RAMAKRISHNA SENIOR SECONDARY SCHOOL
SUMMER HOLIDAYS' HOMEWORK (Commerce Stream)
CLASS XI (2026-27)

Dear Parents

Greetings from the RKS Fraternity!

The Academic Session 2026-27 has begun in full swing and students have settled well in their classes. Now is the time for Summer Break. The School will be closed for Summer Break from May **30, 2026** to **June 30, 2026**. The school will reopen on **July 1, 2026**. In order to keep our students well engaged, we are sending the **Summer Holiday Homework**.

General Instructions:

1. Revise the syllabus covered so far in the class.
2. Do all the work as specified by the subject teacher.
3. Submit your Holiday Homework in the first week of July as per the teacher's instructions.
4. The students must do their work neatly in their own handwriting. Marks of Internal Assessment will be awarded only if the students do the work in their own handwriting.

Summer Vacations are the most awaited holidays by the students. It is also a time to enjoy those little pleasures of life that get overlooked during the busy school routine. They get a positive bounce back when they rejoin school after this much-needed break.
There are a few things that students can keep in mind to utilize this break fruitfully.

- Go for educational trips and excursions.
- Spend quality time with family and friends.
- Pursue your hobbies and interests.
- Sharpen your skills and develop new ones.
- Follow a fitness regime to stay agile both mentally and physically.
- Learn and explore new things.
- Relax your body and mind because, 'A Healthy Mind Lives in a Healthy Body.'

Have a delightful and productive Summer Break!

English

1. Project Work

Prepare a General Studies Project on the topic 'Science and Technology' on A4 sized white ruled sheets.

The project should be prepared under following headings-

• Application of Science and Technology

• Emerging Technologies

• Science and Technology in the Social Context

• 'Science and Society'

Use Resources such as newspapers, books, magazines, TV Channels and the internet (relevant websites) can be used.

The project should include the following:

- Cover Page (Name, Class, Section)
- Title of the topic
- Index
- Certificate of Completion
- Acknowledgement
- Introduction to the topic
- How science and technology are related
- Role of advancing technology in the society
- Application of technology benefitting the society
- Enumerate the emerging technologies
- What will be your contribution towards the simultaneous development of society and technology
- Conclusion
- Bibliography/ list of resources used

2. Attempt **Unseen Comprehension** (to be done in the book- Evergreen Practice Papers)

Evergreen Practice Papers 1,2, and 3

3. **Grammar Practice** (to be done in the book- Evergreen Practice Papers)

Gap Filling : Exercises 1 to 4 - Editing: Exercises 1 to 4

4. **Creative Reflection Task** (to be done in English register – 150 words)

Imagine standing between two mirrors: one shows how **others perceive you**, and the other shows **who you truly are** when you are completely alone.

Write a short reflection on a time you felt a major difference between these two versions of yourself. Describe the situation, how you handled the pressure to fit in, and what you learned about your true identity.

5. **Reading and Literary Enrichment**: (to be done in English register) (150 words)

Explore the theme of unspoken love and quiet dignity in *The Portrait of a Lady*. How do the grandmother's daily routines, her relationship with nature (the sparrows), and her ultimate departure highlight a love that doesn't rely on words?

6. **Revision**: Revise all the topics covered so far.

7. **Reading and Reflection Assignment –** Read the book *Treasure Island* by Robert Louis Stevenson and write a brief review (120–150 words).

Submission Guidelines:

- Submit your project in a neatly bound file with a cover page.
- Project should be handwritten only.
- Diagrams, illustrations, and photos (if used) must be pasted neatly.
- Date of Submission: July 2, 2026

BUSINESS STUDIES

1. **Prepare the Business Studies Project on any one topic :-**
   - Insurance
   - Banking
2. **Do the following case studies in notebook :-**

Topic: Unit 1: Nature and purpose of business

1. Mr. Mukul sold his furniture and car on OLX as he was shifting base to New Zealand. Is this a business activity? Which feature of business is being referred here?

2. Darshan Sharma prepares ‗soanpapri' for customers during Diwali season every year. He prepared more ‗soanpapri' due to increased demand with adulterated ingredients. He employed women and children for packing and paid them salary. This way he generated good profit from himself. (a) Which objective of business is not fulfilled?

3. Mr. Mahesh is an orthopedic surgeon in Ganga ram hospital and Mr. Harish, his friend is an eye specialist who has set his own clinic. Mr. Harsh's wife, Mrs. Savita operates her Jewelry shop. Compare and differentiate the nature of tasks undertaken by them on any three bases.

4. Harsh is a well-known orthopedic doctor in Agra. He runs his private clinic under the name 'Joint and Bone Clinic'. In context of the above case: (a) Identify the type of economic activity that Harsh is engaged in. (b) State the feature of the type of economic activity as identified in part (a) of the question.

5. Name and explain the two characteristics of business which involve possibility of loss.

Kapil Sharma wants to start a business of fashionable items. But he is hesitating to go ahead with his plans because of the various kinds of risks which are inherent in every business .He consults his friend Sunil in this regard for guidance about ways to overcome such situations effectively in his business. In context of the above case (a) Describe briefly the various types of business risk. (b) State any two suggestions which Sunil is likely to give to Kapil Sharma to overcome such situations effectively in his business. (c) Explain briefly any two causes of business risk

Unit 2: Forms of Business Organisations

1. Jagat is running a grocery store under the name ‗Morning Needs' in a local market. He takes all decisions about business himself, without any interference from others and also earns a direct reward for his risk bearing. In context of the above case: (a) Identify and define the form of business organization in which Jagat has promoted his business. (b) State any four features of this form of business organization.

2. Recently Rajat, a friend of Shrey, who is a partner in an audit firm ‗Shanker Enterprise' on Shrey's request accompanies him to a business meeting with ‗Prabhu Enterprises' and actively participates in the negotiation process for a business deal. Rajat gives the impression that he is also a partner in ‗Shanker Enterprise'. Later on, credit is extended to ‗Shanker Enterprise' on the basis of these negotiations. In context of the above case Can legally binding partnership arise where no formal

partnership agreement is in effect? Explain with reference to Rajat.

3. Mr. Lakshit Aggarwal owns an ancestral house in Shimla. On the advice of his friend he converts it into a lodge with renovation. The revenue from the lodge helps to supplement his income substantially. On his death the property (lodge) is inherited by his three sons in order of their age namely, Lakshay, Luv and Lok who carry on with the business under the form of Joint Hindu Family Business. In context of the above case: (a) Name the law which governs the Joint Hindu Family Business. (b) Who amongst the three brothers has the right to exercise control over the family business? (c) Comment upon the liability of the three brothers.

3. Do the General Studies Project work on A4 sized white ruled sheets given below :-

Topic - Promoting Global Understanding

- Global Conflict analysis and Resolution
- Global Voices
- Global Environmental Ethics
- Global Understanding through Travel And Tourism

ECONOMICS:

1. Write **Higher order thinking skills** questions from Ch-1,2,3 micro economics.
2. Do back exercises in the book(All one marker type Questions)
3. Revise the Syllabus done so far..
4. Make a **General Studies Project** on the topic -

Current trends in Socio Economic Structure

(Following points to be included

*Current trends in Socio Economic Structure

*Socio Economic Structure

*Implementing social protection strategies

*Limitations and uncertainties of socio Economic Structure)

5.Project files to be prepared by the students for the practical exam. (To be assessed for 20 marks

(Project work as per the guidelines of CBSE)

Prepare a project file as per the topics allotted in the classroom

1.Effect on PPC due to various government policies

2.Opportunity Cost as an Economic Tool (taking real life situations)

3.Bumper Production- Boon or Bane for the Farmer

4.Demonetisation

5.Organic Farming-Back to the nature

6.Digital India

7.Make in India-The way ahead

8.Goods and Service Tax Act and its impact on GDP

Key Instructions to be followed:

1. The projects must be neat and well-presented and must be completely hand-written.
2. You can use colored A4 size sheets.
3. All pages will be numbered, with a broad left margin to allow Filing.
4. It must not be less than 35 pages or exceed 50 pages (including front and back cover)
5. You will use only one face (Odd page) to write content material.
6. Even number page will be utilized ONLY to illustrate pictures, fact/figure & statistics (Whatever applicable/relevant to written content on the following page).
7. Your project work should be supported by case study.
8. The Cover page will be the Title page.

9. No whitener to be used or written matter to be crossed out. In case of any mistakes, redo the sheet.
10. Define your project using Pictures, graphs, maps, cartoons, pie chart, flow chart, newspaper clippings wherever possible.
11.Project file should be covered with yellow chart paper.

MATHS

QUESTION BANK: 100 MULTIPLE CHOICE QUESTIONS

> **General Instructions:**
>
> 1. Solve all 100 questions cleanly in a dedicated Mathematics holiday homework notebook.
> 2. Write down the step-by-step logical verification/workings for each problem along with your selected option.
> 3. This assignment carries significant weightage towards internal assessments and practical grades.
> 4. Revise the core theoretical concepts and formulas from Chapters 1 and 2 of NCERT before beginning.

Section A: Chapter 1 — Sets (50 MCQs)

Q1. Which of the following is a well-defined collection of objects?

(A) The collection of beautiful girls in India (B) The collection of rich merchants in Kolkata
(C) The collection of all even integers (D) The collection of difficult topics in Mathematics

Q2. If A is the set of all prime numbers less than 20, then n(A) is:

(A) 7 (B) 8
(C) 9 (D) 10

Q3. The set builder form of A = {1, 4, 9, 16, 25} is:

(A) {x : x is an odd natural number} (B) {x : x = n^2, n ∈ N and n ≤ 5}
(C) {x : x = 2n, n ∈ N} (D) {x : x is a prime number}

Q4. Which of the following sets is an empty set?

(A) {x ∈ R : x^2 - 9 = 0} (B) {x ∈ R : x^2 + 1 = 0}
(C) {x ∈ R : x^2 - x = 0} (D) {x ∈ N : x is even and prime}

Q5. Let A = {x : x is a letter in the word 'FOLLOW'}. What is n(A)?

(A) 6 (B) 5
(C) 4 (D) 3

Q6. If a set contains n elements, then the total number of its proper subsets is:

(A) 2^n (B) 2^n - 1
(C) 2^n - 2 (D) 2^(n-1)

Q7. Let A = {1, 2, {3, 4}, 5}. Which of the following statements is incorrect?

(A) {3, 4} ∈ A (B) {3, 4} ⊆ A
(C) {{3, 4}} ⊆ A (D) 1 ∈ A

Q8. If A = {x : x = 2n+1, n ∈ Z} and B = {x : x = 2n, n ∈ Z}, then A ∩ B is:

(A) Z (B) Ø
(C) A (D) B

Q9. The cardinality of the power set of an empty set is:

(A) 0 (B) 1
(C) 2 (D) Infinity

Q10. If A and B are two sets such that $A \subseteq B$, then $A \cup B$ is equal to:

(A) A (B) B
(C) Ø (D) $A \cap B$

Q11. For any two sets A and B, A - B is equal to:

(A) $A \cap B$ (B) $A \cap B'$
(C) $A' \cap B$ (D) $A \cup B'$

Q12. If n(A) = 20, n(B) = 30 and $n(A \cup B) = 45$, then $n(A \cap B)$ is:

(A) 5 (B) 10
(C) 15 (D) 20

Q13. The shaded region in a Venn diagram representing $(A \cup B)'$ is:

(A) Everything inside A and B (B) Everything outside both A and B
(C) Only region exclusive to A (D) Only region exclusive to B

Q14. According to De Morgan's Law, $(A \cap B)'$ is equal to:

(A) $A' \cap B'$ (B) $A' \cup B'$
(C) $A \cap B'$ (D) $A' \cap B$

Q15. If A = {1, 2, 3, 4, 5} and B = {4, 5, 6, 7}, then symmetric difference $A \Delta B$ is:

(A) {1, 2, 3, 6, 7} (B) {4, 5}
(C) {1, 2, 3, 4, 5, 6, 7} (D) {}

Q16. If U = {1, 2, 3, ..., 10} and A = {2, 4, 6, 8, 10}, then A' is:

(A) {1, 3, 5, 7, 9} (B) {2, 4, 6, 8, 10}
(C) U (D) Ø

Q17. The number of non-empty subsets of a set containing 4 elements is:

(A) 16 (B) 15
(C) 14 (D) 12

Q18. If A, B, and C are three finite sets, then $A - (B \cup C)$ equals:

(A) $(A - B) \cup (A - C)$ (B) $(A - B) \cap (A - C)$
(C) $(A - B) \cup C$ (D) $(A - B) \cap C$

Q19. Every set is a _____ of itself.

(A) Proper subset (B) Improper subset
(C) Universal set (D) Power set

Q20. In a town of 800 people, 500 read Hindi newspapers and 400 read English. How many read both?

(A) 100 (B) 200
(C) 150 (D) 50

Q21. If $A = \{x : x \text{ is a multiple of } 3, x \leq 15, x \in N\}$ and $B = \{x : x \text{ is a multiple of } 5, x \leq 15, x \in N\}$, find A - B.

(A) {3, 6, 9, 12} (B) {3, 6, 9, 12, 15}
(C) {5, 10} (D) {15}

Q22. Which of the following is equivalent to $A \cap (B \cup C)$?

(A) $(A \cap B) \cup C$ (B) $(A \cup B) \cap (A \cup C)$
(C) $(A \cap B) \cup (A \cap C)$ (D) $(A \cap B) \cap C$

Q23. The set of all real numbers x such that $2x + 3 = 7$ is:

(A) A finite set (B) An infinite set
(C) An empty set (D) A universal set

Q24. If P(A) denotes the power set of A, and A = {1}, what is P(P(A))?

(A) {Ø, {1}} (B) {Ø, {1}, {{1}}, {Ø, {1}}}
(C) {Ø, {Ø}, {{1}}, {Ø, {1}}} (D) None of these

Q25. If A = {x : x^2 - 5x + 6 = 0} and B = {2, 3}, then:

(A) A ⊂ B (B) B ⊂ A
(C) A = B (D) A ∩ B = Ø

Q26. If n(U) = 700, n(A) = 200, n(B) = 300 and n(A ∩ B) = 100, then n(A' ∩ B') is:

(A) 400 (B) 300
(C) 500 (D) 600

Q27. The set {x ∈ R : 3 < x ≤ 8} written as an interval is:

(A) (3, 8) (B) [3, 8]
(C) (3, 8] (D) [3, 8)

Q28. The interval [-2, 5) expressed in set builder form is:

(A) {x ∈ R : -2 ≤ x ≤ 5} (B) {x ∈ R : -2 < x < 5}
(C) {x ∈ R : -2 ≤ x < 5} (D) {x ∈ R : -2 < x ≤ 5}

Q29. If A, B, C are sets such that A ⊂ B and B ⊂ C, then:

(A) A ⊂ C (B) C ⊂ A
(C) A ∩ C = B (D) A ∪ B = C

Q30. The number of elements in the power set of a set with cardinality 6 is:

(A) 32 (B) 64
(C) 128 (D) 256

Q31. If A ∩ B = A, then:

(A) A ⊆ B (B) B ⊆ A
(C) A = Ø (D) B = Ø

Q32. If A and B are disjoint sets, then n(A ∪ B) equals:

(A) n(A) + n(B) - n(A ∩ B) (B) n(A) + n(B)
(C) n(A) - n(B) (D) n(B) - n(A)

Q33. For any set A, (A')' is equal to:

(A) A' (B) A
(C) Ø (D) U

Q34. The set of all rational numbers is a subset of:

(A) Set of integers (B) Set of natural numbers
(C) Set of real numbers (D) Set of irrational numbers

Q35. If A = {1, 3, 5} and B = {2, 4, 6}, then A and B are called:

(A) Equal sets (B) Equivalent sets
(C) Disjoint sets (D) Overlapping sets

Q36. The power set of {a, b, c} has how many elements?

(A) 3 (B) 6
(C) 8 (D) 9

Q37. If A = {x : x is a letter in 'MATHEMATICS'}, then n(A) is:

(A) 11 (B) 9
(C) 8 (D) 7

Q38. If A - B = Ø, then:

(A) A = B (B) A ⊆ B
(C) B ⊆ A (D) A ∩ B = Ø

Q39. If A ∪ B = A ∩ B, then which of the following must hold?

(A) A = Ø (B) B = Ø
(C) A = B (D) A ∩ B = Ø

Q40. In a school, 40 students play cricket and 20 play tennis. If 10 play both, find total playing either game.

(A) 60 (B) 50
(C) 40 (D) 30

Q41. Let U = {1,2,3,4,5,6,7,8,9,10}. If A = {x : x is prime} and B = {x : x is odd}, find A ∩ B.

(A) {3, 5, 7} (B) {1, 3, 5, 7}
(C) {2, 3, 5, 7} (D) {3, 5, 7, 9}

Q42. Which of the following is a singleton set?

(A) {x ∈ N : x^2 = 4} (B) {x ∈ Z : x^2 = 4}
(C) {x ∈ R : x^2 = -4} (D) {x ∈ N : 2x = 5}

Q43. The expression A ∩ (A ∪ B)' is equal to:

(A) A (B) B
(C) Ø (D) U

Q44. If A has 3 elements and B has 4 elements, maximum possible elements in A ∩ B is:

(A) 0 (B) 3
(C) 4 (D) 7

Q45. If A has 3 elements and B has 4 elements, minimum possible elements in A ∪ B is:

(A) 3 (B) 4
(C) 7 (D) 1

Q46. The set of all lines parallel to the x-axis is:

(A) A finite set (B) An infinite set
(C) An empty set (D) A singleton set

Q47. If A = {x : x is a multiple of 4} and B = {x : x is a multiple of 6}, then A ∩ B consists of multiples of:

(A) 2 (B) 4
(C) 6 (D) 12

Q48. The complement of a universal set is:

(A) Universal set itself (B) An empty set
(C) A singleton set (D) An infinite set

Q49. If A ⊆ B, then B' ⊆ A'. This statement is:

(A) Always True (B) Always False
(C) True only if A is empty (D) True only if B is universal

Q50. Out of 100 students, 60 like math, 40 like science, and 20 like both. The number of students who like neither is:

(A) 0 (B) 20
(C) 40 (D) 30

Section B: Chapter 2 — Relations & Functions (50 MCQs)

Q51. If A = {1, 2} and B = {3, 4}, then the number of elements in A × B is:

(A) 2 (B) 4
(C) 6 (D) 8

Q52. If A × B = {(a,1), (a,2), (b,1), (b,2)}, then the set A is:

(A) {1, 2} (B) {a, b}

(C) {(a,1), (b,2)} (D) None of these

Q53. If n(A) = p and n(B) = q, then the total number of relations from A to B is:

(A) pq (B) 2^(pq)
(C) p^q (D) q^p

Q54. A relation R on a set A is defined as a subset of:

(A) A (B) A × A
(C) P(A) (D) None of these

Q55. Let A = {1, 2, 3}. Which of the following is NOT a relation on A?

(A) {(1,1), (2,2)} (B) {(1,2), (3,1), (2,3)}
(C) {(1,4)} (D) {(3,3)}

Q56. The domain of the relation R = {(1,2), (3,4), (5,6)} is:

(A) {2, 4, 6} (B) {1, 3, 5}
(C) {1, 2, 3, 4, 5, 6} (D) {1, 6}

Q57. The range of the relation R = {(x, y) : y = x + 5; x is a natural number less than 4} is:

(A) {1, 2, 3} (B) {6, 7, 8}
(C) {5, 6, 7} (D) {1, 2, 3, 6, 7, 8}

Q58. A relation f from a set A to a set B is called a function if:

(A) Every element in A has a unique image in B (B) Some elements in A have multiple images in B
(C) No element in A has an image in B (D) Every element in B has a pre-image in A

Q59. The domain of the real function f(x) = 1 / √(x - 2) is:

(A) (2, ∞) (B) [2, ∞)
(C) (-∞, 2) (D) R - {2}

Q60. The range of the identity function f(x) = x defined on R is:

(A) R+ (B) R-
(C) R (D) Z

Q61. The domain of the modulus function f(x) = |x| is:

(A) R+ (B) [0, ∞)
(C) R (D) Z

Q62. The range of the constant function f(x) = c is:

(A) R (B) {c}
(C) Ø (D) None of these

Q63. The domain of the function f(x) = √(9 - x^2) is:

(A) (-3, 3) (B) [-3, 3]
(C) (-∞, -3] ∪ [3, ∞) (D) [0, 3]

Q64. The range of the function f(x) = x / |x| for x ≠ 0 is:

(A) R (B) [-1, 1]
(C) {-1, 1} (D) {0}

Q65. If f(x) = x^2 + 2x + 1, then f(-1) is equal to:

(A) 4 (B) 2
(C) 0 (D) -1

Q66. If f(x) = 2x - 5, find the value of f(7).

(A) 9 (B) 14
(C) 5 (D) -1

Q67. If n(A) = 3 and n(B) = 2, the number of functions from A to B is:

(A) 6 (B) 8
(C) 9 (D) 5

Q68. The signum function f(x) has a range equal to:

(A) R (B) [-1, 1]
(C) {-1, 0, 1} (D) {1}

Q69. The domain of the function f(x) = 1 / (x^2 - 4) is:

(A) R (B) R - {2}
(C) R - {-2, 2} (D) [-2, 2]

Q70. If (x + 1, y - 2) = (3, 1), then the values of x and y are:

(A) x=2, y=3 (B) x=3, y=2
(C) x=2, y=1 (D) x=4, y=3

Q71. If A = {1, 2, 3} and B = {x, y}, then B × A is:

(A) {(1,x), (2,y), (3,x)} (B) {(x,1), (x,2), (x,3), (y,1), (y,2), (y,3)}
(C) {(1,1), (2,2), (3,3)} (D) None of these

Q72. The value of the greatest integer function [x] at x = -1.5 is:

(A) -1 (B) -2
(C) 1 (D) 0

Q73. If f(x) = x^3 and g(x) = x + 1, then (f + g)(2) is:

(A) 9 (B) 10
(C) 11 (D) 12

Q74. If f(x) = 3x + 4 and g(x) = 2x, find (f · g)(1).

(A) 14 (B) 12
(C) 7 (D) 2

Q75. The vertical line test is used to check if a graph represents a:

(A) Set (B) Relation
(C) Function (D) Interval

Q76. The range of the real function f(x) = |x - 1| is:

(A) R (B) [0, ∞)
(C) (0, ∞) (D) (-∞, 0]

Q77. If A has 4 elements, then the number of elements in A × A × A is:

(A) 12 (B) 16
(C) 64 (D) 4

Q78. The range of the function f(x) = 1 / (2 - cos x) is:

(A) [1/3, 1] (B) [1/2, 1]
(C) [-1, 1] (D) R

Q79. If f(x) = log(x), its domain is:

(A) R (B) [0, ∞)
(C) (0, ∞) (D) R - {0}

Q80. If ordered pairs (a, b) and (c, d) are equal, then:

(A) a = d and b = c (B) a = c and b = d
(C) a = b and c = d (D) None of these

Q81. If A × B is an empty set, then:

(A) Either A or B must be empty (B) Both A and B must be empty
(C) Neither A nor B is empty (D) A and B are equal

Q82. Let f(x) = √x. The domain of this function over real numbers is:

(A) R (B) (-∞, 0]
(C) [0, ∞) (D) (0, ∞)

Q83. If f(x) = x^2, then the pre-images of 4 are:

(A) {2} (B) {-2}

(C) {-2, 2} (D) {4}

Q84. A function f: R → R defined by f(x) = x^n where n is a positive integer is called a:

(A) Constant function (B) Polynomial function
(C) Rational function (D) Identity function

Q85. The domain of a rational function p(x)/q(x) excludes points where:

(A) p(x) = 0 (B) q(x) = 0
(C) p(x) = q(x) (D) q(x) > 0

Q86. If f(x) = x^2 - 1 and g(x) = 2x + 1, find (f - g)(3).

(A) 1 (B) 2
(C) 3 (D) 4

Q87. The function f(x) = x^3 is symmetric about:

(A) X-axis (B) Y-axis
(C) Origin (D) Line y = x

Q88. The Cartesian product of three sets A, B, C produces elements called:

(A) Ordered pairs (B) Ordered triplets
(C) Subsets (D) Relations

Q89. The range of the function f(x) = x^2 + 5 is:

(A) R (B) [5, ∞)
(C) (5, ∞) (D) [0, ∞)

Q90. If f(x) = 1 - x, then f(f(x)) is equal to:

(A) x (B) 1 - x
(C) x - 1 (D) 0

Q91. The codomain of a function is always _____ the range.

(A) A subset of (B) A superset of or equal to
(C) Disjoint from (D) Smaller than

Q92. If f(x) = [x] and g(x) = |x|, then find (f + g)(-2.3).

(A) -0.7 (B) -1
(C) 0.7 (D) -5.3

Q93. If n(A) = 5, the total number of non-empty relations possible on A is:

(A) 2^25 (B) 2^25 – 1 (C) 2^10 (D) 32

Q94. The domain of f(x) = 1 / √(4 - x^2) is:

(A) [-2, 2] (B) (-2, 2) (C) (-∞, -2) ∪ (2, ∞) (D) R

Q95. If f(x) = e^x, then its range is:

(A) R (B) [0, ∞) (C) (0, ∞) (D) (-∞, 0)

Q96. The intersection of the domain of f(x) and g(x) is the domain of:

(A) f + g (B) f – g (C) f · g (D) All of these

Q97. If R = {(x, y) : x, y ∈ N, x + 2y = 8}, then the range of R is:

(A) {1, 2, 3} (B) {2, 4, 6} (C) {1, 2, 3, 4} (D) {2, 3}

Q98. The fractional part function f(x) = x - [x] has a range of:

(A) (0, 1) (B) [0, 1] (C) [0, 1) (D) R

Q99. If A = {1, 2} and B = {3}, find the number of elements in (A × B) ∩ (B × A).

(A) 0 (B) 1 (C) 2 (D) 4

Q100. If f(x) = 1 / x, then for any x ≠ 0, f(1/x) equals:

(A) 1/x (B) x
(C) 1 (D) x^2

ACCOUNTANCY

1. **Prepare the Compehensive Project on Accountancy on one side ruled sheets.**
2. **Do the General Studies Project work on A4 sized white ruled sheets given below :-**
   Topic - Workforce Education Skills

- Soft skills
- Digital Skills
- Industry Specific Skills
- Financial literacy

3. **Do the worksheet given below (Attach the same in notebook) :-**

Worksheet

1. Assets which do not have physical existence and can't be touched, seen but can be felt only are known as --.

2. The goods unsold at the end of the accounting year is called - --.

3. Sale of household furniture of ₹. 50,000 of proprietor for ₹. 45,000 and invested the same amount in business will be called as --.

4. The excess of expenses of a period over its related revenues is termed as _____.

5. Ghanshyam and co. purchased machinery worth ₹12,00,000. It further incurred transportation cost of ₹ 2,00,000 and installation cost of ₹ 5,00,000. The market price of the machinery at the end of the accounting year was ₹25,00,000. Ghanshyam and co. should record the machinery price as ₹ in the books. Why?

6. A business purchased goods for Rs 2,00,000 and sold 75% of the goods during accounting year ended 31st March, 2022. The market value of remaining goods was Rs 48,000. He valued closing stock at cost while recording he violated concept.

7. Kabir charged depreciation on his Fixed Assets of ₹8,50,000 @ 10% p.a. in year 2018. He then charged depreciation in year 2019 at the rate of 12% p.a. Management is facing problem in comparing the data in consecutive years. To solve this problem, Kabir should learn about
- Assumption of accounting.

8. Ram, a sole proprietor of M/s Ram & company purchase a car for his personal use. The payment was made by issuing a cheque from the account of M/s Ram & company. His accounted debited to his Drawings Account due to the adherence of Business Entity Concept(T/F)

9. The value of a building that has been purchased by the firm for 3 crores, keeps on changing with its market value violates the principle of

a) Historical cost b) Matching c) Money Measurement d) Materiality

10. Match the following

1. Competency of the management will not be recorded	a) Prudence principle
2. Policy of playing safe	b) Revenue recognition principle
	c) Money measurement
	d) Going concern

11. Malik Ram working as a cashier in Reliance industry for the financial year 2019-20 and amount of 10 months' salary ₹ 2,00,000 credited in his account then 2 months' salary of ₹40,000 is shown in Reliance Industry by the name of ----------

12. Identify and explain the Accounting Principles/Concepts/Conventions followed or violated in the following situations:

1. 'Puri and Sons' is following the policy of valuing the closing stock at cost price irrespective of the fact that its market price is significantly lower than the cost price

2. 'Jain and Sons' is in Garments business. Their accountant prepared a single set of Financial statements for the time period from 1/4/2019 to 31/3/21.

INFORMATICS PRACTICES

1. Do Solved and Unsolved Exercise of Chapter 1 in your register.
2. Revise the syllabus covered.
3. General Studies -- *Prepare Project on Nation Building* covering the given topics :-
   - ✓ Meaning and Importance of National Integration
   - ✓ Historical Context of Nation Building
   - ✓ The role of Education and the Media in Nation Building
   - ✓ Challenges and Limitations to Nation Building

PHYSICAL EDUCATION:

File Work

1. GAME
Proficiency in Games and Sports (Skill of any one IOA recognized Sport/Game of your choice.
Including:
1. History of the game
2. Labelled diagram of field/court paste/draw.
3. Equipment used
4. Fundamentals Skills
5. Terminologies
6. Basic Rules

2 . TRADITIONAL SPORTS

Write any ten traditional sports and paste their pictures in front of them.Two traditional sports should be done on one page. These traditional sports can be found in Chapter no. 5 of the Physical Education book.

Project Work

Make the project on general studies on the topic
"Human Rights"
- The universal declaration of Human Rights and it's significance

- The responsibility of individuals, communities, and business in promoting Human Rights.
- The relationship between Human Rights and sustainable development.

PAINTING

Practical

1- Make One still Life with water colors or pastel colour.

2- Make One Landscape with water colors.

Note: Do your work in your sketch book.

Theory

Complete Chapter 1 "Art an Introduction "in your Note book.

WORK EXPERIENCE

Prepare a Project on

Visit an Old Age Home and organise the activities for the aged people.

Title of Project file: Visit to an Old Age Home.