PROJECT WORK – 2024–25
CLASS – IX

PROJECT WORK (SUBMISSION DATE: 1ˢᵗ July 2024)

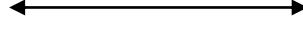## ENGLISH LANGUAGE

Written

Question 1)   Despite several attempts made by the government, to abolish child marriage it still remains as one of the biggest social evils and is still prevalent in most part of the country. Comment. (500 words)

Or

Question 2)   India needs to become a superpower to provide to the expanding needs of the countrymen. Discuss. (500 words)

Speaking skill – 5

Listening skill – 5

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ENGLISH LITERATURE

Question 1)   Referring closely to Marge Piercy's 'A work of Artifice' comment upon the extended metaphor of Bonsai tree which is representing women. What does the poet intend to share through the poem? (1000 words)

Or

Question 2)   Comment upon the theme of the play 'Julius Caesar', who is your favourite character? Why? (1000 words)

INSTRUCTIONS TO THE CANDIDATES:

1)   The Projects are for CISCE Board.

2)   Handwriting should be neat and clear.

3)   Make these Projects separately; one for language and one for literature.

4)   Write relevant matter and make it very creative.

5)   Relevant pictures and quotations must be there. Pictures only on the non-ruled sheet and write on the ruled side.

6)   Proper heading should be written in BOLD.

7)   Significant lines, phrases and dialogues should be highlighted.

8)   Do not use red and green ink.

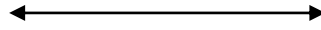9)   Cover the projects neatly with relevant details on the cover-page itself.

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HINDI

प्रश्न सं. 1)   पुरूष प्रधान समाज में नारी का संघर्ष, घर– परिवार की सीमाओं से बाहर नई चुनौतियाॅ; विविध क्षेत्रों में नारी योगदान दे रही हैं।नारी और नौकरी; दोहरी भूमिका कितनी संभव है, कितनी जरूरी। (शब्द सीमा 300–400 शब्द)

प्रश्न सं. 2)   कहानी 'काकी' का कथानक लिखते हुए कहानी का उद्देश्य स्पष्ट कीजिए। लेखक का साहित्यिक परिचय देते हुए श्यामू और विश्वेश्वर का चरित्र चित्रण कीजिए।

प्रश्न सं. 3)   A Listening Skills (AURAL) Listening to a conversation/Talk/Reading of a passage writing down the relevant points and answering the given questions.

प्रश्न सं. 4)   B Speaking skills (Oral)
                  (The topic-provided by the subject teacher)

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HISTORY / CIVICS

Question 1)   Make a pictorial presentation of the Harappan Civilisation.
                              OR
                'Fundamental Duties complement Fundamental Rights'. Illustrate with the help of a project.

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GEOGRAPHY

Question 1)   Prepare a project on-
                "Pollution, its sources, its effects and prevention".

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PHYSICS

[SEQUENCE-: Name, Contents, Acknowledgement, Introduction of Project Work- Topic is to be mentioned**, Objectives of Project Work, Detailed Matter, Conclusion, Bibliography]**

Topic 1:   Write about reflection of light by plane mirror and spherical mirror along with formation of images and their characteristics. Give uses of all types of mirrors.

Topic 2:   Write about electricity, electric circuits and symbols used in it. Write about magnetism and electromagnets.

WORKING MODEL

Prepare a working model from application of Pascal's Law.

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CHEMISTRY

Project Work: Prepare project work on any two questions given below:

Question 1:   Sources of pollution of water bodies in the locality. Suggest preventive steps to control it.
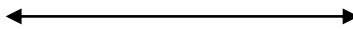Question 2:   Discoveries in the field of chemistry.
Question 3:   Preventive measurement of water pollution and effect of sodium carbonate on foaming capacity of soap.

Note: *Pictures are required on every pages as per given topic.*
Working Model: Make any one working model from the following:
                (i)   Acid rain working model.
                (ii)   Distillation of water.

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BIOLOGY

Topic 1

                Useful role of bacteria in the field of Medicine, Agriculture and Industry.
Topic 2

                Major classes of food their sources and functions. Balanced diet, Malnutrition and deficiency diseases.
Topic 3

                Prepare a Working Model on <u>anyone</u> of the following-
                (i)   Plant cell
                (ii)   Animal cell

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MATHEMATICS

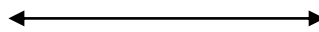|	
Topic 1	Conduct a survey of a group of students and represent it graphically height, weight, number of family members, pocket money etc.
Topic 2	Planning delivery routes for a milkman.

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ECONOMICS

[SEQUENCE-: Name, Contents, Acknowledgement, Introduction of Project Work- *Topic is to be mentioned***, Objectives of Project Work, Detailed Matter, Conclusion, Bibliography.]**

TOPIC – I

A case study on the effects of industrial pollution.

Adverse impacts of industrialisation: a brief understanding of the adverse impacts with reference to industrial pollution and deforestation; measures to overcome the adverse impacts: Afforestation, Waste management.

(Paste one passport size photograph in school uniform on the cover page of the file.)

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COMMERCIAL STUDIES

[SEQUENCE-: Name, Contents, Acknowledgement, Introduction of Project Work- *All the topics are to be mentioned***, Objectives of Project Work, Detailed Matter, Conclusion, Bibliography.]**

TOPIC – I
Students need to submit a file on the following topics: -
(i) Production, (ii) Purchasing & Stores, (iii) Marketing & Sales, (iv) Finance & Accounting, (v) Human Resources, (vi) General Administration, Legal and Compliance, (vii) Management Information System (MIS). Meaning and objectives of each of the above.
(Paste one passport size photograph in school uniform on the cover page of the file.)

TOPIC – II
Write a detailed report on the meaning, process and role of "Communication" in a commercial organisation; different methods of communication: letter, e-mail, conference calling (audio & video), telephonic conversation, social media - meaning of each.
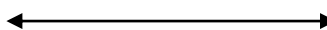Make a PowerPoint Presentation on it and copy the same in the "Smart Class" for Class-IX.

TOPIC – III
Write a Detailed report on the meaning of Journal; and classification of accounts, rules of debit and credit.
Recording of transactions in a journal for a model question, (Simple numerical, Compound journal entries including cash discount, bad debts and opening and closing entries need **not** be covered). Meaning, posting and balancing of ledger accounts. (Ledger posting on the basis of simple journal entries.)
Meaning, objectives and preparation of trial balance with the given set of ledger account balances. (Re-drafting of trial balance need not be covered.)

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COMPUTER APPLICATIONS

Question 1)	Write a program to input the radius of the circle and find its area. ***Area of the Circle*** $= \pi r^2$
Question 2)	Write a program to input side of the cube and find its volume. ***Volume of cube= (side)³***
Question 3)	Write a program to input length, breadth and height of the cuboid and find its volume. ***Volume of Cuboid=l*b*h***
Question 4)	Write a program to input the radius of sphere and find its volume. ***Volume of sphere=4/3πr³***

Question 5) Write a program to input the radius and height of the cylinder and find its volume.
Volume of Cylinder=$\pi r^2 h$

Question 6) Write a program to input the principal, rate, time and calculate the simple Interest.
Simple Interest=(principal * rate * time)/100

Question 7) Write a program to input three integers and compute their average.

Question 8) Write a program to input the temperature in Fahrenheit, convert it into Celsius.
Celsius= (5.0/9)*(Fahrenheit-32)

Question 9) Write a program to demonstrate the use of the following mathematical functions.
   i)   Math.sqrt()
   ii)   Math.pow()
   iii)   Math. ceil()
   iv)   Math. floor()
   v)   Math.max()
   vi)   Math. round()

Question 10) Write a program in Java to accept a number. Check and print whether it is a prime

number or not.

A prime number is a number which is divisible by 1 and itself only. For example 2, 3, 5, 7, 11, 13 are all prime numbers.

Question 11) Write a program to input a number and check and print whether it is a Pronic number or not. [Pronic number is the number which is the product of two consecutive integers.]
Examples:
12 = 3 * 4
20 = 4 * 5
42 = 6 * 7

Question 12) An Abundant number is a number for which the sum of its proper factors is greater than the number itself. Write a program to input a number and check and print whether it is an Abundant number or not.

Example:

Consider the number 12.

Factors of 12 = 1, 2, 3, 4, 6 Sum of factors = 1 + 2 + 3 + 4 + 6 = 16

As 16 > 12 so 12 is an Abundant number.

Question 13) Write a program in java to determine if an entered number is a Buzz number.
Hint: A number is said to be a ***Buzz number*** if it ends with 7 or it is divisible by 7.
Example: 1007 is a Buzz number as it ends with 7.
343 is also a Buzz number as it is divisible by 7.

Question 14) Write a program in Java to input year in yyyy format and determine if it is a Leap Year.

Question 15) Employees at Analyze consulting earn the basic hourly wage of Rs 500.In addition to this, they also receive a commission on the sales they generate while tending the counter. The commission given to them is calculated according to the following table.

Total Sales	Commission Rates
Rs 100 to less than Rs 1000	1%
Rs 1000 to less than Rs 10000	2%
Rs 10000 to less than Rs 25000	3%
Rs 25000 and above	3.5%

Write a program in Java that inputs the number of hours worked and the total sales. Compute the wages of the employees.

Question 16) An electricity board charges the bill according to the number of units consumed and the rate as given below.

Units Consumed	Rate per unit
First 100 units	Rs 5 per unit
Next 200 units	Rs 10 per unit
Above 300 units	Rs 15 per unit

Write a program in java to accept the total units consumed by a customer and calculate the bill. Assume that a meter rent of Rs 500 is charged from the customer.

Question 17) Create a menu driven program to perform the following operations:
(A) ddition
(S) ubtraction
(M) ultiplication
(D) ivision
(R) emainder
(E) xit
The user should be able to pick the first letter of each option to perform the relevant action e.g. selecting D should invoke the Division operation.

Question 18) Write a program to input any number and compute the factorial of a given number using a while loop.
Hint: Factorial of 5=1*2*3*4*5

Question 19) Write a program using do while loop to calculate the sum of first 50 even and odd integers.

Question 20) Write a program to accept a number and check whether the number is Palindrome or not.
Hint: A palindrome number is a number that remains the same when its digits are reversed.
Example 121,101,141

Question 21) Write a program to accept a number and check whether the number is Armstrong or not.
Hint: A number is said to be Armstrong number if the sum of the cube of each digit of the number is equal to that number. Example $135 = 1^3 + 3^3 + 5^3 = 1+9+125$

Question 22) Write a menu driven program to find the sum of the following series:
i) $x^1 + x^2 + x^3 + x^4 +$……………………………….x^n
ii) $1/\sqrt{1} + 2/\sqrt{2} + 3/\sqrt{3} + 4/\sqrt{4}+$……………….. $10/\sqrt{10}$

Question 23) Write a menu driven program to print the following series
i)   2,4,6,8,10…………………n
ii)   1 11 111 1111 11111
iii)   1 12   123 1234 12345

Question 24) Write a program to print the following pattern
i)   *   ii) 1 * * * *
        * *   * 2 * * *
        * * *   * * 3 * *
        * * * *   * * * 4 *
        * * * * * *   * * * * 5

Question 25) Hotel Mount View, Nainital has announced seasonal discounts for its membership holders. The hotel provides three types of membership i.e. Gold, Diamond and Platinum. The membership coded for Gold, Diamond and Platinum are 1,2 and 3 respectively.
The hotel has two types of rooms: Deluxe and Super Deluxe. The codes for Deluxe and Super Deluxe rooms are 'D' and 'S' respectively.
Create a program that will accept name of the customer, membership code, room code, Number of rooms and Number of days from user and display the bill amount, discount and payable amount as per the given rates.

Room /Membership	Gold	Diamond	Platinum
Deluxe	5%	15%	25%
Super Deluxe	10%	20%	30%
Tariff per day: Deluxe Rs 2500,Super Deluxe Rs 4200			

Guidelines:

i)   **Students have to work on project regularly throughout the year according to instructions of the teacher.**
ii)   **Use comments in the program wherever it is required.**
iii) **Do the variable description after each program**
iv)   **Mention the output of each program after execution of it at right place.**

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ROBOTICS & ARTIFICIAL INTELLIGENCE (AI)

ROBOTICS

1.   Robots are becoming smarter day by day .Identify 5 unique smart robots and make a presentation .
2.   "All robots are machine ,but all machines are not robots." Prepare a writeup on the same.
3.   Is it ethical to use robots for military purposes? Prepare a presentation on this topic.

Artificial Intelligence

4.   Think and plan a small presentation on how AI could be used in classrooms. Which subjects could be taught and how would teaching be different in an AI-enabled classroom?
5 .   AI is a powerful tool ; however ,depending on how it is used ,it can be a blessing or a curse. Discuss with examples.

Python (Programming)

6.   Write a python program to find largest of three input number.
7.   Write a program to check whether it is a prime number or composite number using python.
8.   Write a python program to input two number to find HCF and LCM.
9.   Write a python program to print the following pattern:
      1
      12
      123
      1234
      12345
10.   Write a python program to generate the first n terms of a Fibonacci series 0,1,1,2,3,5,8……
11.   Write a python program to accept a number ,find out and display whether it is a Armstrong number or not.
      Armstrong number are those number whose sum of the digits to the power of number of digits is equal to the given number.
      (Example: N=153 so number of digits in 153 are 3 so $1^3+5^3+3^3$=153 so 153 is Armstrong number)
12.   Write a python program to check the given String is palindrome or not.
      Example: MADAM,RADAR,MOM etc are palindrome words which you can read same from front and back.).
13.   Write a python program to reverse the input string.
      Example: input :COMPUTER
      Output: RETUPMOC
14.   A year is a leap year if it is divided by 4,except that years divisible by 100 are not a leap year unless they are also divisible by 400. Write a python program that ask user for a year and print whether it is a leap year or not.
15.   Write a python program to find the factorial of a number provided by the user.
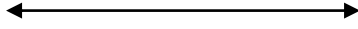   (Example: input N=5 factorial of 5 will be 5x4x3x2x1=120).
      Guidelines:
      i)   **Students have to work on project regularly throughout the year according to instructions of the teacher.**
      ii)   **Use comments in the program wherever it is required.**
      iii) **Do the variable description after each program**
      iv)   **Mention the output of each program after execution of it at right place.**

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PHYSICAL EDUCATION

Project -   Prepare a Project file on any two games given in your syllabus under following headings:
1.   Knowledge of Game – History
2.   Rules of the Game
3.   Fundamental skills of the Game
4.   Terminologies
5.   National and International Governing Bodies
6.   National and International Tournaments

HOME SCIENCE

[SEQUENCE-: Name, Contents, Acknowledgement, Introduction of Project Work- All the topics are to be mentioned, Objectives of Project Work, Detailed Matter, Conclusion, Bibliography.]

TOPIC -1
Collecting ten play materials and evaluating them in terms of their merits and demerits.

TOPIC -2
Demonstration of various cuts of vegetables and fruits such as slice, chop, dice, mince, juliennes to make easy salads.
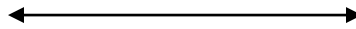
TOPIC -3
Identification and collection of samples of ten herbs/ spices/condiments available in the kitchen for treating common ailments. Preparation of a report on the same.

TOPIC -4
Collecting samples of fabrics and comparing them on the basis of cost, durability, appearance and suitability.

TOPIC -5
Designing a leaflet or a pamphlet to create awareness regarding consumer rights/ responsibilities.

S.U.P.W

1. **File work:**
    Write on the following topics:
(a) Health and Hygiene
(b) First Aid
(c) Interior Decoration

2. **Community Service:**
    Awareness drive on 'Health and Nutrition Education'.
    Students are required to take First Aid Box containing the following medicines and equipment: Dettol, Iodex, Burnol, Tincture Iodine, Spirit, Adhesive Plaster, Cotton Wool and Gauze, Band-Aid, Scissors, Crepe Bandage, Mask, Sanitizer etc.

3. **Projects:**
    (a)   Students are required to make six hankies using different stitches of hand embroidery or fabric painting.
    (b)   Students are required to make waste paper basket (dustbin) with the help of cardboard, thermocol etc.