

ANNUAL EXAMINATION – 2012-2013

CLASS - X I

COMPUTER SCIENCE

Paper – 2

(PRACTICAL)

(Reading Time:15 minutes)

(Planning Session AND Examination Session: Three Hours)

The total time to be spent on the planning session and the Examination session is three hours. After completing the Planning Session, the candidate may begin with the Examination Session.

A maximum of 90 minutes is permitted for the Planning Session.

However, if candidate finish earlier, they are to be permitted to begin the Examination Session.

(Maximum Marks:80)

As it is practical examination the candidate is expected to do the following:

1. Write an algorithm for the selected problem.
(Algorithm should be expressed clearly using any standard scheme such as pseudo code or in steps which are simple enough to be obviously computable) [10]
2. Write a program in JAVA language. The program should follow algorithm and should be logically and syntactically correct. [20]
3. Document the program using mnemonics names/comment, identifying and clearly describing the choice of data types and meaning of variables. [10]
4. Code/Type the program on the computer and get a printout (Hard Copy).Typically this should be a program that compiles and run correctly. [10]
5. Test run the program on the computer using the given sample data and get a printout of the output in the format specified in the problem. [10]
6. Viva-Voce on the **Selected Problem.** [20]

Solve any **one** of the following Problems.

Question 1

Write a program in Java to accept a String and print all the consecutive and repeated charaters present in the given string.

Sample Input : understanding computer science.

Sample Output : Consecutive Characters :

d
e
r
s
s
t

Repeated Characters :

u
n
d
e
r
s
t
i
c

Question 2

Write a program in Java to display all prime palindrome numbers from m to n.

Sample Input :

Enter the value of m:- 4

Enter the value of n:- 9

Sample output:-

Sorry! Not possible to find in one digit

Sample Input :

Enter the value of m:- 40

Enter the value of n:- 20

Sample output:-

Sorry! Not possible first value should be greater than second one

Sample Input :

Enter the value of m:- 10

Enter the value of n:- 200

Sample output:-

11 , 101 , 111 ,121 ,131 ,141 ,151 ,161 ,171,181 ,191

Question 3

Write a program in Java to store the numbers in a m x n matrix in Double Dimensional Array. Arrange the numbers of each row in ascending order and display the result.

Sample Input:

Enter number of rows:- 4
Enter number of column:- 4
22 14 23 25
81 26 31 10
58 64 17 12
55 33 26 14

Sample Output:

14 22 23 25
10 26 31 81
12 17 58 64
14 26 33 55

