Ques-1 On *March 2017,* Raghubir , starts wholesaling business. Following transactions as follows:

1. He started business with capital of Rs. 15,000 and Land worth Rs. 10,000.p

2. Bought goods from Bilal and Friends Rs. 1,000 and by cash from XYZ Co. Rs 2,000.

3. However*,* sold goods to Rehman & sons Rs. 1,500 and sale by cash Rs. 5,000.

4. Gave away charity of cash Rs. 50 and merchandising worth Rs. 30.

5 Paid Bilal and Friends cash Rs. 975; discount received Rs. 25.

6. Received cash from Rehman & Sons Rs. 1,450; allowed him discount of Rs. 50

07. Purchased from Kareem goods of list price of Rs. 6,000 subject to 10% trade discount by cash.

08. Sold goods to Din Muhammad Rs. 800 and cash sales of Rs. 200.

*09.*Distributed goods worth Rs. 200 as free samples and goods taken away by the proprietor for personal use Rs. 100.

10. Received discount Rs 20 and Commission Rs 500.

11. Goods returned by Din Muhammad Rs. 200 and payment other outstanding amount.

*12.*Furniture lost by fire of worth Rs. 500.

*13.*Bad Debts during the period was Rs.100.

Ques-2 **Analyze the following transactions under the Accounting Equation Approach.**

1. **Commenced business with cash ₹500000**

2. **Purchased goods ₹25000**

3. **Paid salary ₹10000**

4. **Sold goods costing ₹20000 at a profit of 25% on the cost**

5. **Paid salary in advance ₹2000**

6. **Introduced additional capital ₹10000**

7. **Purchased computer ₹15000**

8. **Deposited ₹50000 into the bank**

Ques-3 Raghunath had the following transactions in an accounting year:

(i) Commenced business with cash ₹ 50,000.

(ii) Paid into bank ₹ 10,000.

(iii) Purchased goods for cash ₹ 20,000 and credit ₹ 30,000.

(iv) Sold goods for cash ₹ 40,000 costing ₹ 30,000.

(v) Rent paid ₹ 500.

(vi) Rent outstanding ₹ 100.

(vii) Bought furniture ₹ 5,000 on credit.

(viii) Bought refrigerator for personal use ₹ 5,000.

(ix) Purchased motorcycle for cash ₹ 20,000.

Create an Accounting Equation to show the effect of the above and also show his Balance Sheet.

Ques-4 **What are the basic accounting equations? How do you calculate Capital and Liabilities?**

Ques-5 **What do you call recording of a transaction?**

Ques-6 **learn and write the all accounting principles**

MODERN PUBLIC SCHOOL

Holiday Homework

Class XI

1. Prepare a collage of top 25 business news during the summer vacation.
2. Project Work based on the **START-UP INDIA CAMPAIGN**, where students as young entrepreneurs have to start a business organization. Students will apply concepts introduced under the Topic **'Nature and Purpose of Business'** and '**Forms of Business enterprise'** from class XI Business.
3. Do all case study of ch1 and ch 2 unsolved.

Answer Long Type Question

1. Discuss the various types of 'Hundis' practised by ancient Indian merchant communities.
2. Briefly discuss the major trade centres in ancient India. .
3. What is meant by economic activities and non-economic activities? Discuss any four points of difference between the two.
4. Distinguish between business and profession on the basis of: (i) Qualification; (ii) Mode of establishment: (iii) Return; (iv) Risk; (v) Code of Conduct.
5. Explain primary and secondary industries with the help of examples.
6. 'Risk is an inherent element of a business. Do you agree?
7. Briefly discuss the organisational objectives of a business.
8. Discus the nature and causes of business risk.

MODERN PUBLIC SCHOOL

Sector-37 Faridabad

Holiday Homework

XI Economics

Session- 2024-25

1. When will PPC be a straight line, concave and convex to the origin ?

2. Name and discuss the technical term used to denote the rate at which the quantity of output of one good is sacrificed to produce one more unit of the other good. Explain with example.

3. What happens to the demand for a complementary good of a commodity and a substitute good when the price of the commodity rises and that of a substitute good falls?

4. Explain why there is inverse relationship between price and quantity demanded of a commodity? 4 points.

5. Explain the importance of statistics in economics.

6. Price elasticity of demand of a good is (-) 0.75. calculate the percentage fall in its price that will reserved in 15% rise in its demand.

7. Price elasticity of demand of a good is (-) 1. At a given price the consumer buys 60 units of the good. How many units will the consumer buy if price falls by 10%?

Modern Public School

Holiday Homework (2024-25)

Class XI   Sub- English

Q1. Create a poster on theme "If you cannot,reuse,refuse" emphasising the need for buying things which can be reused and how it is good for everyone. Use compelling visuals and slogans to support your message.

Q2. You are Samar Vij. You want to rent out your flat in Indore. Draft a suitable advertisement in about 50 words, to be published in the classified columns of a national daily.

Q3. You are Sanjana Sirohi, a chef. You have been looking for a suitable job since last month. Draft a suitable advertisement within 50 words to be published in the classified coloumns of a national daily.

Q4. Choose any suitable passage and

1. Make notes on the above passage giving suitable headings, sub-headings and abbreviations.
2. Give suitable title of the passage and write summary.

Q5. Imagine you are the speaker in the poem 'A Photograph' by Shirley Toulson. Describe how absence of your mother has impacted your life, reflecting on the sense of emptiness, the flood of memories and the significance of moments shared with her.

Q6. Write character sketch of-

- Mourad
- Uncle Khosrove
- Grandmother (The portrait of a lady)

Q7. Use the example of Sue and Jonathan to explain how children can be brave if they are not just considered soft in nature and are rather taught how to stand up to challenging situations.(We're Not Afraid to Die…)

Q8. The society in the story 'The summer of the Beautiful White Horse' runs successfully on two fundamental values of trust and truth. Do you agree ? Why/ Why not ?

Q9. Prepare a project file on the topic discussed in class. Make it neatly on A4 size sheet and paste pictures.

मॉडर्न पब्लिक स्कूल

ग्रीष्मावकाश गृहकार्य **(2024-25)**

कक्षा- ग्यारहवीं

विषय-हिंदी

प्र**01.**हामिद के चरित्र की कोई तीन विशेषताएँ बताइए।

प्र**02.**'दोपहर के भोजन' शीर्षक की सार्थकता स्पष्ट कीजिए।

प्र**03.**टी.वी.के निजी चैनल अपनी व्यावसायिक

सफलता के लिए कौन-कौन से तरीके अपनाते हैं**?**

प्र**04.**किसी मित्र की शादी समाचार क्यों नहीं बन सकती **?**

प्र**05.**लेख में मकबूल ने किन-किन पेंटरों के नाम लिए हैं**?** जिन्होंने पेंटिंग की दुनिया में अपना

प्रभाव दिखाया।

प्र**06.**परियोजना कार्य - **1.**भक्तिकाल-हिंदी साहित्य का स्वर्ण युग

2. सूरदास - महान कृष्णभक्त कवि

Q.1) Answer the following questions :

a) What is DBMS ? Define it ?
b) Write any three benefits of using DBMS ?
c) What is SQL ?
d) Write any three characteristics of SQL ?
e) Define the following terms :
 i. Record
 ii. Field
 iii. Primary key
 iv. Foreign key
 v. Alternate key

Q.2) Write the following queries based on the given table : Faculty

F_id	Fname	Fsalary	DOJ
101	Amit	25000	12-10-80
102	Aman	34000	10-02-90
103	Sumit	45000	23-07-93
104	Suman	22000	19-09-97
105	Sumati	50000	09-07-00

1) Write a query to create the following table.
2) Display all records of table Faculty.
3) Show the name of the faculty where DOJ is "10-02-90".
4) Display all records in increasing order of name.
5) Insert one more record (106 , Sneha , 40000 , 10-03-88)
6) Delete the record of faculty where F_id =102.
7) Display the details of those faculties whose salaries are greater than 30000.
8) Increase the salary by 2000 where f_id is 04.

MULTIPLE CHOICE QUESTIONS::

Q.1 If A, B and C are any three sets, then A × (B ∪ C) is equal to:

A. (A × B) ∪ (A × C) B. (A ∪ B) × (A ∪ C)

C. (A × B) ∩ (A × C) D. None of the above

Q.2 The range of the function f(x) = 3x − 2, is:

A. (- ∞, ∞) B. R − {3} C. (- ∞, 0) D. (0, − ∞)

Q.3 How many elements are there in the complement of set A?
A. 0 B. 1 C. All the elements of A
D. None of these
Q.4 Empty set is a _____.
A. Infinite set B. Finite set C. Unknown set D. Universal set
Q.5: The number of elements in the Power set P(S) of the set S = {1, 2, 3} is:
A. 4 B. 8 C. 2   D. None of these
Q.6 Order of the power set P(A) of a set A of order n is equal to:
A. n   B. 2n C. 2n D. n2
Q.7 Which of the following two sets are equal?
A. A = {1, 2} and B = {1}   B. A = {1, 2} and B = {1, 2, 3}
C. A = {1, 2, 3} and B = {2, 1, 3}   D. A = {1, 2, 4} and B = {1, 2, 3}

Q.8 Let U = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}, P = {1, 2, 5}, Q = {6, 7}. Then P ∩ Q' is :

A. P B. Q C. Q' D. None

Q.9 The cardinality of the power set of {x: x∈N, x≤10} is _____.

A. 1024 B. 1023 C. 2048 D. 2043
Q.10 Write X = {1, 4, 9, 16, 25,…} in set builder form.
A. X = {x: x is a set of prime numbers}   B. X = {x: x is a set of whole numbers}
C. X = {x: x is a set of natural numbers}   D. X = {x: x is a set of square numbers}
        EXTRA QUESTIONS::
Q. 1: Write the following sets in the roster form.
(i) A = {x | x is a positive integer less than 10 and 2x − 1 is an odd number}

(ii) C = {x : x2 + 7x − 8 = 0, x ∈ R}

Q. 2: Write the following sets in roster form:

(i) A = {x : x is an integer and −3 ≤ x < 7}

(ii) B = {x : x is a natural number less than 6}
Q. 3: Given that N = {1, 2, 3, …, 100}, then
(i) Write the subset A of N, whose elements are odd numbers.

(ii) Write the subset B of N, whose elements are represented by x + 2, where x ∈ N

Q. 4: Let X = {1, 2, 3, 4, 5, 6}. If n represent any member of X, express the following as sets:

(i) n ∈ X but 2n ∉ X

(ii) n + 5 = 8
(iii) n is greater than 4
Q. 5: Let U = {1, 2, 3, 4, 5, 6}, A = {2, 3} and B = {3, 4, 5}.

Find A′, B′, A′ ∩ B′, A ∪ B and hence show that (A ∪ B)′ = A′∩ B′.

Q. 6: Use the properties of sets to prove that for all the sets A and B, A − (A ∩ B) = A − B

Q. 7: Let U = {1, 2, 3, 4, 5, 6, 7}, A = {2, 4, 6}, B = {3, 5} and C = {1, 2, 4, 7}, find

(i) A′ ∪ (B ∩ C′)

(ii) (B − A) ∪ (A − C)

Q. 8: In a class of 60 students, 23 play hockey, 15 play basketball,20 play cricket and 7 play hockey and basketball, 5 play cricket and basketball, 4 play hockey and cricket, 15 do not play any of the three games. Find
(i) How many play hockey, basketball and cricket
(ii) How many play hockey but not cricket
(iii) How many play hockey and cricket but not basketball

Q. 9: Let U = {x : x ∈ N, x ≤ 9}; A = {x : x is an even number, 0 < x < 10}; B = {2, 3, 5, 7}. Write the

set (A ∪ B)′.

Q. 10: In a survey of 600 students in a school, 150 students were found to be drinking Tea and 225 drinking Coffee, 100 were drinking both Tea and Coffee. Find how many students were drinking neither Tea nor Coffee.

Q.11 Let A, B and C be sets, then show that A ∩ (B ∪ C) = (A ∩ B) ∪ (A ∩ C).

Q.12 Out of 100 students; 15 passed in English, 12 passed in Mathematics, 8 in Science, 6 in English and Mathematics, 7 in Mathematics and Science; 4 in English and Science; 4 in all the three. Find how many passed:
i) in English and Mathematics but not in Science
ii) in Mathematics and Science but not in English
iii) in Mathematics only
iv) in more than one subject only

Q.13 Two finite sets have m and n elements, respectively. The total number of subsets of first set is 56 more than the total number of subsets of the second set. The values of m and n respectively are: (A) 7, 6 (B) 5, 1 (C) 6, 3 (D) 8, 7

Q.14 Let A and B be two sets, if A ∩ X = B ∩ X = φ and A ∪ X = B ∪ X for some set X, prove that

A =B.

Q.15 Let P be the set of prime numbers and let S = {t | 2t − 1 is a prime}. Prove that S ⊂ P.

Q.16 If A and B are subsets of the universal set U, then show that:

(i) A ⊂ A ∪ B

(ii) A ⊂ B ⇔ A ∪ B = B

(iii) (A ∩ B) ⊂ A

Q17 A, B and C are subsets of Universal Set U. If A = {2, 4, 6, 8, 12, 20} B = {3, 6, 9, 12, 15}, C = {5, 10, 15, 20} and U is the set of all whole numbers, draw a Venn diagram showing the relation of U, A, B and C.

Q18. In a town of 10,000 families it was found that 40% families buy newspaper A, 20% families buy newspaper B, 10% families buy newspaper C, 5% families buy A and B, 3% buy B and C and 4% buy A and C. If 2% families buy all the three newspapers. Find:
(a) The number of families which buy newspaper A only.
(b) The number of families which buy none of A, B and C

Q.19 If X and Y are two sets such that X ∪ Y has 18 elements, X has 8 elements and Y has 15 elements; how many elements does X ∩ Y have?

Q20. If X= { a, b, c, d } and Y = { f, b, d, g}, find: (i) X – Y (ii) Y – X (iii) X ∩ Y

Q.21 Out of 100 students; 15 passed in English, 12 passed in Mathematics, 8 in Science,6 in English and Mathematics, 7 in Mathematics and Science; 4 in English and Science; 4 in all the three. Find how many passed
(i) in English and Mathematics but not in Science
(ii) in Mathematics and Science but not in English
(iii) in Mathematics only
(iv) in more than one subject only

Q22. Let F1 be the set of parallelograms, F2 the set of rectangles, F3 the set of rhombuses, F4 the set of squares and F5 the set of trapeziums in a plane. Then F1may be equal to

(a) F2 ∩F3. (b) F3 ∩F4

(c) F2 u Fs. (d) F2 ∪ F3 ∪ F4 ∪ F1

Q23 If X= {1, 2, 3}, if n represents any member of X, write the following sets containing all numbers represented by
(i) 4n (ii) n + 6 (iii) n/2 (iv) n-1

CHAPTER 2 RELATION AND FUNCTIONS
MULTIPLE CHOICE QUESTIONS

1. If f(x) = x3 – (1/x3), then f(x) + f(1/x) is equal to
(a) 2x3. (b) 2/x3 (c) 0. (d) 1

2. Let n (A) = m, and n (B) = n. Then the total number of non-empty relations that can be defined from A to B is
(a) mn. (b) nm – 1 (c) mn – 1 (d) 2mn – 1

3. If f(x) = x2 + 2, x ∈ R, then the range of f(x) is

(a) [2, ∞) (b) (-∞, 2]

(c) (2, ∞) (d) (-∞, 2) ∪ (2, ∞)

4. What will be the domain for which the functions f(x) = 2x2 – 1 and g(x) = 1 – 3x are equal?
(a) {-2, 1} (b) {1/2, -2} (c) [2, 12] (d) (-1, 2)

5. If [x]2 – 5 [x] + 6 = 0, where [.] denotes the greatest integer function, then
(a) x ∈ [3, 4] (b) x ∈ (2, 3]. (c) x ∈ [2, 3]. (d) x ∈ [2, 4)

6. If f(x) = ax + b, where a and b are integers, f(–1) = – 5 and f(3) = 3, then a and b are equal to
(a) a = – 3, b = –1 (b) a = 2, b = – 3
(c) a = 0, b = 2 (d) a = 2, b = 3

7. The domain of the function f(x) = x/(x2 + 3x + 2) is
(a) [-2, -1] (b) R – {1, 2} (c) R – {-1, -2} (d) R – {2}

8. The range of f(x) = √(25 – x2) is

(a) (0, 5) (b) [0, 5]. (c) (-5, 5) (d) [1, 5]

9. The domain and range of the real function f defined by f(x) = (4 – x)/(x – 4) is given by
(a) Domain = R, Range = {–1, 1}
(b) Domain = R – {1}, Range = R
(c) Domain = R – {4}, Range = {– 1}
(d) Domain = R – {– 4}, Range = {–1, 1}

10. The domain and range of the function f given by $f(x) = 2 - |x - 5|$ is

(a) Domain = R+ , Range = $(-\infty, 1]$

(b) Domain = R, Range = $(-\infty, 2]$

(c) Domain = R, Range = $(-\infty, 2)$

(d) Domain = R+ , Range = $(-\infty, 2]$

EXTRA QUESTIONS:

Q.1: Write the range of a Signum function.

Q.2: The Cartesian product A × A has 9 elements among which are found (−1, 0) and (0,1). Find the set A and the remaining elements of A × A.

Q.3: Express the function f: A—R. $f(x) = x^2 - 1$. where A = { -4, 0, 1, 4) as a set of ordered pairs.

Q.4: Assume that A = {1, 2, 3,...,14}. Define a relation R from A to A by R = {(x, y) : 3x − y = 0, such that x, y ∈ A}. Determine and write down its range, domain, and codomain.

Q.5: Let $f(x) = x^2$ and $g(x) = 2x + 1$ be two real functions. Find
(f + g) (x), (f −g) (x), (fg) (x), (f/g) (x)

Q.6: Redefine the function: $f(x) = |x - 1| - |x + 6|$. Write its domain also.

Q.7: Find the domain and range of the real function $f(x) = x/1+x^2$.

Q.8 Let A = {1, 2, 3}, B = {4} and C = {5}
(i) Verify that: A × (B − C) = (A × B) − (A × C)

(ii) Find (A × B) ∩ (A × C).

Q.9 Find x and y if: (i) (4x + 3, y) = (3x + 5, − 2) (ii) (x − y, x + y) = (6, 10)

Q.10   Find the domain for which the functions f (x) = $2x^2 - 1$ and g (x) = 1 − 3x and check whether they are equal.

Q.11. Find the domain and range of the real function $f(x) = 1/(1 - x^2)$.

Q12.. A relation R is defined from a set A = {2, 3, 4, 7} to a set B = { 3, 6, 9, 0} as follows R = ((x,y) ∈ R : x is relatively prime to y; x ∈ A, y ∈ B). Express R as a set of ordered pairs and determine the domain and range.

Q13. Draw the graph of the function f: R → R defined by f (x) = x^3, x ∈ R

Q.14. If R3 = {(x, x) | x is a real number} is a relation, then find the domain and range of R3.

Q.15. Redefine the function f (x) = $|x - 2| + |2 + x|$, − 3 ≤ x ≤ 3.

Q.16. In each of the following cases, find a and b.
(i)(2a + b, a − b) = (8, 3)
(ii) {a/4, a − 2b) = (0, 6 + b)

Q.17.. If R1 = {(x, y)| y = 2x + 7, where x∈ R and -5 ≤ x ≤ 5} is a relation. Then find the domain and range of R1.

Q.18.. Let f and g be real functions defined by f(x) = 2x+ 1 and g(x) = 4x − 7.
(i) For what real numbers x, f(x) = g(x)?
(ii) For what real numbers x, f (x) < g(x)?

Q.19. The ordered pair (5, 2) belongs to the relation R ={(x, y): y = x − 5, x, y∈Z}

Q.20 The function f is defined by
$$f(x)= \begin{cases} 1-x, & x<0 \\ 1, & x=0 \\ x+1, & x>0 \end{cases}$$

Draw the graph of f(x).

CHAPTER 5 (COMPLEX NUMBERS)

MULTIPLE CHOICE QUESTIONS::

1. The value of $1 + i2 + i4 + i6 + \ldots + i2n$ is
(a) positive (b) negative (c) 0 (d) cannot be evaluated

2. If $a + ib = c + id$, then
(a) $a2 + c2 = 0$ (b) $b2 + c2 = 0$. (c) $b2 + d2 = 0$ (d) $a2 + b2 = c2 + d2$

3. If a complex number z lies in the interior or on the boundary of a circle of radius 3 units and centre $(-4, 0)$, the greatest value of $|z +1|$ is
(a) 4 (b) 6 (c) 3 (d) 10

4. The value of arg (x) when $x < 0$ is
(a) 0 (b) π/2 (c) π. (d) none of these

5. If $1 - i$, is a root of the equation $x2 + ax + b = 0$, where $a, b \in R$, then the value of $a - b$ is
(a) -4 (b) 0 (c) 2 (d) 1

6. Number of solutions of the equation $z2 + |z|2 = 0$ is
(a) 1 (b) 2 (c) 3 (d) infinitely many

7. If $[(1 + i)/(1 - i)]x = 1$, then
(a) $x = 2n + 1$, where $n \in N$. (b) $x = 4n$, where $n \in N$

(c) $x = 2n$, where $n \in N$. (d) $x = 4n + 1$, where $n \in N$

8. If the complex number $z = x + iy$ satisfies the condition $|z + 1| = 1$, then z lies on
(a) x-axis (b) circle with centre $(1, 0)$ and radius 1. (c) circle with centre $(-1, 0)$ and radius1 (d) y-axis

9. The simplified value of $(1 - i)3/(1 - i3)$ is
(a) 1 (b) -2 (c) -i (d) 2i

(a) $x = n\pi$. (b) $x = [n + (1/2)] (\pi/2)$ (c) $x = 0$ (d) No value of x

EXTRA QUESTIONS::

Q.1 Write the given complex number $(1 - i) - (-1 + i6)$ in the form $a + ib$

Q.2 Express the given complex number (-3) in the polar form.

Q.3 Solve the given quadratic equation $2x2 + x + 1 = 0$.

Q.4 For any two complex numbers z1 and z2, show that $Re(z1z2) = Rez1 Rez2 - Imz1Imz2$

Q.5 Find the modulus of $[(1+i)/(1-i)] - [(1-i)/(1+i)]$

Q.6 If $|z2-1| = |z|2+1$, prove that z lies on the imaginary axis.

Q.7 Compute the value of p, such that the difference of the roots of the equation is $x2+px+8=0$ is 2.

Q.8 Express each of the following complex numbers in the form $a+ib$
(i) $3(7 + i7) + i (7 + i7)$. (ii) $i9 +i11$. (iii) $[(\frac{1}{3})+3i]3$

Q.9 Solve the following quadratic equations:
(a) $x^2+3x+5 = 0$. (b) $x^2+x+(1/\sqrt2)= 0$

Q.10 Determine the real numbers x and y if $(x-iy)(3+5i)$ is the conjugate of -6-24i.

Q.11 If $arg (z - 1) = arg (z + 3i)$, then find $(x - 1) : y$, where $z = x + iy$.

Q.12 Find the complex number satisfying the equation $z + \sqrt2 |(z + 1)| + i = 0$.

Q.13 Solve the system of equations $Re (z2) = 0, |z| = 2$.