BAL BHARATI PUBLIC SCHOOL
SAMPLE PAPER PT1
(2024-25)
CLASS - XI
SUBJECT- ENGLISH

TIME: 1 HR   **Maximum Marks: 25**

GENERAL INSTRUCTIONS;
1. There are three sections in this question paper. A, B and C
2. Read the instructions properly. All questions are compulsory. Complete one section and then move to the next .
3. There are three printed pages.

SECTION A READING (8 MKS)

Q1. Read the passage and answer the questions that follow.

BALANCING THE SCALES

Artificial intelligence (AI) is making a difference to how legal work is done, but it isn't the threat it is made out to be. AI is making impressive progress and shaking up things all over the world today. The assumption that advancements in technology and artificial intelligence will render any profession defunct is just that, an assumption and a false one. The only purpose this assumption serves is creating mass panic and hostility towards embracing technology that is meant to make our lives easier.

Let us understand what this means explicitly for the legal world. The ambit of AI includes recognizing human speech and objects, making decisions based on data, and translating languages. Tasks that can be defined as 'search-and-find' type can be performed by AI.

Introducing AI to this profession will primarily be for the purpose of automating mundane, tedious tasks that require negligible human intelligence. The kind of artificial intelligence that is employed by industries in the current scene, when extended to the law will enable quicker services at a lower price. AI is meant to automate a number of tasks that take up precious working hours lawyers could be devoted to tasks that require discerning, empathy, and trust-qualities that cannot be replicated by even the most sophisticated form of AI. The legal profession is one of the oldest professions in the world. Thriving over 1000 years; trust, judgement, and diligence are the pillars of this profession. The most important pillar is the relationship of trust between a lawyer and clients, which can only be achieved through human connection and interaction.

While artificial intelligence can be useful in scanning and organizing documents pertaining to a case, it cannot perform higher-level tasks such as sharp decisionmaking, relationship-building with valuable clients and writing legal briefs, advising clients, and appearing in court. These are over and above the realm of computerization.

The smooth proceeding of a case is not possible without sound legal research. While presenting cases lawyers need to assimilate information in the form of legal research by referring to a number of relevant cases to find those that will favour their client's motion. Lawyers are even required to thoroughly know the opposing stand and supporting legal arguments they can expect to prepare a watertight defence strategy. AI, software that operates on natural language enables electronic discovery of information relevant to a case, contract reviews, and automation generation of legal documents.

AI utilizes big-data analytics which enables visualization of case data. It also allows for creation of a map of the cases which were cited in previous cases and their resulting verdicts, as per the website Towards Data Science. The probability of a positive outcome of a case can be predicted by leveraging predictive analytics with machine learning. This is advantageous to firms as they can determine the return on investment in litigation and whether an agreement or arbitration should be considered.

(a) On the basis of your understanding of the above passage, make notes on it using headings and subheadings. Use recognizable abbreviations (wherever necessary- minimum four) and a format you consider suitable. Also supply an appropriate title to it. (5)

(b) Write a summary of the passage in about 80 words. (3)

SECTION B GRAMMAR AND WRITING SKILLS (5 MKS)

Q2. Draft an advertisement to sell you Honda city car as you are moving abroad. Furnish all necessary details.   3 mks

OR

Draft an advertisement as the Senior Manager of an IT firm looking for a suitable receptionist.

Q3. Arrange the given words into a sentene.   ½ x 4=2 mks

    i.   last/ was/ the railway/ Sunday/ particularly/ platform/ busy
    ii.   on the platform/ vendors with/ were/ wares/ their/ selling/ flowers/ sweet-smelling/ the
    iii.   board/ were unsure how they/ the/ We/ would/ train
    iv.   boarded/ they/ caution/ the train with/ However

SECTION C LITERATURE (12 MKS)

Q4. Read the given extract and answer the questions that follow. [½ X4=2 mks]

Where did my childhood go
It went to some forgotten place,
That's hidden in an infant's face,
That's all I know.
    i.   Where does the speaker suggest their childhood has gone?

A) To a distant land

B) To a forgotten place

C) To the future

D) To a book

ii. What does the speaker associate their childhood with?

A) A child's laughter

B) An infant's face

C) A lost toy

D) A family photo

iii.What is the tone of the lines provided?

A) Joyful

B) Nostalgic

C) Angry

D) Indifferent

 iv. What can be inferred about the speaker's feelings towards their childhood?

Q5. Answer any one of the following questions in 40 to 50 mks. [2mks]

A. Why did Gangadhar Pant go to the Forbes building?

B. Who are Cyril and Doris? Why were they taught a lesson by Mrs Fitzgerald?

Q6. Answer any one of the questions in 120 to 140 words. [6 mks]

A. How did Mrs Pearson teach her family members a lesson to ensure they treated her right in the future?

B. Describe the behaviour pf Mrs Pearson's family members. Do you think they were right? How can children show to their mothers that they care for her?

Q 7. Answer any one of the questions in 120 to 150 words.

A. Describe Professor Gaitonde's journey on-board Jijamata express.

B. How was the history of India different in the alternate reality? What impact did hat have on the Country as a whole?

BAL BHARATI PUBLIC SCHOOL

SAMPLE QUESTION PAPER

PT1 (2024-25)

CLASS - XI

SUBJECT- MATHEMATICS

TIME: 45 MIN   **Maximum Marks: 25**

SECTION – A

- All questions are Compulsory.
- All Question in Section A are of One Mark each. Marks of Question in Section B have been indicated on the right side of Questions.

1

1   Find the conjugate of each of the following : $\dfrac{4}{i^5}$

2   Two complex numbers $z_1 = a + ib$ and $z_2 = c + id$ are equal if (a) a = c (b) b = d (c) a = c and b = d (d) none of these
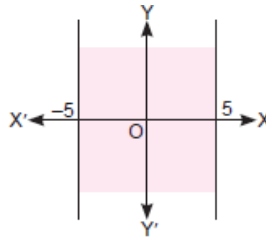
If x < 5, then

3   (a) –x < –5 (b) –x ≤ –5

(c) –x > –5 (d) –x ≥ –5

If $z_1 = a + ib$ and $z_2 = c + id$ are two complex numbers.

4   Then the product $z_1 z_2$ is defined as

(a) ac + bd (b) ac + i(bd) (c) (ac – bd) + i(ad + bc) (d) none of these

5   Inequalities ax + b < 0, ax + b > 0; ax + b ≤ 0; ax + b ≥ 0 are respectively examples of (a) strict inequalities (b) slack inequalities (c) strict inequalities and slack inequalities (d) none of these

6

The inequality representing the following graph is: (a) | x | < 5 (b) | x | ≤ 5 (c) | x | > 5 (d) | x | ≥ 5

7   Expression of $i^{15} - 3i^7 + 2i^{109} + i^{100} - i^{17} + 5i^3$. in the form ($a + ib$) is………………..

8   $\left\{ i^{17} - \left(\dfrac{1}{i}\right)^{34} \right\}^{2}$ Simplified is written as …………………..

9   Solution of the following system of inequation : $\dfrac{4-3x}{5} < \dfrac{2x-5}{4}$ is given as………………

10   Solution of the inequality, $3x - 5 < x + 7$, when x is a Natural Number……………….

SECTION B

11   Express in the form of $a + ib$: $\left(\dfrac{1}{1-4i} - \dfrac{2}{1+i}\right)\left(\dfrac{3-4i}{5+i}\right)$.   2

12   Given the following information, find standard deviation : $N = 10$, $\sum x = 60$, $\sum x^2 = 1{,}000$ 2

13   Find the conjugate of : $\dfrac{(3-2i)(2+3i)}{(1+2i)(2-i)}$.   2

14   Express $(\sqrt{5} - \sqrt{3}i)(\sqrt{5} + \sqrt{3}i)^2$ in the form $(a + ib)$.   2

15   Find thw solution of the following system of inequation : $\dfrac{1}{2}\left(\dfrac{3}{5}x + 4\right) \geq \dfrac{1}{3}(x - 6)$ 3

OR

Solve of the following inequation : $|x - 2| \geq 3$

16   The diameter of circles (in mm) drawn in a design are given below :

Diameter (in mm)	33 – 36	37 – 40	41 – 44	45 – 48	49 – 52
No. of circles	15	17	21	22	25

4

Calculate the standard deviation and mean diameter of the circles.

Bal Bharati Public School, Dwarka

PT – 1 Sample Paper (Painting) 2024-25
Date: 11-11-2024

Class XI

Time: 1 Hour   **Marks:25**

GENERAL INSTRUCTION:

All the questions are compulsory.

S. No	Section -A	Marks
1A	The worship of Mother Goddess was related. a. With the Aryan Civilization b. With the Mediterranean Civilization c. With the Indus Valley Civilization d. With the Vedic Civilization	1
B	The Lakhu cave having ancient rock paintings is located in --------------- district. a. Chamoli district b. Nainital district c. Haridwar district d. Almora district	1
C	The animal picturised on most seals of Indus Valley Civilization period is: a. Unicorn b. Lion c. Tiger d. Humped Bull	1
D	What colours were used for Pre-historic Wall Painting a. Oil Colours b. Mineral Colours c. Acrylic Colours d. Wax colours	1
E	The Bhimbetka caves were discovered by…………………… archaeologist. a. Cockburn b. Ram c. Mitra d. V.S.Wakankar	1
F	In which form is the famous figure of bull found in Mohenjodaro? a. Stone Crafts b. Terracotta Crafts c. Copper seal None of the above	1
G	Along which river Mohenjo-Daro is situated? a. Indus b. Ravi c. Luni	1

H	What colours were used for Pre-historic Wall Painting
	   a. Oil Colours
	   b. Mineral Colours
	   c. Acrylic Colour
		1

I	The rock paintings were an important and distinct feature of the Mesolithic people through their beginning may be traced to the upper Paleolithic period. Which of the following are the characteristics of these paintings?
	1.These paintings are made on the walls of rock shelters
	2.Maximum of them have been found at Bhimbetka in MP
	3. They throw light on the social and economic life of Mesolithic people.
	Select the answer from the codes given below.
	   a. 1,2,3
	   b. 1 and 2
	   c. 1 and 2
	   d. 2 and 3
		1

Section- B (Short Question 80-100 words)
2	Describe the significant characteristic of "Mother Goddess from Mohenjo-Daro?	2
3	Describe the technique of bronze casting from the Indus Valley Civilization	2
Section- C (Long Question 250-300 words)
4	Describe the artistic aspects of two female sculptures from Indus Valley Civilization.	6
5	Write a short note on the following paintings with period, location medium **Roaring animal**	6

BAL BHARATI PUBLIC SCHOOL, DWARKA, NEW DELHI
PT 1 2024-25 SAMPLE PAPER
CLASS – XI
SUBJECT: PSYCHOLOGY

TIME: 1 hour

General Instructions:

- *The question paper has 4 Sections A, B, C and D.*
- *All questions are compulsory.*
- *Section A has 10 questions, from Question No. 1 to 10 carrying 1 mark each. Answer to these questions in one word or one sentence.*
- *Section B has 1 question, from Question No. 11, carrying 2 marks. Answer to the question should not exceed 40-50words.*
- *Section C has 1 question, Question No. 12, carrying 3 marks. Answer to this question should not exceed 120 words.*
- *Section D has 1 question, Question No. 13, carrying 4 marks. Answer to this question should not exceed 140 words.*
- *Section E has 1 question, Question No. 14, carrying 6 marks. Answer to this question should not exceed 200 words.*

_____
SECTION A

Q1.) _____ is the most effective way of acquiring a conditioned response.

Q2.) Partial reinforcement schedule is least resistant to extinction.

Q3.) _____ is one of the chief proponents of operant conditioning.
   a.) B.F Skinner
   b.) Ivan Pavlov
   c.) Tolomon
   d.) Albert Bandura

Q4.) Which of the following helps in better memory retention?
   a.) Use of mnemonics
   b.) Deep level processing
   c.) Minimizing interference
   d.) All of the above

Q5.) Which of the following does not apply to stage model theory of memory?
   a.) It was proposed by Atkinson and Shiffrin
   b.) Information in sensory register fades very quickly
   c.) Chunking helps in enhancing the capacity of STM.

d.) Many stimuli simultaneously enter our receptors creating a kind of "bottleneck" situation.

Q6.) Method of Loci uses imagery and visual encoding for better memory retention. (True/False)

Q7.) Neema was once mobbed by a person with a beard. Now every time she comes across a bearded person she starts feeling anxious. She is exhibiting:
a.) Generalization
b.) Discrimination
c.) Resistance
d.) Extinction

Q8.) Which of the following is not a secondary reinforcer?
a.) Money
b.) Fame
c.) Certificates
d.) Food

Q9.) Sudden solution to a problem is a principle of _____ learning.

Q10.) Classical conditioning was first investigated by _____.

Section B
Q11.) Why is observational learning called social learning?

Section C
Q12.) Explain any one type of cognitive learning.
            Or
        Describe the process of memory in detail.

Section D
Q13.) Explain the key principles of levels of processing view by Craik and Lockhart.

Section E
Q14.) Explain the various stages of stage model of memory.
                              Or
        Differentiate between classical and operant conditioning.

BAL BHARATI PUBLIC SCHOOL, DWARKA

CLASS -XI

SAMPLE PAPER

SUBJECT: CHEMISTRY

TIME: 1 Hr   **MM: 25**

_____

General instructions:
   i. All questions are compulsory.
   ii. Question number 1 to 10 are objective type questions carrying one mark each.
   iii. Question number 11-16 are short answer questions, carrying two marks each. Answer these in about 30 words each.
   iv. Question number 17 is also short answer question, carrying three marks . Answer these in about 40 words each.

_____

 Q No 1 to 10 are multiple choice questions. Choose the correct option.

1. Given the standard electrode potentials:

$K^+/K = -2.93$ V
$Ag^+/Ag = 0.80$ V
$Hg^{2+}/Hg = 0.79$ V
$Mg^{2+}/Mg = -2.37$ V
$Cr^{3+}/Cr = -0.74$ V

The correct increasing order of reducing power of the metals is:

1.	Cr < Mg < K < Ag < Hg	2.	Mg < K < Ag < Hg < Cr
3.	K < Ag < Hg < Cr < Mg	4.	Ag < Hg < Cr < Mg < K

2. When $KMnO_4$ acts as an oxidising agent and ultimately forms MnO_4^{2-}, MnO_2, Mn_2O_3 and Mn^{2+} then the no. of electrons transferred in each case respectively is:

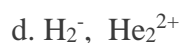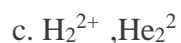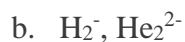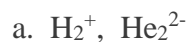(a) 4, 3, 1, 5   (b) 1, 5, 3, 7

(c) 1, 3, 4, 5   (d) 3, 5, 7, 1

3. In which of the following pairs of molecules/ions both the species are not likely to exist?

a. H_2^+, He_2^{2-}

b. H_2^-, He_2^{2-}

c. H_2^{2+}, He_2^2

d. H_2^-, He_2^{2+}

4. Bond order is _____ to bond length of a molecule:

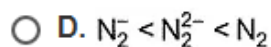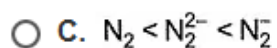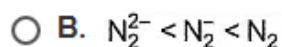a. directly proportional   b. equal to   c. inversely proportional   d. not related

5.

According to MO theory which of the following lists ranks the nitrogen species in terms of increasing bond order?

○ A. $N_2^- < N_2 < N_2^{2-}$

○ B. $N_2^{2-} < N_2^- < N_2$

○ C. $N_2 < N_2^{2-} < N_2^-$

○ D. $N_2^- < N_2^{2-} < N_2$
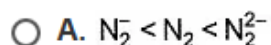
a. A   b. B   c. C   d. D

6. Which of the molecular orbital has greater energy comparatively?

a) Both Bonding molecular orbital and Anti-bonding molecular orbital have the same energy

b) The energy of Bonding molecular orbital and Anti-bonding molecular orbital depends on the situation

c) Bonding molecular orbital

d) Anti-bonding molecular orbital

7. Which of the following is not a reducing agent?
(a) SO_2 (b) H_2O_2 (c) CO_2 (d) NO_2^-

8. The standard electrode potential of Sn^{4+}/Sn^{2+} couple is +0.15 V and that for Cr^{3+}/Cr couple is -0.74 V. These two couples in their standard state are connected to make a cell. The cell potential (emf) will be :

a. 0.89 V   b. 0.18 V   c. 1.83 V   d. 1.199 V

9. The reaction $3ClO^-$ (aq) $\rightarrow$ ClO_3^- (aq) + $2Cl^-$(aq) is an example of:

   (a) Oxidation reaction   (b) Reduction reaction

   (c) Disproportionation reaction   (d) Decomposition reaction

10. In the following question a statement of assertion followed by a statement of reason is given.

   ASSERTION : Oxidation state of fluorine in all its compounds is always -1.

   REASON: Flourine is the most electronegative atom.

   Choose the correct answer out of the following choice:

   a. Assertion and reason both are correct statements and reason is correct explanation for assertion.

   b. Assertion and reason both are correct statements but reason is not correct explanation for assertion.

   c. Assertion is correct statement and reason is wrong statement.

   d. Assertion is wrong statement but reason is correct statement.\

11. Write a balanced chemical equation for the following reaction:

   Permanganate ion reacts with sulphur dioxide gas in an acidic medium to produce Mn^{2+} and hydrogen sulphate ion.

12. Account for the following :

   a. All decomposition reactions are not redox reactions.

   b. Flourine does not show a disproportionation reaction.

   c. Salt bridge is used in an electrochemical cell.

13. a. What is the oxidation number of Cr in CrO_5? How will you rationalize your result.

   b. SO_2 can undergo oxidation as well as reduction. Why?

14. Consider the following galvanic cell :

   $$Ag / Ag^+ \,||\, Cu^{2+} / Cu$$
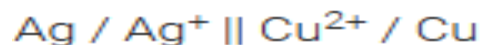
 i. Write the overall cell reaction.

 ii. What do the vertical double lines denote? State its any one use.

 iii. Which electrode acts as anode and which as cathode?

15. With the help of an example explain how molecular orbital justifies the non existence of molecules of noble gases.

16. a. The compound AgF_2 is an unstable compound. However if formed the compound acts as a very strong oxidizing agent. Why?

b. Identify the substance oxidized and substance reduced :

$3HCl$ (aq) + HNO_3 (aq) → Cl_2 (g) +$NOCl$ (g) + $2H_2O$ (l)

c. Arrange HNO_2, NO NH_4Cl and N_2 in decreasing order of oxidation state of nitrogen.

17. a. Classify the following species as paramagnetic / diamagnetic. Also comment on their stability.

C_2^{2-}, O_2^-, O_2^{2+}

b. Why is H_2^+ more stable than H_2^- although both have same bond order.

BAL BHARATI PUBLIC SCHOOL, DWARKA, NEW DELHI

CLAS1 – XI

Sample paper

PERIODIC TEST - 1 (2024-25)

SUBJECT : BIOLOGY

MM: 25

TIME: 1 hr   **DATE:**

Section A (1Mark Each)

1. The ultimate electron acceptor of respiration in anaerobic organisms is:

    a. Cytochrome   b. Oxygen   c. Hydrogen   d. Glucose

2. Phosphorylation of glucose during glycolysis is catalysed by

    a. Phosphoglucomutase   b. Phosphoglucoisomerase

    c. Hexokinase   d. Phoshorylase

3. Pyruvic acid, the key product of glycolysis can have many metabolic fates. Under aerobic condition it forms

    a. Lactic acid   b. CO_2 + H_2O

    c. Acetyl CoA + CO   d. Ethanol + CO

4. Electron Transport System (ETS) in mitochondria can be found in

    a. Outer membrane   b. Inter membrane space

    c. Inner membrane   d. Matrix

5. Which of the following exhibits the highest rate of respiration?

    a. Growing shoot apex   b. Germinating seed

    c. Root tip   d. Leaf bud

6. During light reaction in photosynthesis the following are formed:

    a. ATP and sugar   b. Hydrogen, O_2 and sugar

    c. ATP, hydrogen donor and O_2 d. ATP, hydrogen and O_2 donor

7. Dark reaction in photosynthesis is called so because

    a. It can occur in dark also   b. It does not depend on light energy

    c. It cannot occur during day light   d. It occurs more rapidly at night

8. PEP is primary CO_2 acceptor in

    a. C4 plants   b. C3 plants   c. C2 plants   d. Both C3 and C4 plants

9. Splitting of water is associated with

    a. Photosystem I   b. Lumen of thylakoid

    c. Both Photosystem I and II   d. Inner surface of thylakoid membrane

10. The correct sequence of flow of electrons in the light reaction is

    a. PSII, plastoquinone, cytochromes, PSI, ferredoxin
    b. PSI, plastoquinone, cytochromes, PSII, ferredoxin
    c. PSI, ferredoxin, PSII,
    d. PSI, plastoquinone, cytochromes, PSII, ferredoxin

Section B (3 marks each)

11. Why does the rate of photosynthesis decrease at higher temperatures?. Explain how during light reaction of photosynthesis, ATP synthesis is a chemiosmotic phenomenon.
12. Complete the same reactions in the figure given below
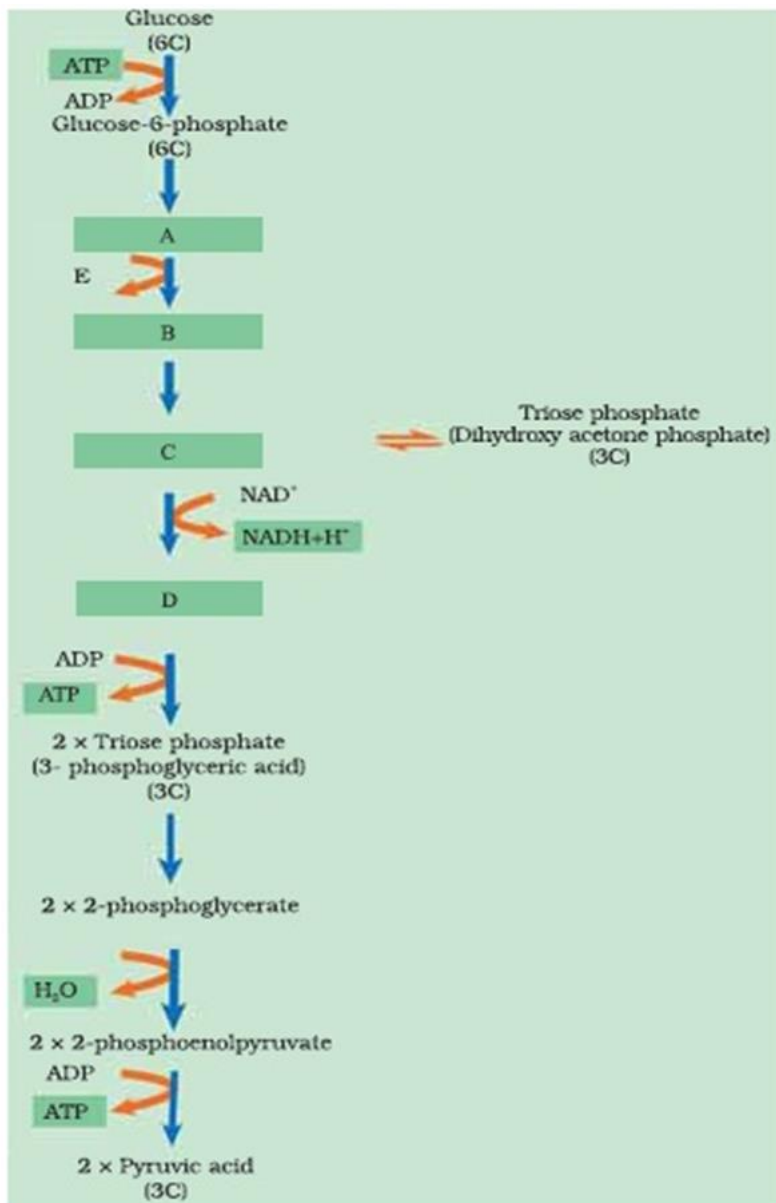
13. Why is respiratory pathway referred to as an amphibolic pathway? Explain.

ii) We commonly call ATP as the energy currency of the cell. Can you think of some other energy carriers present in a cell? Name any two.

14. How are C4 plants adapted to survive in high temp and low CO2 conditions ? Write steps in photorespiration

15. Enumerate the assumptions that we undertake in making the respiratory balance sheet. Are these assumptions valid for a living system? Compare fermentation and aerobic respiration in this context.

BAL BHARATI PUBLIC SCHOOL, DWARAKA

SAMPLE PAPER CLASS XI

PHYSICAL EDUCATION

Time – 1 hr

Marks – 25

Que 1 to 10 (1Mark)

Que 11 to 15 (3 Mark)

Q1. Which ability is improved by using high velocity training for short intervals?

   (a) Speed   (b) Endurance   (c) Strength   (d) Flexibility

Q2. Which of the following is NOT a component of wellness

   (a) Mental (b) Occupational (c) Cosmetic (d) Physical

Q3. What is the ability of an individual to live a physically, mentally, socially and emotionally balanced life?

   (a) Wellness (b) Physical fitness (c) Lifestyle (d) All of the above

Q4. Which is NOT a health-related physical fitness component?

   (a) Muscular endurance (b)Cardiorespiratory endurance (c) Speed (d) Flexibility

Q5. Which of the following is played with the help of animals?

   (a) Polo (b) Mallakhamb (c) Atya Patya (d) kalaripayattu

Q6. What point scale did Sheldon use to classify individuals in his somato typing system?

   (a) 1-5 (b) 1-7 (c) 1-9 (d) None of these

Q7. Skinfold technique is used to measure:

   (a) Fat percentage (b) Weight (c) Measurement (d) Over fatness

Q8. Which parameters are required for calculation of BMI

   (a) Weight/height (b) height/weight (c) weight/(height)2 (d) height/(weight)2

Q9. Mesomorph is characterised by-

   (a) Well defined muscles (b) Soft and round body (c) Slow metabolism (d) Thin

Q10. Sit and Reach test is used to measure:

   (a) Flexibility (b) Agility (c) Strength (d) All of these

Q11. What are the benefits of traditional sports and regional games?

Q12. Describe any three components of wellness.

Q13. Explain in detail the 'P, R, I, C, E' procedure.

Q14. Explain in details the concept of Test, Measurement and Evaluation in physical education and sports?

Q15. Explain in details the Somatotypes.

MM: 25   **TIME:** 1 hour

Q1. When supply curve is parallel to Y-axis, elasticity of supply will be :   1 mark

   (a)more elastic   (b) less elastic   (c) perfectly elastic   (d) perfectly inelastic

Q2. Shifts in the supply curve occurs due to :   1 mark

   (a) increase in own price of the commodity
   (b) decrease in own price of the commodity
   (c) factors other than own price of the commodity
   (d) Both(a) and (b)

Q3. Which of the following is not a measure of central tendency ?   1 mark

   (a) Mean   (b) Median   (c) Mode   (d) Range

Q4 Median of values 2,5,8,4,9,6,7 is :

   a) 9   b) 8   c) 7   d) 6   1 mark

Q5. Statement 1: Supply is not affected due to change in taxation policy of government.

     Statement 2: Due to rise in tax supply curve shifts to the left.

Alternatives: 1 mark

 (a) both the statements are true

 (b) both the statements are false

 (c) statement one is true and statement 2 is false

(d) statement 2 is true and statement one is false

 Q6. Assertion (A) : In case of perfectly elastic supply, supply curve is a horizontal straight line.

       Reason (R) : Supply does not change with change in price in case of perfect elastic supply.

Alternatives: 1 mark

 (a) both the Assertion and Reason are true and Reason is the correct explanation of Assertion.

 (b) both the Assertion and Reason are true and Reason is not the correct explanation of Assertion.

 (c) Assertion is true but Reason is false

(d) Assertion is false but Reason is true

Q7. If the average wage of 60 male workers of a factory is 8000 and average wage of 40 female workers is 7000. Find the average wage of all workers.   3 marks

Q8. Distinguish between contraction of supply and decrease in supply.   3 marks

Q9. The mean of marks of 50 students was 60. Later it was found that marks of two students were wrongly taken as 30 and 14, instead of 13 and 40. Find correct mean.   3 marks

Q10:If supply of a commodity increases from 200 units to 300 units due to increase in price by ₹10. Find new price if ES = 2.   3 marks

Q11 Find missing frequency if median is 40.   3 marks

C. I	0-10	10-20	20-40	40-60	60-80	80-100
Freq	8	10	22	---	10	5

Q12 Find mode graphically & verify your answer.   4 marks

C. I	0-10	10-20	20-30	30-40	40-50	50-60
Freq.	2	8	10	20	7	3

BAL BHARATI PUBLIC SCHOOL, DWARKA, NEW DELHI
PERIODIC TERM- 1 (2024-25) SAMPLE PAPER
CLASS – XI
SUBJECT: ACCOUNTANCY

TIME: 1 hrs   **MM:25**

DATE:

General instructions: -

1. All questions are compulsory.

2. Marks are indicated against each question.

Q1. Which of the following items is not a reason for difference between bank balance
    as per cash book and pass book?
(a) Dishonoured cheque   **(1)**
(b) Cheques deposited but not yet cleared
(c) Credit sales
(d) Cheques issued but not yet presented for payment

Q2. Bank statement also called?   **(1)**
(a) Pass book   (b) Cash book   (c) Credit book   (d) Debit book

Q3. Depreciation helps in determining   **(1)**
(a) Accurate level of profit   (b) Increases the value of asset
(c) Revenue generation   (d) Increase the burden of tax

Q4   What is depreciation?   **(1)**
(a) Cost of using a fixed asset
(b) The value of asset
(c) Portion of a fixed assets cost consumed during the current accounting year
(d) Cost of fixed asset's repair

Q5. The main purpose of preparing a bank reconciliation statement is?   **(1)**
     (a) To know the bank balance
     (b) To know the balance of bank statement
     (c) To correct the cash book
     (d) To identify causes of difference between cash book and bank statement

Q6. Goods sold to Ram for Rs 840 was recorded in his account as Rs 480. In the rectifying
     entry,
   a)   Ram's A/c will debited Rs. 480   b)   Ram's A/c will be debited Rs 360
   c) Ram's A/c will be credited Rs. 360   d) Ram's A/c will be credited Rs. 1320   **(1)**

Q7. Goods purchased from Raghav for 4,500 but goods recorded as 5,400 in **(1)** the Purchases Book. The type of error related to:

    (a) Error of Omission   (b) Error of Commission

    (c) Error of Partial Omission   (d) Error of Principle

Q8.   A book- keeper failed to balance his Trial Balance. Later on following errors were discovered. Rectify the following errors and prepare Suspense account. **(6)**

a) Goods amounting to Rs. 620 sold to D & Co. were correctly entered in the sales book, wrongly posted to the co. account as Rs. 260.

b) The total of returns inwards book amounting to Rs. 200 was not posted to the ledger.

c) Goods worth Rs. 100 were purchased on credit from Prakash but the amount was entered in Rakesh account.

d) Sales book was undercast by Rs.200.

e) The total of credit side of Sohan's account was overcast by Rs.100.

Q9.   Manas purchased a Machine on 1st April, 2017 for Rs. 1,20,000 on which additional Rs. 10,000 was spent for its installations. On 1st October, 2018 another Machine was purchased for Rs. 1,40,000. The first Machine was sold for Rs. 90,000 on 1st April, 2019 and a new Machine was purchased for Rs. 3,40,000 on the same date. **(6)**
You are required to show the Machine Account from 2017-18 to 2019-20 on the basis of Diminishing balance Method, given that depreciation was charged at the rate of 10% p.a. and that the books are closed on the 31st March of every year. Prepare machinery account for 3 years .

Q10.   Prepare a Bank Reconciliation Statement of Mr. Rivij Jain on 31st May 2012 from the following: **(6)**

  i. Dr. Balance as per Pass book Rs. 50,000.

  ii. Cheque issued to Mr. Ram for Rs. 2,000 not entered in Cash Book.

  iii. Mr. Dhanam (Debtor) deposited an amount of Rs. 1,000 directly into the bank account of Mr. Rivij Jain.

  iv. Cheque Received from Mr. Guru for Rs. 6,000, entered in cash book but not sent tobank.

  v. There was a credit in the pass book for Rs. 600 and another credit for Rs. 200 forinterest.

  vi. Bank charges Rs. 500 entered twice in cash book.

BAL BHARATI PUBLIC SCHOOL
PT1 EXAMINATION (2024-25)
CLASS – XI SAMPLE PAPER
SUBJECT- COMPUTER SC

TIME: 1 Hour   **Maximum Marks: 25**

	SECTION A	

1	Find the output of the following code segment
	a=110
	while a>100:
	    print(a)
	    a-=2
		1

2	Consider the following string ADDRESS: **ADDRESS= "a-1 plot no 5 Dwarka "** **print(ADDRESS.capitalize())**	**1**

3	Choose the correct output of the following code:
	>>>str1= "Hello123"
	>>>str1.isalnum()
	    a) True c) False
	    b) Error d) None of these
		1

4	a='Welcome 2025\t\t\tBye 2024'
	count=0
	for i in a:
	    if i.isspace():
	        count=count+1
	print(count)
		1

5	Choose the correct output of the following code:
	>>> str1= "COMPUTER LAB"
	>>> str1.index("X")
	    a) 0
	    b) -1
	    c) Error
	    d) None of these
		1

6	Find the output a=20 while a>10: a= a-1 print(a)	**1**

7	Choose the correct output of the following code:
	>>>**str1= "123welcome"**
	>>>**str1.isdigit()**
	   a) True c) False
	   b) Error d) None of these
		1

8	Find the output of the following code a='Computer Science is Science of Computers' s1=a.partition('Sci') s2=a.partition('comp') s3= a.split("Comp") s4=a.split("comp") print(s1, s2,s3, s4)	1
9	Find the output mySubject = "Computer Science" mySubject[-5:-1]	1
	Q10 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**	
10	Assertion:- Operators + and * can work with numbers as well as strings Reasoning:- Unlike numbers for string + means concatenation and * means replication.	
	SECTION B SUBJECTIVE	

11	Write the difference between the following. Also write python code with output to explain the concept.
	   a) split() and partition()
	   b) lstrip() and rstrip()
		2
		+
		2

12	Find the output a) "one\n\t two three four\n".split() b) "-".join(["A","B","C","D"])	2

13	**Find the output of the following code segment**
	for i in range(4):
	 for j in range(5):
	  if i+1 ==j or j+i==4:
	   print("*", end=" ")
	  else:
	   print(" ", end=" ")
	 print()
		2

14	Write a program to input a string and count the occurrence of word **the** in the string.	2
15	Write a program that takes a sentence and finds the longest word in it. If there are multiple longest words, return all of them.	2
16	Write a program to generate fibonacci series upto n terms using while loop	3

BAL BHARATI PUBLIC SCHOOL
PT1 EXAMINATION (2024-25) SAMPLE PAPER
CLASS – XI   SUBJECT- Artificial Intelligence

TIME: 1 Hrs   **Maximum Marks: 25**
                                                                          Date:

General Instructions:
1. Please read the instructions carefully.
2. This Question Paper consists of 16 questions in two sections: Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.

Section A: Objective Type Questions

1.	What is the purpose of data preprocessing? A) To make data more complex B) To make data less accessible C) To clean and prepare data for analysis D) To increase the size of the dataset	1
2.	What is the distinguishing feature of ratio scale data? A) It involves categories without a specific order B) It has a zero point and allows for ratios to be calculated C) It involves categories with a strict order but no measurable differences between categories D) It has a definite order, but the differences between categories cannot be measured	1
3.	Which statistical measure is most suitable for data sets with evenly spread values and no exceptionally high or low values? A) Mean B) Median C) Mode D) Variance	1
4.	What is the term used to describe the graphical or pictorial representation of data? A) Statistical summary B) Data organization C) Data visualization D) Data interpretation	1
5.	Which of the following scatter plots represents a positive correlation? a. points scattered randomly with no apparent trend b. points forming a diagonal line and bottom left to top right c. points forming a diagonal line from top left to bottom right d. points clustered around a central point	1
6.	What is one advantage of linear regression analysis? a. it is robust to outliers b. it can capture nonlinear relationships between variables c. it is simple and easy to interpret d. it is suitable for classification tasks	1

7.	Which type of classification involves categorizing data into two distinct classes? a. multi-class classification b. binary classification c. unsupervised classification d. regression	1
8.	The K-Nearest Neighbors (KNN) algorithm assigns a class to new data point by considering: a. Distance from the data point to a predefined decision boundary b. Majority vote of its K nearest neighbors in the training data c. Similarity of the data point to a cluster centroid d. probability of each class given the data point's features	1
9.	Which method is used to group highly dense areas into clusters? a. Partitioning clustering b. Density-based clustering c. Distribution model-based clustering d. Hierarchical clustering	1
10.	What is supervised learning in Artificial Intelligence? a. training a computer algorithm on input data that is not labelled. b. training a computer algorithm on input data that has been labelled for a specific output. c. training a computer algorithm without any input data d. training a computer algorithm to perform unsupervised tasks.	1
	Section B: Subjective Type Questions	
11.	What are the secondary sources of data collection? (Write any two)	1
12.	What is data preprocessing? Explain any three ways of data pre-processing?	2
13.	Differentiate between regression and classification.	2
14.	A company recorded the daily temperatures (in degrees Celsius) for five consecutive days: 20°C, 22°C, 25°C, 18°C, and 23°C. Determine the variance and standard deviation of the temperatures.	2
15.	i) What is K-Means Clustering? ii) Explain the steps involved in K-Means Clustering. iii) Write two applications of K-Means clustering.	1 2 1
16.	What are quantitative and qualitative levels of measurement? Explain with the help of an example for each type.	4

BAL BHARATI PUBLIC SCHOOL, DWARKA
SAMPLE PAPER - PT1 (2024-25)
CLASS XI
SUBJECT – PHYSICS

Time: 1 Hrs   MM: 25

General Instructions:
1. There are 15 questions in total. All questions are compulsory.
2. This question paper has two sections. Section A contains 10 MCQs of one mark each.
3. Section B contains 5 questions with a total of 15 marks.

SECTION A

Q1.   The moment of inertia of a ring about its diameter is I. The moment of inertia of the same ring about the axis perpendicular to its plane and passing through its center is:
   a) I/2   b) I/4   c) 4I   d) 2I

Q2.   Planet A has mass M and radius R. Planet B has half the mass and half the radius of Planet A. If the escape velocities from the Planets A and B are V_A and V_B respectively, then $V_A/V_B = n/4$. The value of n is:
   a) 1   b) 3   c) 4   d) 2

Q3.   The minimum energy required to launch a m kg satellite from the earth's surface in a circular orbit at an altitude of 5R, where R is the radius of earth is:
   a) 3mgR   b) 5/6 mgR   c) 2 mgR   d) 1/5 mgR

Q4.   The ratio of radius of gyration of a circular disc and a circular ring of the same radii and same mass about a tangential axis in the plane is:
   a) 1 : 2   b) √5 : √6   c) 5 : 6   d) 2 : 1

Q5.   A sphere rolls down an inclined plane of inclination Ө. What is the acceleration as the sphere reaches bottom:
   a) 5/7 g sin Ө   b) 3/5 g sin Ө   c) 2/7 g sin Ө   d) 2/5 g sin Ө

Q6.   Two balls, each of radius R, with equal mass and density are placed in contact, then the force of gravitation between them is proportional to:
   a) $1/R^2$ b) R   c) 1/R   d) 1/R

Q7.   At what altitude (h) above the earth's surface would the acceleration due to gravity be one-fourth of its value at the earth's surface?
   a) h = R   b) h = 4R   c) h = 2R   d) h = 16R

Q8. A satellite in a circular orbit of radius R has a time period of 4h. Another satellite with orbital radius 3R round the same planet will have a period (in hours)

    a) 16   b) 4   c) $4\sqrt{7}$ d) $4\sqrt{8}$

Q9. In pure rolling, velocity of contact point is:
    a) ωr b) $< \omega r$ c) $> \omega r$ d) zero

Q10. **Assertion:** If there is no external torque on a body about its centre of mass, then the velocity of center of mass remains constant.
Reason: The linear momentum of an isolated system remains constant.
a. Both Assertion and Reason are correct and reason is a correct explanation for assertion.
b. Both Assertion and Reason are correct but reason is not a correct explanation for assertion.
c. Assertion is correct, reason is incorrect
d. Assertion is incorrect, reason is correct.

SECTION B

Q11. What are the various factors on which the value of acceleration due to gravity (g) at any place on the earth depends? Graphically show the variation of g with distance r from center of earth.   (2)

Q12. Show that angular momentum of a particle is equal to twice the product of its mass and areal velocity.(2)

Q13. A solid spherical ball is rolling on a frictionless horizontal plane surface about its axis of symmetry. Calculate the ratio of its rotational kinetic energy to its total kinetic energy.   (3)

Q14. From a circular disc of radius R and mass 9M, a small disc of radius R/3 is removed from the disc as shown. Find the moment of inertia of the remaining disc about an axis perpendicular to the plane of the disc and passing through O.
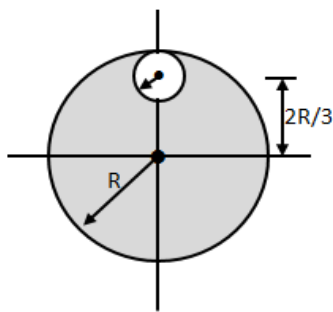
                                                                            (3)

Q15. a) What is meant by gravitational potential energy of body? Obtain an expression for the gravitational potential energy of a body of mass m located at a distance r from the center of the earth.
b) Calculate the energy required to move a body of mass m from an orbit of radius 2R to radius 3R.   (5)

MM: 25   **TIME:** 1 hour

1. A Govt Company is any company in which the paid up capital held by the government is not less than   1
   a. 49 %
   b. 51%
   c. 34%
   d. 90%

2. The board of directors of a joint stock company is elected by :   1
   (a) General public
   (b) Government bodies
   (c) Shareholders
   (d) Employees.

3. Choose the correct steps for raising funds from the public.   1
   (i) SEBI Approval
   (ii) Minimum subscription
   (iii) Appointment of brokers, bankers, underwriters
   (iv) Application to the stock exchange
   (v) Filing of the prospectus
   (vi) Allotment of shares
   a) i>iii>iv>vi>ii>v
   b) i>ii>iii>iv>v>vi
   c) i>vi>iv>iii>ii>v
   d) i>v>iii>ii>iv>vi

4. Among the following documents, which are not mandatory to be submitted to the registrar along with an incorporation application by a private company?   1
   (a) Address of registered office and undertaking
   (b) Undertaking and statement of capital
   (c) Statement of capital, address of the office, and list of directors
   (d) List of directors and statement of capital

5. When two Business undertaking get united in order to share profit and common objective, then it is called :   1
   (a) MNC's
   (b) Company

(c) Partnership

(d) Joint venture.

6. Men may come and men may go but the company exist"- this explains which characteristics of the company as per companies Act 1956   1

   a. Separate legal entity

   b. Perpetual Succession

   c. Capacity to sue

   d. None of the above

7. Business people have the skills to solve: 1

   (a) All social problems

   (b) Some social problems

   (c) No social problems

   (d) All economic problems.

8. Which of the following statement is correct: 1

   (a) Increase in agricultural land due to land pollution

   (b) Plantation nearby industries decreases the noise pollution

   (c) Land pollution increases due to use of plastic bags

   (d) Use of fertilizers, chemicals and pesticides increases air pollution.

9. Which business do not have social responsibility towards the customers: 1

   (a) Making availability of good quality goods at the proper rate

   (b) Disclosing truth in advertisement

   (c) Providing share in profit

   (d) No adulteration in the goods.

10. Which of the following is capable of doing maximum good to society :   1

    (a) Business success

    (b) Laws and regulations

    (c) Ethics

    (d) Professional management.

11. Write short note on : PPP (Public, Private Partnership) with examples.   3

12. Nestle is a swiss transnational food and drink company headquarterd in Vevey, Vaud, Switzerland. It has been the largest food company in the world. Nestle has over 8000 brands with a wide range of products across a number of markets, including coffee, bottled water, and other beverages, breakfast cereals, infant foods, pet food etc.

    A. What form of enterprise is Nestle?

    B. State any three features of the form of enterprise as identified in part (a) of the question.   (1+3)

13. Easy living is a popular fast moving consumer goods company in India. As per policy, the company is committed to function and develop its business in a socially responsible way.
    a. What do you understand by socially responsible way?
    b. Suggest any three ways in which the company can prove itself to be socially responsible.   (1+3)
14. Explain steps in capital subscription stage in the formation of company. 4