

ANNUAL EXAMINATION : 2011-2012

CLASS - IX (ICSE)

Time : 2 hrs.

Subject - Computer Application

M.M.: 100

Answer to this paper must be written on the paper provided separately.

You will not be allowed to write during first 15 minutes.

This time is to be spent in reading the question paper.

The time given at the head of question paper is the time allowed to write the answers.

This paper is divided into two sections.

Attempt all questions from Section 'A' and any four questions from Section 'B'.

The intended marks for questions or parts are given in [ ].

SECTION-A [40 Marks]

Attempt all questions from this section.

- Q.1- a. State two kinds of datatypes in Java. [2]
- b. Differentiate between break statement and continue statement. [2]
- c. Define fall through. [2]
- d. Define Implicit and Explicit type conversion. [2]
- e. What is single dimensional array? [2]
- Q.2- a. Name the character set used by Java. What is its significance. [2]
- b. Name the class that is used for different Mathematical functions. Give an example of a Mathematical function. [2]
- c. Differentiate between while and do while loops. [2]
- d. Define a variable. Give an example. [2]
- e. Why is final keyword used? [2]
- Q.3- a. What is the return type of the following String functions:- [2]
- i. equals() *b*
- ii. compareTo() *no*
- iii. endsWith() *b*
- iv. length() *i*
- b. Predict the output of following:- [4]
- String x = "Computer";
- String y = "Application";
- i. System.out.println (x.substring(1, 5)); *omple*
- ii. System.out.println (x.equals(y)); *false*
- iii. System.out.println (x.charAt(3)); *p*
- iv. System.out.println (y.length ()); *11*
- c. Write two advantages and two disadvantages of using an array? [4]
- d. If y=14 then find [2]
- $z = (++y * (y++ + 5))$  *300*
- e. Write Java expression for the following:- [2]
- i.  $z = x^3 + y^3 - \frac{xy}{z}$
- ii.  $d = \sqrt{e^2 + b^2}$
- f. Give the output:- [2]
- int a[] = new int[5];
- a[0]=4; a[1]=8; a[2]=7; a[3]=12; a[4]=3;
- System.out.println (a[2+1]); *12*
- g. Rewrite the following using if else [2]
- commission=(sale>5000)? sale\*10/100:0;
- h. Consider the following code snippet:- [2]
- int i=15; int n=i++%5;
- what are the values of i and n after code s executed?

**SECTION 'B' [60 Marks]**

**Answer any four questions from this section.**

**Each program should be written using variable description/mnemonic codes, such that the logic of the program is clear. Flowchart and algorithms are not required.**

- Q.4- a. What are the features of wordprocessor? [5]  
b. Write short note on:- [5]  
i. Thesaurus  
ii. Custom Animation  
c. Explain the following functions with syntax:- [5]  
i. POWER ( )  
ii. COUNT IF ( )
- Q.5- a. What is Mail Merge? [5]  
b. Name five different services provided by Internet. [5]  
c. What is a database? Write the advantages of using a database. [5]
- Q.6- a. Write a program to input a string and check whether it is palindrome or not. [7]  
b. Write a program to input a number and find whether it is prime or not. [8]
- Q.7- a. Write a program to print the following pattern: [5]  
I  
  N  
   D  
    I  
     A
- b. Write a program to input 10 elements in an array and find the smallest and greatest number. [10]
- Q.8- Write a program to input 10 elements in an array. Enter a number and using binary search technique check whether number is present in the array or not. [15]
- Q.9- Using a switch case, write a menu driven program to convert temperature from Fahrenheit to Celsius and Celsius to Fahrenheit. For an incorrect value, an appropriate message should be displayed. [15]

(Hint:  $C = \frac{5}{9} \times (F - 32)$  and  $F = 1.8 \times (C + 32)$ )

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