

Class: XI(2023-24)

Holiday Homework

Science

English Language

Write any *ONE* of the following:

ASSIGNMENTS FOR PROJECT WORK:

1. The test of a brochure.
2. A product Description.
3. A process description (Eg:- instruction to operate a device, a recipe, a scientific experiment)
4. Description of a Sporting Event.
5. An Autobiographical experience.
6. Review of a television serial.

Instructions:

- Only ONE assignment is allowed
- Maximum 500 words needed
- A4 size sheets should be used.
- Write only side of the sheet.
- Plain/coloured/ designed paper can be used.
- Photos/ Pictures/ Paper cuttings can be used.
- Stick file/ Thread file etc can be used.

The following should be used for page arrangement.

- ❖ Preface
- ❖ Acknowledgement
- ❖ Index
- ❖ Title Page
- ❖ Content
- ❖ Conclusion
- ❖ Bibliography

English Literature

Topics

1. Referring closely to the Drama “Macbeth” explain the main themes and issues presented in it.
2. The plot of Shakespeare’s plays has its roots in characterisation. Explain the characterisation of the drama “Macbeth”
3. Give a critical Appreciation of the story “A Living God”
4. The glorification of love in the sonnet seems to be exaggerated. Explain it with close reference to the poem “Sonnet “ by William Shakespeare.
5. Referring closely to the Drama “Macbeth” Act 1 scene 1-7 give a critical evaluation of the characters pointing out their actions and reactions.

Remember the following points while doing the project

- Study the topic very well.
- Cover page, certificate and declaration will have to be attached later on.
- Format of the above will be given later.
- Preface, acknowledgement, table of content, Introduction, a small summary of the text, Elaborating the topic with many sub-points, conclusion, bibliography etc. should be there in the project.
- Those who select poem should take the printout of the poem and attach it in the project before introduction.
- Roll. Numbers are given. As per the roll numbers given, please do the project.
- I hope all of you will cooperate well.
- Roll numbers are assigned for both commerce and science.
- It should be done in A-4 size sheet.
- Write only in one side of the paper.
- Total of 22-25 pages

Physics Project:

1. Investigating the properties of various types of waves (e.g. sound, light) and their applications
2. Studying the principles of resonance and designing and building a simple resonance apparatus
3. Investigating the principles of fluid mechanics and designing and building a simple hydraulic lift

CHEMISTRY

Prepare a project on the topic discussed in class.

- Total number of pages should be 30.
- A4 size sheets should be used.
- Plain/coloured sheets can be used.
- Write only one side of the sheet.
- Photos/ pictures/graph/cuttings can be used.

Pages should be arranged in the following order.

- Preface
- Acknowledgement
- Index
- Introduction
- Content
- Conclusion
- Bibliography

Submit your project during first week of July.

Submission of project file after allotted date will not be considered.

MATHEMATICS

Prepare a project on the topic **Sequence and series**

- Total number of pages should be 20- 25
- A4 size sheets should be used.
- Plain/coloured/ designed sheets can be used.

Pages should be arranged in the following order.

- Preface
- Acknowledgement
- Index
- Introduction
- Content

- Arithmetic Progression
 - General term of a A.P
 - Sum of first n terms of an A.P
 - Arithmetic Mean (A.M.)
 - Geometric Progression (G.P.)
 - General term of a G.P.
 - Sum of first n terms of a G.P.
 - Infinite G.P. and its sum
 - Geometric mean (G.M.)
 - Relation between A.M. and G.M
- Conclusion
 - Bibliography

BIOLOGY

1. Complete copy work of all the chapters done in class.
2. Learn chapters 1,10, 16, 17 and 18.
3. Complete Biology Annual board Project as per discussion in class.

●General instructions :

- a. Use A4 Sheets to complete your project (white or light colors).
- b. Don't use designer sheets.
- c. Draw maximum diagrams related to your project.
- d. You can paste print outs for case history only.
- e. Don't decorate your project with coloured tapes, unnecessary flowers, designs etc. Try to have topic related diagrams, watermarks etc so that it gives a good biology project presentation.
- f. On the cover-page of project Write the name of topic in bold letters and draw the main diagram of the project. You can make this diagram creative according to your choice.

COMPUTER SCIENCE

Write the following programs in project File.

Instruction:

Order of each question is :

- ❖ **Question**
- ❖ **Algorithm**
- ❖ **Program with comments**
- ❖ **Variable description**

Question 1:

A Unique number is a positive integer (without leading zeros) with no duplicate digits.

For example, 7, 135, 214 are all unique numbers whereas 33, 3121, 300 are not.

Accept two positive integers m and n , where m is less than n as user input. Display the number of Unique integers that are in the range between m and n (both inclusive) and output them along with the frequency, in the format specified below.

Test your program with the sample data and some random data:

Example:

INPUT:

$m = 100$

$n = 110$

OUTPUT:

THE UNIQUE INTEGERS ARE:

102 103 104 105 106 107 108 109

FREQUENCY OF UNIQUE INTEGERS IS :8

Question 2:

An Evil number is a positive whole number which has even number of 1's in its binary equivalent.

Example: Binary equivalent of 9 is 1001, which contains even number of 1's.

Thus, 9 is an Evil Number.

A few Evil numbers are 3, 5, 6, 9....

Design a program to accept a positive whole number 'N' where $N > 2$ and $N < 100$. Find the binary equivalent of the number and count the number of 1s in it and display whether it is an Evil number or not with an appropriate message.

Test your program with the following data and some random data:

Example:

INPUT:

N = 15

BINARY EQUIVALENT: 1111

NUMBER OF 1's: 4

OUTPUT: EVIL NUMBER

Question 3:

A Circular Prime is a prime number that remains prime under cyclic shifts of its digits. When the leftmost digit is removed and replaced at the end of the remaining string of digits, the generated number is still prime. The process is repeated until the original number is reached again.

A number is said to be prime if it has only two factors I and itself.

Example:

131

311

113

Hence, 131 is a circular prime.

Question 4:

Write a program to accept a string and check whether a string is Heterogram or not.

A string is said to be Heterogram if none of the alphabets present in the string is repeated.

INPUT:The big dwarf only jums

OUTPUT:HeterogramString

Question 5:

Write a program to accept a string and replace each vowel with next alphabet and each consonant with previous alphabet.

INPUT:THE CAPITAL OF INDIA IS NEWDELHI.

OUPUT:SGF BBOJSBK PE JMCJB JR MFVCFKGJ.

PHYSICAL EDUCATION

Game-1

Basketball □

Instructions:-

- * Minimum 20 to 25 pages needed.
- * A4 size sheets should be used.
- * Write only one side of the sheet.
- * Plain/coloured /designed sheets can be used.
- * Photos /pictures/ cuttings can be used.

The following should be used for page arrangement.

1. Preface.
2. Acknowledgement.
3. History of basketball.
4. Draw with the help of scale and pencil - basketball court, restricted area and back board.
5. All measurements.
6. Terms use in basketball.
7. Basketball rules , timeout, and substitution.
8. Duties of officials.
9. Fundamental skills.
10. Association and national or international personalities.
11. Bibliography.

*NOTE:-

Write in good handwriting.*