन (i) सही है। (ख) केवल कथन (ii) सही है। (ग) केवल कथन (iii) सही है। (घ) केवल कथन (iv) सही है। 5. कॉलम 1 को कॉलम 2 से सुमेलित कीजिए और सही विकल्प चुनकर लिखिए- कॉलम 1कॉलम 2 1. मन है(i) अजब 2. मत कुरेदो (ii) चोटियों की बर्फ को		

	3. दहकता लावा (iii) हृदय में		
	(क) 1 – (i), 2- (iii), 3- (ii)		
	(ख) 1 – (i), 2 – (ii), 3 – (iii)		
	(ग) 1 – (iii), 2-(ii), 3-(i)		
	(घ) 1 – (ii), 2-(iii), 3-(i)		
4	<अप्पू के साथ ढाई साल' के आधार पर बताइए कि एक फिल्म (जैसे पाथेर पांचाली) बनाते समय निर्देशक को किन वास्तविक जीवन की चुनौतियों और कलात्मक निर्णयों का सामना करना पड़ता है।	2.5	Interdisciplinary
5	'भारतीय ग्रामीण बैंक, आगरा शाखा को कुछ कार्यालय-सहायकों की आवश्यकता है। बैंक के मैनेजर को इस पद के लिए आवेदन-पत्र लिखिए। अथवा दैनिक जागरण समाचार-पत्र के सम्पादक को एक पत्र लिखिए जिसमें "अपराधी तत्त्वों के राजनीति में रहने से लोकतन्त्र के लिए सम्भावित खतरों के प्रति चिंता प्रकट की गयी हो"	5	Analytical Skill
6	1. जनसंचार के प्रमुख माध्यम क्या हैं?	5	Critical Thinking and Problem Solving

	2. दुनिया गाँव में क्यों बदल गई है?		
	3. हिंदी का पहला अखबार कौन-सा था?		
	4. पटकथा की मूल इकाई क्या होती है?		
	5. जनसंचार माध्यमों का मानव जीवन पर क्या प्रभाव है?		
7	i. डायरी-लेखन क्या है? कुछ प्रसिद्ध डायरियों और डायरी लेखकों के नाम भी बताइए।	5	Evaluation
8	नाटक और फ़िल्म की पटकथा में क्या अंतर होता है? स्पष्ट कीजिए।	**2.5**	Communication Skills
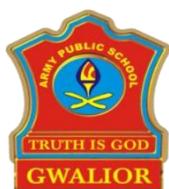
ARMY PUBLIC SCHOOL GWALIOR
CLASS - XI
ACADEMIC SESSION 2025-26
WORKSHEET (SELF –ASSESSMENT)

Subject: Chemistry   **Assignment No.: 8**
Allotment Date: 31January 2026   **Marks: 20+20=40**

PART I

BASIC(GENERAL QUESTIONS)

S. NO.	QUESTIONS	MARKS	NATURE
1	1. When acetylene is treated with HBr, the product is ———- (a) Methyl bromide (b) Ethylene bromide (c) Ethyl bromide (d) Ethylidene bromide 2. The dihedral angle in the staggered conformation of C_2H_6 is (a) 120^0 (b) 60^0 (c) 0^0 (d) 90^0 3. Bond length of (I) ethane, (II) ethene, (III) acetylene and (IV) benzene follows the order: (a) I > II > III > IV (b) I > II > IV> III (c) I > IV > II > III (d) III > IV > II > I 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 (b) Buta-1,3-diene (c) Pent-2-yne (d) Penta-1,3-diene	1X5=5	Knowledge
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.	2	Understanding

	Q.1. Assertion : Benzene on heating with conc. H_2SO_4 gives benzene sulphonic acid which when heated with superheated steam under pressure gives benzene. Reason : Sulphonation is a reversible process. Answer Q.2. Assertion : Sodium acetate on Kolbe's electrolysis gives methane. Reason : Methyl free radical is formed at anode.			
3	Despite their – I effect, halogens are o- and p-directing in haloarenes. Explain..	**2**		Understanding
4	In the presence of peroxide addition of HBr to propene takes place according to anti-markovnikov's rule but the peroxide effect is not seen in the case of HCl and HI. Explain..	**3**		Analytical
5	An unsaturated hydrocarbon "A' adds two molecules of H_2 and on reductive ozonolysis gives butane-1,4-di-al, ethanal and propanone. Give the structure of 'A', write its IUPAC name and explain the reactions involved.	**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 can be used as the halide component of a Friedel craft reaction? (a) Chlorobenzene (b) Bromobenzene (c) Chloroethene (d) Isopropyl chloride 2. Which of the compounds show dipole moment? (a) 1,4-dichlorobenzene	**1X5=5**		Understanding

(b) 1,2-dichlorobenzene
(c) trans-1,2-dichloroethane
(d) trans-but-2-ene

3. Which of the following compounds will exhibit cis-trans isomerism?
(a) Butanol
(b) 2- Butyne
(c) 2-Butenol
(d) 2-Butene
.
4.. Benzene reacts with CH_3Cl in the presence of anhydrous $AlCl_3$ to form
(a) Chlorobenzene
(b) Benzyl chloride
(c) xylene
(d) toluene

5. What happens when a mixture of acetylene and hydrogen is passed over heated Lindlar's catalyst?
(a) Ethylene and water are formed
(b) Ethane and water are formed
(c) Ethylene is formed
(d) Acetylene and ethane are formed

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 : Acetylene is acidic in nature. Reason : Acetylene is sp hybridised. Q.2. Assertion : Boiling point of alkanes increases with increase in molecular weight. Reason : van der Waal's forces increase with increase in molecular weight. .	2	Understanding
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	Write hydrocarbon radicals that can be formed as intermediates during monochlorination of 2-methylpropane? Which of them is more stable? Give reasons.	3	Understanding
5	How will you convert benzene into (i) p – nitrobromobenzene (ii) m – nitrochlorobenzene	3	HOT
6	The intermediate carbocation formed in the reaction of HI, HBr and HCl with propene is the same, and the bond energy of HCl, HBr and HI are 430.5 kJmol^{-1}, 363.7 kJmol^{-1} and 296.8 kJmol^{-1}, respectively. What will be the order of reactivity of these halogen acids?	5	HOT

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

Subject: Mathematics **Assignment No.: 8**
Allotment Date: 31January 2026 **Marks: 20+20=40**

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

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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
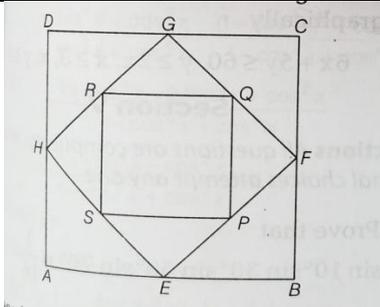
Based on the above information, answer the following:

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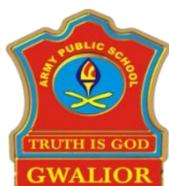
ARMY PUBLIC SCHOOL GWALIOR
CLASS - XI
ACADEMIC SESSION 2025-26
WORKSHEET (SELF –ASSESSMENT)

Subject: Biology
Allotment Date: 31January 2026

Assignment No.: 8
Marks: 20+20=40

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 • 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.	1	Understanding based question
10	• Assertion (A): All locomotions are movements, but all movements are not locomotions. • 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).	1	Real life application based on CBQ
11	• Assertion (A): Smooth muscles are involuntary and lack striations. • Reason (R): The orderly arrangement of actin and myosin filaments causes striations, which is absent in smooth muscles.	1	Information based question
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

Subject: Economics

Allotment Date: 31January 2026

Assignment No.: 8

Marks: 20+20=40

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 (c) No change in price (d) Decrease in supply	1	Interdisciplinary
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	**1**	Reasoning

	explanation of A (c) A is true but R is false (d) A is false but R is true		
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

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

Subject: History   **Assignment No.: 8**
Allotment Date: 31January 2026   **Marks: 20+20=40**

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:	**1x6=6**	Remembering

a) A religious system

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 & Creating (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

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

**Subject: Political Science**
Allotment Date: 31January 2026

Assignment No.: 8
Marks: 20+20=40

PART I

BASIC (GENERAL QUESTIONS)

S. NO.	QUESTIONS	MARKS	NATURE
1.	**Objective Type Questions**: **(i) What is one of the primary goals of secularism?** (a) To promote a specific religion within a state. (b) To oppose all forms of inter-religious and intra-religious domination. (c) To eliminate the practice of religion altogether. (d) To encourage the dominance of one religion over others. **(ii) Which of the following is a characteristic of a theocratic state?** (a) Separation of religious and state institutions. (b) Equality and freedom for all religious groups. (c) Governance by religious leaders or a priestly order. (d) The promotion of mutual help and understanding between communities. **(iii) What does the concept of Principled Distance refer to in the context of secularism?** (a) The complete separation of religion from the state (b) The state's equal intervention in all religions to promote harmony (c) The flexible distance the state maintains from all religions, involving intervention only when necessary (d) The banning of all religious practices in public spaces **(iv) What is the meaning of the term 'Apartheid'?** (a) Social Upliftment (b) Social Discrimination (c) Economic Upliftment (d) Economic Discrimination	**(4x1=4)**	Information
2	**VERY SHORT ANSWER TYPE QUESTIONS:** What kind of Secularism Jawaharlal Nehru wanted? **OR** Define in your word about Theocratic state.	**2**	Understanding

3	**SHORT ANSWER TYPE QUESTIONS** Explain the concept of Principled distance. **OR** Mention some characteristics of secularism?	**4**	HOTS

4	**Read the extract carefully and answer the questions that follow:**
	Let us look at a very different kind of secularism practised in Turkey in the first half of the twentieth century.
	This secularism was not about principled distance from organised religion, instead it involved, active intervention in and suppression of religion. This version of secularism was propounded and practised by Mustafa Kemal Ataturk. He came to power after the First World War. He was determined to put an end to the institution of Khalifa in the public life of Turkey. Ataturk was convinced that only a clear break with traditional thinking and expressions could elevate Túrkey from the sorry state it was in. He set out in an aggressive manner to modernise and secularise Turkey
	Questions:
	  (i) What was Ataturk's main objective in modernising Turkey?
	  (ii) How was Turkish secularism different from the idea of principled distance from religion?
	  (iii) How did Ataturk intervene in matters of religion?
		(2+1+1=4)	Interdisciplinary & Analytical Thinking

5	**LONG ANSWER TYPE QUESTIONS:** Critically examine the Indian secularism by giving the suitable examples.	**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):** Secularism is invaluable in India **Reason (R):** India is a multi-religious & multi-cultural country. **(ii) Assertion (A):** India is a secular state **Reason (R):** Secularism dictates that there is strict separation of state and religion.	**(1X2=2)**	CBQ Information Real life application Based on CBQ Understanding Based CBQ
7	**VERY SHORT ANSWER TYPE QUESTIONS:** In which way religious discrimination can be prevented in secular states.	**2**	Application based CBQ

	OR Elucidate the western model of secularism with example from book.		Real life relevance based CBQ Understanding based CBQ
8	**SHORT ANSWER TYPE QUESTIONS:** "Some concerning examples of religious discrimination remind us to continuing importance of secularism". Justify the statement. **OR** What were the main factors which were responsible for the rise of Indian Nationalism?	**4**	Critical thinking based Question
	Give three most stark examples from India to prove that in reality several forms of exclusion and discrimination continue to persist even in a declared secular state of India?	**4**	Evaluation based CBQ

9	**Study the cartoon carefully and answer the questions that follow**:
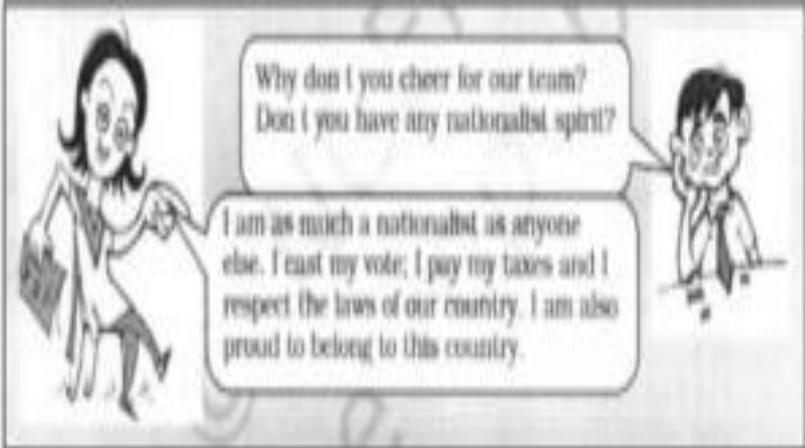	
	Questions:
	    (i) How Nationalism is shown in the cartoon?
	
	    (ii) What do people usually associate with Nationalism?
	    (iii) What are the qualities of a good citizen in India?
		(1+1+2=4)	Critical and Analytical thinking

10	**LONG ANSWER TYPE QUESTION:** Mention the constitutional provisions in India to promote secularism.	**6**	Analytical Skill based CBQ

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Subject: Psychology   Assignment No.: 8
Allotment Date: 31January 2026   Marks: 20+20=40

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.	1	Evaluation

	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. 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

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

Subject: NCC   Assignment No.: 8
Allotment Date: 31January 2026   Marks: 20+20=40

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 c) Telephone d) Fax	1	Remembering
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	1	HOT

	(b) Bullet (d) Round		
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	1	Reasoning

	b) Ground not visible to enemy		
	c) Ground with no vegetation		
	d) Frozen land		
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

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Subject: Computer Science   Assignment No.: 8
Allotment Date: 31January 2026   Marks: 20+20=40

PART I

BASIC (GENERAL QUESTIONS)

Q No.	Questions Section-A (20Marks)	Marks	Nature
1	Which of the following best describes a variable in Python? a) A fixed value that cannot be changed b) A reserved keyword c) A name that refers to a value stored in memory d) A function that stores data	1	Understanding
2	What will be the output of the following code? x = 10 y = 3 print(x // y) a) 3.33 b) 3 c) 3.0 d) Error	1	Understanding
3	Which data type is used to store a sequence of characters in Python? a) int b) list c) str d) tuple	1	Understanding
4	Which statement is true about the if statement in Python? a) It always executes b) It executes only when the condition is true	1	Understanding

	c) It executes when the condition is false		
	d) It is used only with loops		
5	Which keyword is used to check multiple conditions in Python? a) if b) else c) elif d) switch		Remembering

6	What will be the output of the following code?
	
	x = 5
	
	if x > 10:
	
	  print("A")
	
	else:
	
	  print("B")
	
	a) A
	
	b) B
	
	c) No output
	
	d) Error
		1	Evaluation

7	How many times will the loop execute? for i in range(2, 10, 2): print(i) a) 2 times b) 3 times c) 4 times d) 5 times	1	Evaluation
8	Which loop is best suited when the number of iterations is known in advance? a) while loop b) infinite loop c) for loop d) nested loop	1	Understanding/Analyse
9	Which of the following code snippets will print numbers from 1 to 5? a) for i in range(1,5): print(i)	1	Problem Solving

	b) for i in range(1,6): print(i) c) for i in range(5): print(i) d) while i <= 5: print(i)		
10	Why is a dictionary termed as an unordered collection of object?	2	Remembering
11	Explain the use of if-elif-else statement with a suitable example.	3	Understanding
12	Differentiate between while loop and for loop. (Any three points)	3	Remembering
13	Write a Python program to check whether a given number is **even or odd** using a conditional statement.	3	Understanding
	PART II **STANDARD (COMPETENCY BASED QUESTIONS)** **(20Marks)**		
	Q 14 and 15 are ASSERTION AND REASONING based questions. Mark the correct choice as (a) Both A and R are true and R is the correct explanation for A (b) Both A and R are true and R is not the correct explanation for A (c) A is True but R is False (d) A is false but R is True		
14	**Assertion (A):** In Python, the range() function is commonly used with a for loop to control the number of iterations. **Reason (R):** The range() function generates a sequence of numbers.	1	HOT
15	**Assertion (A):** A while loop is preferred when the number of iterations is known in advance. **Reason (R):** A while loop executes the block of code as long as the condition remains true.	1	HOT
16	**Assertion (A):** Indentation is mandatory in Python for defining blocks of code. **Reason (R):** Python uses indentation instead of curly braces {} to group statements.	1	Critical Thinking and Problem Solving
18	Explain the significance of indentation in Python. Why is it important?	3	Analytical Thinking
19	Write a Python program to print all even numbers between 1 and 20 using an iterative construct.	3	Logical Reasoning
20	Differentiate between break and continue statements in Python. (Any three points)	3	Logical Reasoning
21	Explain the working of a for loop in Python with the help of an example.	2	Critical Thinking and Problem solving

22	Write a Python program that accepts a number from the user and prints: • whether the number is **positive, negative, or zero**, and • prints all numbers from **1 to that number** using an appropriate loop. Explain the logic of the program step by step.	5	Critical Thinking and Problem solving

Subject: Physical Education   Assignment No.: 8
Allotment Date: 31January 2026   Marks: 20+20=40

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: Information Technology
Allotment Date: 31January 2026

Assignment No.: 8
Marks: 20+20=40

S.NO.	QUESTIONS	MARKS	NATURE
1	i. BIOS stands for a) Basic Input Output system b) Binary Input output system c) Basic Input Off system d) all the above ii. Which of the following is not the characteristic of ROM: a) It is generally used in startup operations of computer. b) It is a non-volatile c) Read Only Memory d) It is generally placed between CPU and Primary memory and acts as a buffer. iii. The software designed to perform a specific task: a) Synchronous Software b) Package Software c) Application Software d) System Software iv. A device used to connect dissimilar networks is called	1m x 10=10	Information

a) hub

b) switch

c) bridge

d) gateway

v. NIC stands for_____.

 a) new internet card

b) network internet card

c) net interact card

d) network interface card

(vi) In the table teacher, Riya doesn't want repeated values in column marks. Rewrite the correct command.

SELECT MARKS FROM TEACHER;

(vii) _____loop run at least once.

(vii) What is a byte code?

(viii) The size of double datatype in java is of _____bit.

(xi) Which component is used to compile, debug and execute java program?

   (a). JVM   (b) JDK   (c). IDE   (d). JRE

(x) _____is a set of attributes in a relation, for which no two tuples in a relation state have the same combination of values.

        a) Superkey   b) Candidate Key

        c) Primary Key   d) Candidate Key

2	(i) What will be the output of the Java code given below?
	
	      int a = 2;
	      int b = 3;
	      b - = a;
	      System.out.println(b);
	
	(ii) What is the need of JVM?
	
	(iii) How can you write multiline comments in java program?
	
	(iv) What is the difference Update and Alter Table command.
		2m X 4 = 8	Understanding and Problem Solving

3	(i) What is the difference between Primary Key and Foreign Key Constraints? (ii) Explain the Logical Operators used in Java. (iii) What is relational data model? (iv) Explain the different topologies used for networking. (v) Explain the ORDER BY Clause used in SQL.	2m X 5 = 10	Critical Thinking
4	(i) Explain the primitive data type of Java. (ii) Explain all the selection statements of Java. with systex and example. (iii) (a) Write an SQL command to create a table TravelAgency whose description is given below :	4mX3= 12	HOT

AgentCode	Char(4)	Primary Key
AgentName	Varchar(20)	Not Null
Location	Varchar(25)	
Package	Varchar(30)	
Charges	Decimal	

(b) Write the command to add a new row to a table TravelAgency with the following data :

      ("A005","Raman","Grover Travel","Domestic",8000)

(c) Write a query to remove the column Package from the table TravelAgency.