



St. Mary's School, Dwarka
Holiday Homework 2026
Class: XI
Worksheet 3

General Instructions:

- 1) The work should be done neatly and systematically.
- 2) The given questions are to be done in your respective subject notebooks.
- 3) Attempt all questions

Subject: English Core

No. of questions: 8

Max.Marks:25

Q1. Read the passage given below.

1. In earlier times, people believed that success depended mainly on physical strength or academic brilliance. However, modern psychologists argue that resilience plays an equally important role in shaping a person's future. Resilience is the ability to recover from difficulties, adapt to changing situations, and continue moving forward despite setbacks. Individuals who possess resilience are often able to handle pressure more effectively and maintain confidence even during uncertain times.
2. Life today presents numerous challenges for young people. Academic expectations, career competition, and the pressure to appear successful on social media frequently create feelings of insecurity and self-doubt. Many students compare themselves constantly with others and become discouraged when they fail to meet unrealistic standards. Such comparisons often reduce self-esteem and increase anxiety.
3. Experts believe that resilience can be developed gradually through healthy habits and supportive relationships. Activities such as reading, sports, meditation, and creative hobbies help individuals relax and regain emotional strength. Spending time with understanding family members and trustworthy friends also provides encouragement during difficult periods. In addition, learning from failure instead of fearing it helps people become mentally stronger and more independent.
4. Resilient individuals usually display optimism and patience. They do not allow temporary disappointments to destroy their confidence. Instead, they focus on improvement and continue working steadily toward their goals. As a result, they are often better prepared to face the uncertainties of life and achieve long-term success.

Based on your understanding of the passage, answer the following questions.

(1×5 = 5)

(i) According to the passage, resilient people generally —

- a) avoid difficult responsibilities completely
- b) lose confidence after small failures
- c) remain determined during hardships
- d) depend entirely on external support

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(ii) Which statement is TRUE according to the passage?

- a) Social media always improves confidence levels.
- b) Comparisons with others may create insecurity.
- c) Resilience can develop without personal effort.
- d) Failure should be ignored in every situation.

(iii) Mention any two ways suggested in the passage to develop resilience.

(iv) Find the word from the passage that means the same as “uncertainty about oneself.” (Para 2)

- a) resilience
- b) patience
- c) insecurity
- d) optimism

(v) Choose the option that best describes the meaning of ‘setbacks’ as used in the passage.

- a) sudden achievements and rewards
- b) difficult situations and failures
- c) planned journeys and experiences
- d) personal talents and qualities

Q2. You are the Shikha/ Sarthak, Cultural Secretary of your school. Draft a speech in about 120–150 words to be delivered on the occasion of World Environment Day on the topic ‘Small Steps Towards a Greener Future.’ (5)

Do as directed.

Q3. Rearrange the parts of the sentence in the correct order. (1)

- A. after completing the final round successfully
- B. the young athletes received loud applause
- C. from the audience and the judges
- D. despite facing intense competition throughout the event

Options:

- a) D - B - A - C
- b) A - D - B - C
- c) B - D - A - C
- d) C - A - B - D

Q4. Choose the correct options to fill in the blanks. ($\frac{1}{2} \times 4 = 2$)

(a) _____ information was shared during the seminar.

- A. Many
- B. Several
- C. Much
- D. Few

(b) Only _____ students volunteered for the cleanliness drive.

- A. little
- B. few

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C. much

D. every

(c) Has _____ submitted the assignment yet?

A. anyone

B. nobody

C. none

D. everyone

(d) You can sit on _____ side of the table.

A. little

B. either

C. several

D. many

Q5. Fill in the blanks with the correct form of the word given in brackets. ($\frac{1}{2} \times 4 = 2$)

Yesterday evening, Neha(a) _____ (complete) her homework before dinner. While she(b) _____ (revise) for the test, her brother(c) _____ (play) music loudly in the next room. Their mother(d) _____ (ask) him to lower the volume immediately.

Q6. Why does the poet's mother laugh while looking at the photograph in the poem 'A Photograph'?

Answer in 40–50 words.

(3)

Q7. What does the poet mean by the phrase "silence silences" in the poem 'A Photograph'? Answer in 80 words.

(3)

Q8. Design a Memory Scrapbook Page based on the poem 'A Photograph'.

(5)

Your scrapbook page should include:

- A suitable title for the page
- A hand-drawn or pasted picture related to the poem
- Three important memories or moments from the poem
- Two emotions reflected in the poem with examples
- A short personal reflection on why memories are important
- Creative use of colours, borders, or symbols connected to time and memories

No. of questions: 10

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प्रश्न 1 निम्नलिखित पद्यांश पर आधारित प्रश्नों के उत्तर निर्देश के अनुसार दीजिए:

नील गगन की छाँव में बैठी, निज हरियाली ओढ़े,
पर्वत मस्तक ऊँचा करके, देख रहे नभ की निर्भीक।
कल-कल करती नदियाँ गाती, पर्वत से मैदानी पथ तक,
जीवन का यह अविचल धारा, जैसे अमृत का अभिषेक।
हरियाली के आँचल में है, रंग-बिरंगे फूलों का वास,
मीनी-मीनी खुशबू उनकी, महकाती है सारा आकाश।
पक्षी चहक-चहक कर गाते, भोर का सुंदर प्यारा गान,
प्रकृति की इस लीला प्यारी, देख भूलते लोग जहान।
पर ऐ मानव! तूने कैसा, जाल बिछाया बंजर का?
हरियाली को छीन रहा तू, रक्षक होकर भक्षक बन।
वृक्षों को कटवा कर तूने, धरा का रूप बिगाड़ा है,
सूख रही नदियाँ, प्यासी हैं, नभ में धुआँ-धुआँ सा तन।
चेत सको तो चेत रे प्राणी, समय अभी भी बाकी है,
प्रकृति का यह कोप भयानक, लाएगा विनाश की घड़ी।

(1×5=5)

(i) 'पर्वत मस्तक ऊँचा करके' में प्रकृति का कैसा रूप दर्शाया गया है?

- (क) डरपोक
- (ख) साहसी
- (ग) उदास
- (घ) शांत

(ii) कवि ने मानव को क्या बनकर प्रकृति को नुकसान पहुँचाने का दोषी माना है?

- (क) रक्षक
- (ख) पालक
- (ग) भक्षक
- (घ) सृजक

(iii) प्रकृति के सौंदर्य को देखकर लोग क्या भूल जाते हैं ?

- (क) समाज को
- (ख) भविष्य को
- (ग) वर्तमान को
- (घ) संसार को

(iv) "पर ऐ मानव! तूने कैसा, जाल बिछाया बंजर का?" इस पंक्ति के माध्यम से कवि ने मानव की किन क्रियाओं पर चोट की है और उसके क्या दुष्परिणाम हो रहे हैं?

(v) प्रकृति का वर्णन करते हुए कवि ने उसे 'वरदान' क्यों कहा है?

प्रश्न 2 अनुस्मारक या स्मरण पत्र से आप क्या समझते हैं?

(5×1=5)

प्रश्न 3 संचार चक्र बनाते हुए इसके तत्वों का वर्णन कीजिए।

(2×2 = 4)

प्रश्न 4 जनसंचार के कारण दुनिया एक गाँव में बदल गई है? स्पष्ट कीजिए।

निम्नलिखित प्रश्नों के उत्तर दीजिए :

(1½×4 = 6)

प्रश्न 5 मुंशी वंशीधर का चरित्र चित्रण कीजिए।

प्रश्न 6 मियाँ नसीरुद्दीन के पास जाने के पीछे लेखिका का क्या उद्देश्य था?

प्रश्न 7 कबीर ने ईश्वर के विषय में क्या बताया है?

प्रश्न 8 कविता में कवि ने अपनी माँ के विषय में क्या बताया है?

प्रश्न 9 लेखक कब से स्वयं का लता मंगेशकर के संगीत से जुड़ाव अनुभव करने लगा?

(1×1 = 1)

प्रश्न 10 परियोजना कार्य : पाँच प्रकार की रोटियों के नाम लिखकर उनके बनाने की विधि बताते हुए एक स्कैप बुक बनाइए।

(4×1=4)

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Subject: Mathematics

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Q.1) Choose the correct option:

1x2=2

a) A pendulum swings through an angle of 42° in describing an arc of length 55cm. What is the length of the pendulum?

- i) 56 cm ii) 60 cm iii) 75 cm iv) 88 cm

b) The angles of a quadrilateral are in A.P., and the greatest angle is double the least. What is the measure of the least angle?

- i) $\frac{\pi}{2}$ ii) $\frac{\pi}{3}$ iii) $\frac{\pi}{6}$ iv) $\frac{\pi}{4}$

Q.2) If A is any set, then prove that $A \subset \emptyset \Leftrightarrow A = \emptyset$

2

Q.3) Express the following in a + ib form:

2

- i) $(\sqrt{6} + 5i)(\sqrt{6} - i\frac{1}{5})$ ii) $(\frac{1}{2} + 2i)^3$

Q.4) Find the value of $\tan(-480^\circ)$ and $\operatorname{cosec} 1320^\circ$.

2

Q.5) If $A = \{2, 4, 6, 8, 10, 12\}$ and $B = \{3, 6, 9, 12, 15\}$, then show that $(A - B)$, $(A \cap B)$ and $(B - A)$ are disjoint sets.

2

Q.6) Using properties of sets, show that $A = (A \cap B) \cup (A - B)$.

2

Q.7) Find real θ such that $\frac{3+2i \sin \theta}{1-2i \sin \theta}$ is real.

2

Q.8) If $\tan x = \frac{3}{4}$, $\pi < x < \frac{3\pi}{2}$, find the value of $\sin \frac{x}{2}$, $\cos \frac{x}{2}$ and $\tan \frac{x}{2}$.

3

Q.9) Show that $\frac{(1+i)(3+i)}{(3-i)} - \frac{(1-i)(3-i)}{(3+i)} = \frac{14}{5}i$.

3

Q.10) Prove that:

5

i) $\frac{\cos x}{1+\sin x} = \tan \left(\frac{\pi}{4} - \frac{x}{2} \right)$

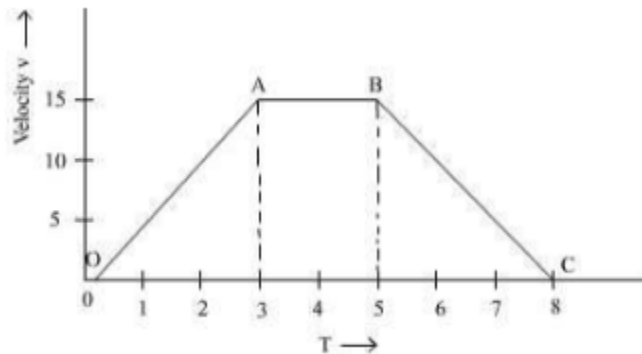
ii) $\sqrt{2 + \sqrt{2 + \sqrt{2 + 2 \cos 8x}}} = 2 \cos x$.

Subject: Physics

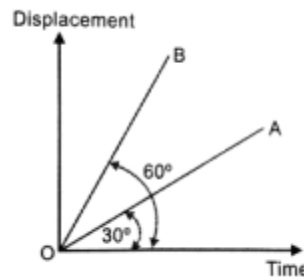
No. of questions: 10

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- Q1. How many meter in 1 second will be covered by a vehicle moving with a speed of 18 km/h? (1)
- Q2. A ball is thrown vertically upwards with a velocity of 20ms^{-1} from the top of a multi storey building. The height of the point where the ball is thrown is 25 m from the ground. How long will it be before the ball hits the ground? Take $g=10\text{ms}^{-2}$. (2)
- Q3. The velocity – time graph for a vehicle is as shown. Draw acceleration – time graph from it. (2)



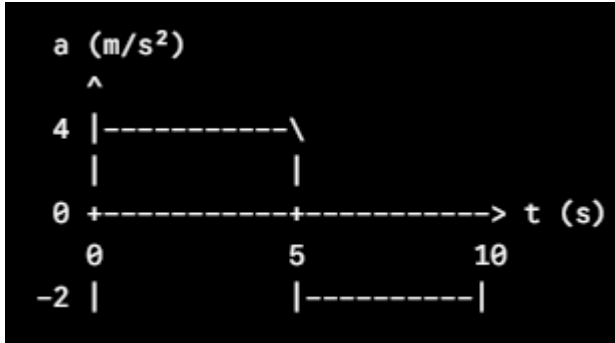
- Q4. Two straight lines drawn on the same displacement time graph makes angle 30 degree and 60 degree with time- axis respectively. Which lines represents greater velocity? What is the ratio of the two velocities? (2)



- Q5. A driver takes 0.20s to apply the brakes after he sees a need for it. This is called the reaction time of the driver. If he is driving a car at a speed of 54km/h and the brakes causes a deceleration of 6.0 m/s^2 , find the distance travelled by car after he sees the need to put the brakes on. (3)
- Q6. When an earthquake occurs underwater, it creates surface waves. The velocity v of these shallow water waves is hypothesised to depend on the wavelength λ , the density of the fluid ρ , and the acceleration due to gravity g . Use the method of dimensional analysis to derive the exact relationship between these quantities. Does the density of the fluid actually affect the wave speed? Explain your conclusion. (3)

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- Q7. An engineered robotic arm is programmed with two directional displacement vectors. $A = 2i - j + 3k$ and $B = -i + 3j + k$. Find the precise angle between these two mechanical vectors using dot product of vectors. (3)
- Q8. An electric test vehicle starts from rest at a checkpoint. Its localized acceleration a plotted against time t over a 10-second test window yields the multi-stage graph below: (3)



Plot the following two graphs

- (i) Velocity (v) vs Time (t)
- (ii) Displacement(s) vs Time (t)
- Q9. Medical engineers are designing a narrow catheter pipe to deliver synthetic blood. The volume flow rate V (volume of liquid flowing out per second) depends on the coefficient of viscosity n of the fluid, the internal radius r of the catheter, and the pressure gradient across the pipe (P/L). Using dimensional analysis, derive an expression for the volume flow rate. Take $K = \pi/8$ (3)
- Q10. An autonomous delivery truck travelling due north at 25m/s along a main highway turns smoothly onto a connecting side road heading directly east. The transition takes exactly 10 seconds to complete. By the end of this 10-second turn, the truck has adjusted its speed to 15m/s due east. Draw a vector representing the initial velocity, final velocity, and change in velocity. Calculate the magnitude and geometric direction of the truck's average acceleration vector during this turn. (3)

Activity:

ADAPTIVE CRUISE CONTROL ADJUSTS YOUR SPEED

1 Set the cruising speed just as you would for standard cruise control.

2 Your car uses a camera or sensors (or both) to detect when another car is ahead.

3 Adaptive cruise control automatically reduces your speed to maintain a gap between cars.

4 When the lane ahead clears, your car resumes its cruising speed.

The diagram shows a driver's perspective from the car. The dashboard displays a speedometer at 55 mph and a wheelchair icon, indicating ACC is active. A car ahead is shown on the road, with sensor beams from the driver's car detecting it. The car's speed is shown decreasing to maintain a safe distance.

A car in cruise control mode moves with a constant velocity of 25 m/s at an angle of 37° north of east.

- (a) Find the horizontal and vertical components of the velocity.
- (b) Calculate the displacement of the car after 40 seconds.

Subject: Chemistry

No. of questions: 10

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Section A: Multiple Choice Questions**(1 Mark each)**1. In the reaction $\text{Zn} + 2\text{H}^+ \rightarrow \text{Zn}^{2+} + \text{H}_2$, which species is being oxidized?(a) H^+ (b) Zn (c) Zn^{2+} (d) H_2 2. The oxidation state of Oxygen in OF_2 is:

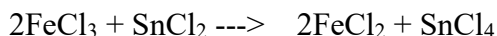
(a) -2 (b) -1 (c) +2 (d) +1

Section B: Very Short Answer Questions**(2 Marks each)**

3. Define 'Redox Reactions' in terms of electron transfer.

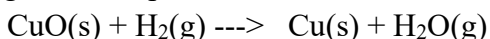
4. Calculate the oxidation number of Phosphorus in H_3PO_4 and PH_3 .

5. Identify the oxidant and reductant in the following reaction:

**Section C: Short Answer Questions****(3 Marks each)**

6. Discuss the 'Stock Notation' with two examples.

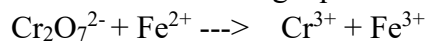
7. Using the concept of oxidation number, show that the following is a redox reaction:

8. Arrange the following in decreasing order of oxidation state of Nitrogen: NO_2 , NH_3 , N_2 , HNO_3 .

9. What are Disproportionation reactions? Give one example. Mention the oxidation state.

Section D: Long Answer Question

10. (a) Balance the following equation by the Half Reaction Method in an acidic medium:



3

(b) Assign oxidation numbers to the underlined elements: $\underline{\text{Cr}_2\text{O}_7^{2-}}$ and $\underline{\text{KMnO}_4}$.

2

No. of questions: 10

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Q1 Write Python Expressions for the following:

(1 × 5 = 5)

- a) to calculate the square of a number x.
- b) to check whether a number n is greater than 10 and less than 50.
- c) using or to check whether a character ch is 'A' or 'a'.
- d) using not to check whether a number x is not equal to 100.
- e) to calculate average of three numbers a, b, and c.

Q2 Predict the output:

(1 × 5 = 5)

- a)

```
a = 10
b = 20
print(a > 5 and b < 30)
```
- b)

```
x = 5
print(x > 10 or x < 20)
```
- c)

```
a = True
b = False
print(not a)
print(a and b)
```
- d)

```
num = 15
print(num % 2 == 0 or num > 10)
```
- e)

```
x = 8
print(not(x > 5 and x < 10))
```

Write programs in Python for the following:

(5 × 2 = 10)

- Q3 Write a program to check whether a number lies between 1 and 100 using and.
- Q4 Write a program to check whether a character entered is a vowel using or.
- Q5 Write a program to check whether a person is eligible for voting (age ≥ 18) using logical operators.
- Q6 Write a program to check whether a number is not divisible by 5 using not.
- Q7 Write a program to check whether a student has passed if marks are greater than or equal to 40 in both Math and Science using and.

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- Q8 A student stores marks using separate variables instead of a list. What disadvantage may occur?
(1)
- Q9. Why are strings considered ordered data types?
(2)
- Q10. A student wants data that cannot be modified after creation. Which data type should be used?
(2)

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Subject: Biology

No. of questions: 10

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- Q1. Define Taxonomy and Systematics. How do they differ? (1)
- Q2. What are Methanogens? Where are they typically found, and what is their commercial importance? (1)
- Q3. Distinguish between Syngamy and Triple Fusion in the context of Angiosperms. (2)
- Q4. What are Liverworts? Name the asexual reproductive structures found in *Marchantia*. (2)
- Q5. Define Radula. In which phylum is this organ found and what is its function? (2)
- Q6. Describe the three basis of classification in the Animal Kingdom: (3)

1. Levels of Organisation
2. Body Symmetry
3. Coelom formation

- Q7. List three unique characteristics of Mammals that distinguish them from other vertebrates. (3)

- Q8. Read the passage and answer the following questions:

The Pteridophytes include horsetails and ferns. They are the first terrestrial plants to possess vascular tissues—xylem and phloem. In pteridophytes, the main plant body is a sporophyte which is differentiated into true root, stem, and leaves. These organs possess well-differentiated vascular tissues. The leaves in pteridophyta are small (microphylls) as in *Selaginella* or large (macrophylls) as in ferns.

1. Why are Pteridophytes evolutionarily significant? (1)
2. Differentiate between Microphylls and Macrophylls. (1)
3. What is the dominant phase in the life cycle of a fern? (1)
4. Where are the spores produced in Pteridophytes? (1)

- Q9. Read the passage and answer the following questions:

Arthropoda is the largest phylum of Animalia which includes insects. Over two-thirds of all named species on earth are arthropods. They have organ-system level of organisation. They are bilaterally symmetrical, triploblastic, segmented and coelomate animals. The body of arthropods is covered by a chitinous exoskeleton.

1. What is the chemical composition of the arthropod exoskeleton? (1)
2. Name the respiratory organs found in aquatic arthropods. (1)

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Q10. Explain the Five Kingdom Classification proposed by R.H. Whittaker. Discuss the criteria used by him and list the kingdoms with one major characteristic of each. (5)

Subject: Legal Studies

No. of questions: 10

M.M. 25

- Q1. Please explain the significance of the green carpet in the Lok Sabha and the red carpet in the Rajya Sabha. (2)
- Q2. Please explain the composition of Legislature by stating the number of seats allocated to the Lok Sabha and the Rajya Sabha. (2)
- Q3. Which States in India have a Bicameral Legislature and why? (2)
- Q4. Please explain the meaning of the term 'Delegated Legislation'. Further, please discuss the importance and need of Delegated Legislation in India. (2)
- Q5. What is the 'Collective Responsibility' of the cabinet ministers in the Parliamentary form of Democracy? Explain the term in relation to Article 75(3) of the Constitution of India. (2)
- Q6. What is the power of Judicial Review of the Indian Judiciary? Do you think the power of Judicial Review is essential for maintaining separation of powers between various organs of the State?(3)
- Q7. What do you understand by the term 'Judicial Activism'? Do you think that in a Democracy like India, the Supreme Court and the High Courts should exercise such powers sparingly or liberally? Please support your answers with reasons. (3)
- Q8. Please explain what is a 'Private Member's Bill' and what is a 'Government Bill'? Further, please explain in which house can a Money Bill be introduced in and why? Substantiate your answer by relying on the relevant provisions of the Constitution of India. (3)
- Q9. Please explain at least three general functions of the 'Executive' as an organ of the Government (3)
- Q10. Does the Parliament of India perform any judicial functions? If yes, explain the judicial functions performed by the Parliament of India. Furthermore, please discuss whether the Parliament of India should perform any judicial functions or should the said functions be performed by the Judiciary? Please provide reasons for your answers. (3)

Subject: Business Studies

No. of questions: 10

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Q.1 Anaya imports raw silk from China, processes it into scarves in India, and sells them to boutiques in Dubai. This trade is known as: (1)

- a) Import Trade
- b) Export Trade
- c) Entrepot Trade
- d) Internal Trade

Q.2 "Z-Tech Solutions" is owned by 10 members. One member goes insane, but the business continues unaffected. This is due to: (1)

- a) Unlimited Liability
- b) Perpetual Succession
- c) Mutual Agency
- d) Karta's Power

Q.3 **Assertion (A):** Business risk is solely caused by natural calamities like floods and earthquakes.

Reason (R): Factors such as changes in consumer tastes and employee strikes can also lead to potential losses in business.

Choose the correct option:

(1)

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
- (b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)
- (c) Assertion (A) is true, but Reason (R) is false
- (d) Assertion (A) is false, but Reason (R) is true

Q.4 Converting raw sugarcane into sugar in a mill is an example of: (1)

- a) Primary Industry
- b) Genetic Industry
- c) Secondary Industry
- d) Tertiary Industry

Q.5 **Assertion (A):** Analyzing the competitive landscape is an important step before starting a business.

Reason (R): Understanding the strengths and weaknesses of existing players helps in formulating effective business strategies.

Choose the correct option:

(1)

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
- (b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)
- (c) Assertion (A) is true, but Reason (R) is false
- (d) Assertion (A) is false, but Reason (R) is true

Q.6 Identify the 'Hindrance' being removed in the following cases:

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- (i) A farmer in Punjab sells wheat to a consumer in Chennai.
- (ii) A businessman stores apples in a cold storage to sell in the off-season.
- (iii) A trader takes a bank loan to expand his shop. (3)

Q.7 Rahul and Sachin are partners. Rahul acts as an agent for Sachin, and his actions bind Sachin. What is this concept called? Explain its significance. (3)

Q.8 A group of 20 low-income women started a "Grih Udyog" to sell handmade papads. They pool their small savings and aim for mutual help rather than maximizing profit.

- (a) Identify the form of business organization.
- (b) State any three features of this form. (4)

Q.9 You are a risk consultant. Analyze these two startups:

Startup A: Selling seasonal umbrellas.

Startup B: Selling high-end fashion jewellery.

Which one faces higher Economic Risk and why? Mention two factors that create business risk for both. (4)

Q.10 "Mr. Shanti wants to start a large-scale manufacturing unit for Solar Panels. He requires ₹50 Crores and wants to protect his personal property from business debts."

Suggest the most suitable form of organization. Elaborate on 4 characteristics of this form that make it superior to a Partnership for this specific venture. (6)

Subject: Accountancy

No. of questions: 10

M.M. 25

Q.1 A design studio enters into a corporate branding contract with a client. The contract guarantees total fee billing of ₹15,00,000 over a 3-year timeline. In the first year, the studio completes the conceptual logo phase, which represents 20% of the total contract value. The client pays an initial advance of ₹5,00,000. How much revenue should the studio record in its Year 1 Income Statement under the Accrual and Revenue Recognition rules? (1)

- a) ₹15,00,000
- b) ₹5,00,000
- c) ₹3,00,000
- d) Zero, until the full 3-year contract ends.

Q.2 A manufacturing plant buys raw compounds worth ₹1,00,000 on credit. 10% of these materials turn out to be defective and are returned to the supplier before any payment is made. How does this transaction affect the buyer's basic accounts? (1)

- a) It creates a Purchase Return of ₹10,00,000.
- b) It represents a Purchase Return / Return Outward of ₹10,000, reducing Creditors and Inventory by ₹10,000 each.
- c) It is recorded as a Sales Return of ₹10,000.
- d) It increases Capital reserves by ₹10,000.

Q.3 **Assertion(A):** Accrual basis of accounting is recognized by the companies Act-2013 to maintained all accounts by every company.

Reasons (R): Accrual basis of accounting does not give a true and fair view of profit or loss of the business for recording cash as well as credit transactions.

Choose which of the following is correct:

- a) (A) is true, but (R) is false
- b) (A) is false, but (R) is true
- c) Both (A) and (R) are true and (R) is the correct explanation of (A)
- d) Both (A) and (R) are true and (R) is not the correct explanation of (A)

Q.4 A financial analysis firm purchases data forecasting software for ₹4,00,000. The software license is valid for 2 years. The firm's accountant records the entire ₹4,00,000 as an administrative expense in the first month to show lower profits for the period. Which core concept does this practice violate? (1)

- a) Materiality Principle
- b) Money Measurement Assumption
- c) Matching Principle
- d) Business Entity Principle

Q.5 An electronics store sells a premium TV system for ₹1,20,000 cash. The unit had an original cost price of ₹95,000. What is the dual-entry effect on the components of the accounting equation? (1)

- a) Cash increases by ₹1,20,000; Capital increases by ₹1,20,000.
- b) Cash increases by ₹1,20,000; Stock decreases by ₹95,000; Capital increases by ₹25,000.
- c) Cash increases by ₹25,000; Stock decreases by ₹95,000.
- d) Debtors increase by ₹1,20,000; Capital increases by ₹25,000.

Std. XI Worksheet 3

Q.6 A real estate company owns a plot of land bought for ₹10 Lakhs in 1995. The current market values the plot at ₹2 Crores. The company wants to secure a major business expansion loan. The director suggests updating the land's value to ₹2 Crores on the Balance Sheet to reflect its current market worth and look financially stronger. Evaluate whether the accountant can implement this update. (3)

Q.7 Rahul , the proprietor of M/S. R.K. & CO. purchased an air-conditioner and installed it in his residence. The payment was made by issuing a cheque from the account of M/S. R.K. & CO. The accountant debited the Drawings Account with the amount whereas Rahul is of the view that it should be debited to the Fixed assets account. In your view , who is correct and why? (3)

Q.8 Explain how a business liability can be settled without causing any physical outflow of cash assets from the business enterprise. Give example using the accounting equation framework to support your answer. (4)

Q.9 Determine if the following are assets, liabilities, revenue or expense : (4)

- | | | |
|---------------------------|-----------------------|--------------|
| (a) Machinery | (b) outstanding rent | (c) creditor |
| (d) salary paid to worker | (e) interest received | (f) sales |
| (g) prepaid expense | (h) depreciation | |

Q.10 Prepare Accounting Equation from the following :- (6)

1. Started operations with a cash investment of ₹6,00,000, manufacturing tools worth ₹4,50,000, and raw material stock worth ₹2,50,000.
2. Rented an industrial workshop and paid a cash premium of ₹3,60,000 for a 3-year advance lease.
3. Purchased additional components from Aero-Component Corp. for ₹2,00,000. The firm paid ₹50,000 via bank transfer and issued a formal promissory note (Bills Payable) for the remaining balance.
4. Sold finished equipment costing ₹1,80,000 to a client for ₹2,45,000. The client paid ₹1,00,000 cash immediately, with the balance on credit terms.
5. Settled the bills payable obligation to Aero-Component Corp. Paid ₹1,48,000 cash in full settlement of the ₹1,50,000 liability.
6. Paid ₹12,000 for routine workshop maintenance. Simultaneously, the owner withdrew raw materials costing ₹15,000 for personal use.

Subject: Economics

No. of questions: 10

M.M. 25

- Q1. Explain the factors affecting elasticity of demand. (2)
- Q2. Write three exceptions of law of demand. (2)
- Q3. What do you mean by consumer's equilibrium? Explain. (2)
- Q4. A consumer has Rs 40 and both goods X and Y are priced at Rs 20 and are available in integer units, (a) Give the bundles that this consumer can afford (b) give the bundles that cost exactly Rs 40. (2)
- Q5. Give reasons for the following statements: (2)
- 1) If the income of a consumer changes and prices of the two goods remain unchanged, a new budget line will be formed which will be parallel to the original line.
 - 2) If the income of the consumer remains unchanged and if the price of goods X rises, intercept of the budget line of Y-axis will remain the same, but on the X-axis it will shift to the left.
- Q6. Giving reasons, comment on the following statements: (3)
- a) A consumer's equilibrium is always formed at a point on the given budget line.
 - b) A consumer's equilibrium will shift to a higher indifference curve with an increase in consumer's income.
- Q7. Giving reasons, state why the following two conditions must be satisfied when a consumer is in equilibrium. (3)
- a) A budget line must be tangent to an indifference curve.
 - b) Marginal rate of substitution must be diminishing.
- Q8. Explain market rate of exchange. (3)
- Q9. Derive the law of demand from the two-commodity equilibrium condition "Marginal Utility = price ratio through utility approach". (3)
- Q10. Describe the assumption which is made to determine the consumer's equilibrium position. (3)

Project Work

- a) Make a project on OPEC. Follow the instructions given below
- Guidelines for Project Work in Economics (Class XI) The objectives of the project work are to enable learners to:
- probe deeper into theoretical concepts learnt in classes XI
 - analyse and evaluate real world economic scenarios using theoretical constructs and arguments
 - demonstrate the learning of economic theory

Std. XI Worksheet 3

- follow up aspects of economics in which learners have interest
- develop the communication skills to argue logically

The expectations of the project work are that:

- learners will complete two projects
- project should be of 3,500-4,000 words (excluding diagrams & graphs), preferably hand-written
- it will be an independent, self-directed piece of study.

Scope of the project:

Learners may work upon the following lines as a suggested flow chart:

Choose a title/topic
Collection of the research material/data
Organization of material/data
Present material/data
Analysing the material/data for conclusion
Draw the relevant conclusion
Presentation of the Project Work 11

Expected Checklist:

- Introduction of topic/title
- Identifying the causes, consequences and/or remedies
- Various stakeholders and effect on each of them
- Advantages and disadvantages of situations or issues identified
- Short-term and long-term implications of economic strategies suggested in the course of research
- Validity, reliability, appropriateness and relevance of data used for research work and for presentation in the project file
- Presentation and writing that is succinct and coherent in project file
- Citation of the materials referred to, in the file in footnotes, resources section, bibliography etc.

Subject: History

No. of questions: 10

M.M. 25

Q1. The political regime known as the 'Principate' was established in 27 BCE by which iconic historical ruler? (1)

- (A) Julius Caesar
- (B) Augustus
- (C) Nero
- (D) Trajan

Q2. What was the 'Denarius' in the highly monetized economic system of the early Roman Empire? (1)

- (A) A land measurement index
- (B) A high-purity silver coin
- (C) A legal labor contract
- (D) An elite infantry unit

Q3. Which major body of water formed the core geographical link and trading highway of the entire Roman Empire? (1)

- (A) The Red Sea
- (B) The Black Sea
- (C) The Mediterranean Sea
- (D) The Caspian Sea

Q4. Which Roman emperor made Christianity the official state religion, transforming its socio-political landscape? (1)

- (A) Diocletian
- (B) Constantine
- (C) Tiberius
- (D) Caligula

Q5. The Roman Empire ran its massive imperial taxation networks primarily through which of the following urban foundations? (1)

- (A) Nomadic military border posts
- (B) Self-governing cities and local urban councils
- (C) Serf-driven isolated plantations
- (D) Direct palace equestrian couriers

Std. XI Worksheet 3

- Q6. Distinguish between the political structures of the Roman Empire and its eastern contemporary, the Iranian (Sasanian) Empire. (3)
- Q7. Analyze the main factors that triggered the severe political and military 'Third-Century Crisis' in Rome. (3)
- Q8. Identify three distinct legal or economic features of Roman society that give it an unexpectedly 'modern' appearance. (3)
- Q9. Describe the role, composition, and unique professional nature of the Roman imperial army. (3)
- Q10. Discuss the social hierarchies of the Roman Empire during the Early and Late Imperial periods. How did the elite maintain their wealth, and what role did administrative urban centers play in taxation and control? (8)

Subject: Political Science

No. of questions: 10

M.M. 25

- Q.1 What are the main functions of the Constitution? (1)
- Q.2 Why right to freedom of Religion is important right? (1)
- Q.3 What are the forms of Violence against Children? Mention a few rights that the Convention on the Rights of the Child provides. (2)
- Q.4 What are the legal and social constraints on Freedom? (2)
- Q.5 What is known as Freedom for the Individual and Freedom for the Nation? (2)
- Q.6 What is meant by:
- a) Natural Inequalities
 - b) Social Inequalities (2)
- Q.7 What is J.S.Mill's criteria of harmful constraints on Freedom? Give a few examples of unreasonable restrictions on Freedom. (2)
- Q.8 What is the importance of equality? (4)
- Q.9 Describe and compare the theories of Free Market and State Intervention. (4)
- Q.10 Discuss the scope of Political Theory. (5)

Subject: Psychology

No. of questions: 10

M.M. 25

- Q1. A counselor studies how adolescents' emotions, thoughts, and social pressures affect their career choices. This reflects psychology as: (1)
- a) Study of soul
 - b) Study of conscious and unconscious experiences with behavior
 - c) Branch of political science
 - d) Study of physical growth only
- Q2. A psychologist interviews disaster survivors to deeply understand trauma experiences while allowing flexible responses. This method is: (1)
- a) Structured questionnaire
 - b) Survey
 - c) Experiment
 - d) Interview method
- Q3. A researcher's personal expectations influence observation records. This threatens: (1)
- a) Objectivity
 - b) Validity
 - c) Sampling
 - d) Reliability
- Q4. Riya notices that her friend performs exceptionally well in studies when praised by teachers, but her performance declines when constantly compared to others. A psychologist explains this using the concept that behavior is influenced by: (1)
- a) Biological maturation
 - b) Environmental and socio-cultural factors
 - c) Reflex action
 - d) Hereditary
- Q5. Assertion (A): Correlation proves cause-and-effect relationship. (1)
Reason (R): Correlation only shows the degree and direction of a relationship.
- a) Both A and R are true
 - b) A is true, R is false
 - c) A is False, R is true
 - d) Both are False
- Q6. Explain the meaning and concept of development. (2)
- Q7. Explain the correlational research in psychology. (4)
- Q8. Meera's grandmother continues learning new digital skills at the age of 68, while Meera herself is developing career goals as a teenager. Their psychologist explains that development is a lifelong process

Std. XI Worksheet 3

and individuals continue to change throughout life. In the context of human development, explain the life-span perspective and how it applies to both Meera and her grandmother. (4)

Q9. Explain the goals of psychological enquiry. How do they help in studying human behaviour? (5)

Q10. "Human behaviour can be controlled and modified through the application of psychological principles." Explain. (5)

Activity : "Myth vs Reality – Psychology Edition"

Write a few common myths people believe about psychology and explain the correct psychological understanding.

Subject: Physical Education

No. of questions: 10

M.M. 25

Chapters: 1. Changing Trends & Career in Physical Education, 2. Olympic Value Education, 3. Yoga

1. Define Sports Training. (2)
2. Write any four advantages of Physical Education. (2)
3. Explain the meaning of Fair Play in Olympics. (2)
4. What is Asana? Explain its importance. (2)
5. Write a short note on Olympic Flag. (2)
6. Explain the changing trends in Physical Education. (3)
7. What are the objectives of Olympic Movement? (3)
8. Describe the procedure and benefits of Vajrasana. (3)
9. Explain any three principles of Yoga. (3)
10. Write a note on career opportunities in Yoga. (3)

Subject: Home Science

No. of questions: 10

M.M. 25

- Q1. True or False: (1)
- a) Home Science is only related to cooking.
 - b) Emotional maturity helps in decision-making.
- Q2. Name any two career opportunities in Home Science. (2)
- Q3. What is emotional maturity? (2)
- Q4. Mention any two signs of a healthy individual. (2)
- Q5. What is peer pressure? How can it affect adolescents? (2)
- Q6. State any four principles of meal planning. (2 marks) (2)
- Q7. Explain how Home Science knowledge helps in better management of resources. (3)
- Q8. Discuss the importance of positive self-talk in personality development. (3)
- Q9. Explain the relationship between food, health, and nutrition. (3)
- Q10. Activity-based: Interview an elderly family member and write any five healthy food habits they followed during their childhood. (5)

Subject: Painting

General Instructions:

- Complete the artwork on an A-2 size ivory sheet.
- Use water colours for colouring.
- Add proper shading, highlights, and shadows to create depth and realism.
- Ensure the drawing follows the principles of perspective and proportion.
- Maintain neatness and overall presentation quality.

Q1. Make a village scene. (10)

Q2. Make a Madhubani painting. (10)