

PROJECT WORK – 2022–23

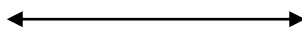
CLASS – IX

PROJECT WORK (SUBMISSION DATE: 1st July 2022)

ENGLISH LANGUAGE

Written

- Question 1) 24th March 2020 changed the face of in class room education and we were introduced to online classes. Describe your experience and explain how things have taken a toll since then.
- Question 2) A Listening Skills (Aural)
Listening to a conversation/ talk/ Reading of a passage writing down the relevant points and answering the giving questions.
- Question 3) B Speaking Skills (Oral)
(Speaking on the topic – provided by the subject teacher)



ENGLISH LITERATURE

- Question 1) Discuss the main plot and the subplot of the play 'Merchant Venice'. Comment upon the friendship of Antonio & Bassanio and their role in Portia's life. (1000 – 1500) Words.



HINDI

- प्रश्न सं. 1) वर्तमान युग में मोबाइल फोन आज जीवन की आवश्यकता बन गया है। इस विषय पर अपने विचार प्रकट कीजिए और बताइए कि मोबाइल फोन जीवन में सुबिधा के साथ-साथ मुसीबत किस प्रकार बन जाता है।
- प्रश्न सं. 2) 'एकांकी संस्कार और भावना' का कथानक लिखते हुए एकांकी का उद्देश्य बताइए तथा सभी पात्रों का चरित्र-चित्रण कीजिए।



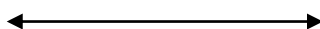
HISTORY / CIVICS

- Question 1) Prepare a project on Inventions and innovations as a result of the Industrial Revolution
OR
Prepare a project on 'Fundamental Duties complement Fundamental Rights'
Word Limit
(1000 to 1500 words)



GEOGRAPHY

- Question 1) Collect information on global environmental issues, and problems and communicate your finding through appropriate.
Modes (Posters, Charts and Power Point presentation.)



PHYSICS

- TOPIC1.** Present textually and diagrammatically on heat and temperature. Discussing the concepts of renewable and non renewable energy with an examples of our daily life.
- TOPIC2.** Write about the pressure in fluids, how does it play an important role in our daily life. Explain with the help of an examples.

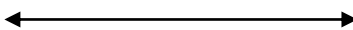
- Note: (i)** While giving the answers of the above questions, your answer should not be less than 3000 words for whole project.
- (ii)** Pictures are required on every pages as per given topic.



CHEMISTRY

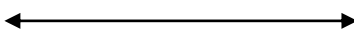
- Question1: Sources of pollution of water bodies in the locality. Suggest preventive steps to control it.
- Question2: Hard water and soft water, Identification of hardness, Simple softening- by heating the temporary hard water, using washing soda and advantage of using detergents over soap in hard water.
- Question 3: Preventive measurement of water pollution.

Note: (i) *While giving the answers of the above questions, your answer should not be less than 3000 words for whole project.*
(ii) *Pictures are required on every pages as per given topic.*



BIOLOGY

- Topic 1** Immunity and its types, uses of the following health aids-Vaccination, immunization, antitoxin, Serum, antiseptic and disinfectant. An idea of the local defense system and its merits.
- Topic 2** Health organizations, Red cross, WHO. Reasons for their formation, Major activities.



MATHEMATICS

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



ECONOMICS

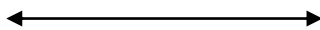
[SEQUENCE:- Name, Contents, Acknowledgement, Introduction of Project Work- Topic is to be mentioned, Objectives of Project Work, Detailed Matter, Conclusion, Bibliography-Word Limit-Minimum 1500 words.]

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.)



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-Word Limit-Minimum 500 words for each topic.]

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.)



COMPUTER APPLICATIONS

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- Question 1) Write a program to input three integers and compute their average.
- Question 2) Write a program to input the temperature in Fahrenheit, convert it into Celsius.
 $Celsius = (5.0/9) * (Fahrenheit - 32)$
- Question 3) Write a program to input side of the cube and find its volume.
 $Volume\ of\ cube = (side)^3$
- Question 4) Write a program to input length, breadth and height of the cuboid and find its volume.
 $Volume\ of\ Cuboid = l * b * h$
- Question 5) Write a program to input the radius of the circle and find its area.
 $Area\ of\ the\ Circle = \pi r^2$
- 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 the radius of sphere and find its volume.
 $Volume\ of\ sphere = 4/3 \pi r^3$
- Question 8) Write a program to input the radius and height of the cylinder and find its volume.
 $Volume\ of\ Cylinder = \pi r^2 h$
- 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 to input the sides of the triangle and finds its area applying Heron's formula.
 $Area = \sqrt{s(s-a)(s-b)(s-c)}$
- Question 11) Write a program which uses the Pythagorean Theorem to find the hypotenuse of a Right-angled triangle.
 $Hypotenuse = \sqrt{a^2 + b^2}$
- Question 12) 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 13) Write a program in Java to input year in yyyy format and determine if it is a Leap Year.
- Question 14) Write a program that reads month number and the year in yyyy format and displays number of days in that month.
- 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) Addition
- (S) Subtraction
- (M) Multiplication
- (D) Division
- (R) Remainder
- (E) Exit

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) $x^1 + x^2 + x^3 + x^4 + \dots + x^n$
- ii) $1/\sqrt{1} + 2/\sqrt{2} + 3/\sqrt{3} + 4/\sqrt{4} + \dots + 10/\sqrt{10}$

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)


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*
**
***
****
*****
            
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- ii)


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1 * * * *
* 2 * * *
* * 3 * *
* * * 4 *
* * * * 5
            
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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.



PHYSICAL EDUCATION

- Project -** Prepare a File on any two games of your text book under following heads:
1. Brief History
 2. Rules of the Game
 3. Fundamental Skills
 4. Terminologies
 5. National and international Governing Bodies.
 6. National and International Tournaments
 7. National and International Players



S.U.P.W

1. **File Work:**
Write on the following topics:
 - (a) Interior Decoration
 - (b) Meal Planning and Food Preservation
 - (c) Electrical Gadgets.

[Minimum 500 words on each topic]
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 wastepaper basket with the help of Cardboard, Thermocol etc.

