Class 10 (Geography Project)

Candidates will be required to prepare a project report on any One topic.

1, Environment: Wildlife Conservation efforts in India
2. Current Geographical Issues: Development of Tourism in India
3. Transport in India : Development of Road, Rail, Water and Air Routes.

Class 10

MATHEMATICS PROJECT

1. Linear Equation
2. Quadratic Equation
3. Ratio and Proportion
4. Remainder and factor Theorems
   10 pages each with one examples

English Project for Std X

English Language

* Listening & Speaking skill

Std X(Literature)

* Compare & contrast the characters of Prince of Morocco

 & Prince of Arragon.

* Critical Appreciation of 'Why the Caged Birds Sing'

(Word limit approx 400 words & to be written as per the

instructions given by the subject teacher)

COMPUTER APPLICATIONS Class 10
Project Work
EVALUATION OUT OF 100 MARKS
Coding may be done using Scanner Class.

Write Programs in java to display the following patterns
i) A
ABA
ABCBA
ABCDCBA
ii) 1
121
12321
1234321

iii) 1
131
13531
1357531
iv) A
AAA
AAAAA
AAAAAAA
v) 1
2 6
3 7 10
4 8 11 13

Methods

Question 2
i) Write a class to check whether a given number is Armstrong or not using a function name int checkArmstrong(int num). Function should return a value 1 if number is Armstrong otherwise it return 0 if not.
ii) Define a subclass sub1 in which define a method f1() to calculate and print hcf (highest common factor) by division method of any two given numbers entered by user in the main class. Define another subclass sub2 in which define a method f2() to calculate and print the area and perimeter of a rectangle by using the required parameters accepted in main class. Define main class to input the parameters required in the above two methods and also call the two functions.
iii) Write a program to print the few lines of the following patter (number of lines is given by user). Use one function for printing alphabets and another function to print the number.
 A A A A A 1
 B B B B 1 2
 C C C 1 2 3

D D 1 2 3 4
E 1 2 3 4 5

iv) The number 151 is a prime palindrome, because it is both a prime number and a palindrome. Write a class that find all prime palindromes between two given numbers a and b. Accept the values for a and b from the user in function main(). Use two function in your class, boolean isPrime(int) for check number is prime or not, int isPalindrome(int) to check number is palindrome or not.

v) Design a program to overload a function rect()

void rect(int n,char ch) With one integer argument and one character type argument draw filled square of side n using the character stored in ch.
void rect(int l, int b, char ch)- With two integer argument and 1 character argument draw a filled rectangle of length l and breadth b using the character stored in ch. Get the following output.
@ @ @ @ @
@ @ @ @ @
A
B B
B B
C C C
C C C
C C C
D D D D
D D D D
D D D D
D D D D

Strings

Question 3
i) In Piglatin a word such as KING becomes INGKAY, TROUBLE becomes OUBLETRAY as so on.
The first vowel of the original word becomes the starting of the translation and proceeding letter being shifted towards the end and followed by AY. Word that begins with a vowel is left unchanged. Write a class to accept a word and convert in to Piglatin word. Define a function int vowelPos(String) to find out the position of first vowel in the given word.
ii) Write a MENU Driven program using separate function to calculate and return the answer of the following options from a given sentence:
a) Total number of digits present in it.
b) Total number of small letters and capital letters present in it.
c) Total number of alphabets used in it.
d) Total number of vowels presents in it.
e) Total Number words present in that sentence.
iii) Write a class to display each word of the string in reverse order. e.g. If input is "India is my Country" output is "aidnI si ym yrtnouC". Use following function in your class:

public String reverse(String word) which will return the reverse word.
public void newstr(String Sentence) Accept a sentence and reverse the each word in
the sentence.
iv) Write a program to accept a sentence and reverse each word in that sentence and

print it. Program should also count number of palindrome word present in that
sentence.
v)
Define a class that has the following functions.
  String reverseWord(String word) -> which reverse the word and return it.
  boolean isPalindrom(String word) -> which check and return true if the word is
palindrome else return false.
  public void main(String Sentence) -> which print the sentence after reversing each
word, and then print number of palindrome word present in it.

vi) Write a program to accept a sentence and reverse each word in that sentence and print it.
Program should also count number of palindrome word present in that sentence.
Define a class that has the following functions.
  String reverseWord(String word) -> which reverse the word and return it.
  boolean isPalindrom(String word) -> which check and return true if the word is palindrome
else return false.
  public void main(String Sentence) -> -> which print the sentence after reversing each word, and
then print number of palindrome word present in it.

Constructor and Array

i)   Create two arrays A and B of size 5 and C of size 10. Accept numbers in two arrays A and B.
        Fill the array C in such a way that the first five positions occupy the numbers present in array
        A and rest of five positions occupy the numbers present in array B.

ii)   Accept numbers into an array of size 10. Then accept a number and search that number in
        array. If the number is present in array, then display the array element number where
        number is found. In case of multiple found display all the positions. Display a proper
        message if the number is not present in array.

iii)   There are 100 elements in an array, Write a program in JAVA to arrange first 50 elements of
        the array in ascending order and rest 50 elements into descending order.

iv)   A metropolitan hotel has ten floors numbered from 1 to 10, each floor having fifty rooms.
        Using a single subscripted variables for the name of the customer and a double subscripted
        variable R[F][I] where F & I represents floor and room numbers. Write a program for the
        room allocation work. The program should automatically display the name of all customer,
        room and floor number.

v)   Accept numbers into an array of size 4X4. Then display the diagonals and also display the
        sum of numbers present in the diagonal position.

vi)   Write a program to accept number into a 3X4 matrix. Display the original array. Then calculate and display the each row total.

vii)   Write a program to generate a Pascal triangle in which each number in the row is the sum of the two numbers immediately above it. The program should accept the number of rows to be print.
1
1 1
1 2 1
1 3 3 1
1 4 6 4 1

viii)   Write a program using constructor to accept time in hours(hh), minutes(mm),Seconds(ss)
Create a default constructor(where hh=0,mm=1,ss=0)
Create a parameterized constructor to accept data.
Also create objects to call constructors.

Write a program using constructor to accept a 7 digit number using scanner class and find out the sum of all even digits and product of
---xxxxxxxxxxxxxxxxxxxxxxxxx---

Odia

CLASS - X

୧. ରଙ୍ଗର ଉସ୍ତବ ହୋଲି

ଶବ୍ଦ ସଂଖ୍ୟା – ୪୦୦

୨. କାଲିଜାଇ

ଶବ୍ଦ ସଂଖ୍ୟା – ୪୦୦

Hindi

CLASS- X — 1. 5 लेखकों की तस्वीर सह उनकी जीवनी एवं उनकी प्रसिद्ध रचनाओं पर शोध ।

2. 5 कवियों की तस्वीर सह उनकी जीवनी एवं उनकी प्रसिद्ध रचनाओं पर शोध ।

3. साहित्य सागर में अन्तर्निहित किन्हीं पाँच पौराणिक कथाओं का चित्र सहित संक्षिप्त विवरण ।

Shoelace file.

मुख्य पृष्ठ – भूमिका, आभारोक्ति, स्वीकारोक्ति, विषयसूची एवं उपसंहार
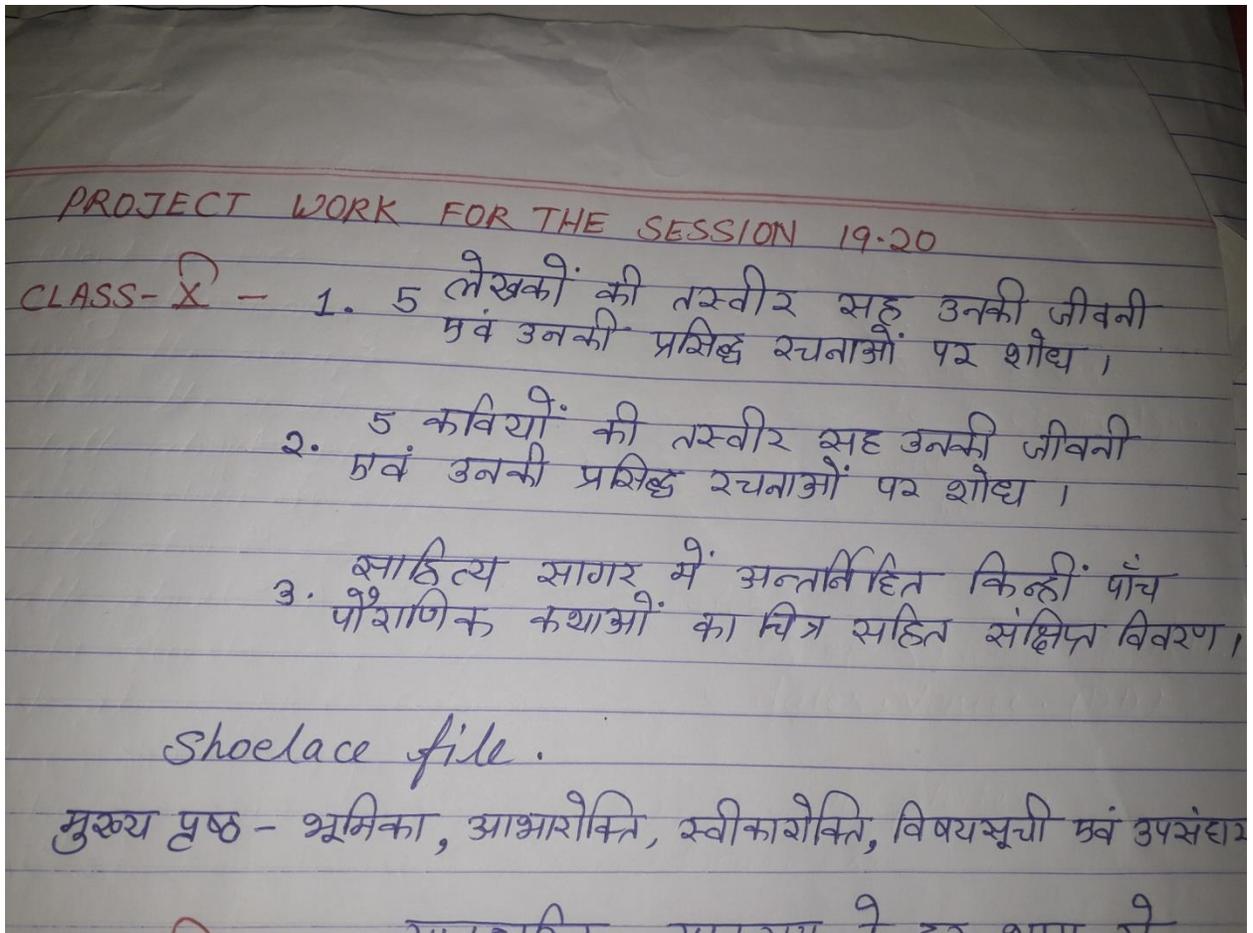
History and Civics Project

1.Prepare a report on contribution of anyone of the following Agencies of United Nations

- **UNICEF**
- **UNESCO**
- **WHO**

OR

2. Highlight the work and achievement of any one noble laureates.