

ANNUAL EXAMINATION – 2012-2013

CLASS – I X

SUBJECT – COMPUTER APPLICATION

Time:-2 hours

Marks:-100

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

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

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

The time given at the head of the paper is the time allowed for writing the answers.

This paper is divided into two sections. Answer all questions from Section - A and any five questions from Section- B. Section A carries 40 marks and Section B carries 60 marks.

The intended marks for questions or parts of question are given in Brackets.

SECTION –A

(Answer all the questions from this section)

Question 1

- a) What is infinite loop? Explain with example. [2]
- b) Write the difference between ordinary compilation and java compilation. [4]
- c) Why Java is called platform independent language? [2]
- d) State the difference between Exit controlled loop and entry controlled loop. [2]

Question 2

- a) Explain the role of comments used in java. [2]
- b) State the difference between String literal and character literal [2]
- c) Explain the difference between break and continue. [4]
- d) State the difference between Implicit and Explicit type conversion. [2]

Question 3

- a)

```
switch(num)
{
case 10:
case 100: System.out.println("original"+ (num%3));
++num;
case 1000:
case500: ++num;
default: --num;
System.out.println("Final"+ (num));
```

 [4]
- b) Write the output of the following code [4]
 - i)

```
for(int i = 6; i>=1; i--)
{
for(int j = 1 j<=5; j++)
System.out.print( j );
System.out.println( );
}
```
 - ii)

```
for(int i = 6; i>=1; i--)
{
for(int j = 1 j<=i; j++)
System.out.print( i );
System.out.println( );
}
```
 - iii)

```
for(int i = 0; i<10; i++)
System.out.print( ++ i );
```
 - iv)

```
int m=3 , n=4;
while( m<10)
m++; n--;
System.out.print(m+ " "+n );
```
- c) Convert the following for loop to while loop and while to for loop. [4]
 - i)

```
int p=20;
for( k =p; k>=0; k-=2)
s+=k;
System.out.print("sum"+sum );
```
 - ii)

```
int a =37,b,c=4;
for( b =1; b<=a; b++)
{
if(a%b= =0)
c=c+1;
}
if(c= =2)
System.out.print((c*4) );
```
- d) Write the output of the following: [6]

```
System.out.print(Math.ceil(7.8));
System.out.print((12 & 8));
System.out.print((12 | 4));
System.out.print((12 >> 3));
System.out.print((12 << 3));
System.out.print(Math.Floor(7.8));
```

e) Write the syntax of for loop. [2]

SECTION-B

NOTE: - Answer any four questions from this section.

Each question carries 15 marks.

Question 4 Write a program to print the addition of the following series:-

- a) 1 , 9 , 25 , 49..... [5]
- b) 4, 16 , 36 , 64..... [5]
- c) 2, 5 , 10 ,17..... [5]

Question 5 Write a menu driven class to accept a number from the user and check whether it is a Palindrome or a perfect number according to user's choice. [15]

- i) Palindrome number :- (A number is a palindrome which when read in reverse order is same as in the right order)
Example:-11,101,151 etc
- ii) Perfect number :- (A number is called Perfect if it is equal to the sum of its factor Other than the number itself)
Example: 6 = 1 + 2 + 3

Question 6 A cloth showroom has announced the following festive discounts on the purchase of items based on the total cost of the item purchased:- [15]

Total cost	Discount
Upto Rs. 2000	5%
Rs. 2001 to Rs5000	25%
Rs. 5001 to Rs10000	35%
Above Rs.10000	50%

Calculate the total amount to be paid after discount.

Question 7 [15]

a) Write a program in java to design the following pattern

```

12345
1234
123
12
1

```

b) Write a program in java to design the following pattern

```

5
54
543
5432
54321

```

Question 8 The Central library charges late fine from the students(if the books were not returned On time) as per the rules: [15]

No. of days late	Textbook	Gen.books
Up to 10 days	20 paisa per day	25 paisa per day
11 to 15 days	25 paisa per day	30 paisa per day
16 to 30 days	30 paisa per day	40 paisa per day
More than 30 days	35 paisa per day	50 paisa per day

WAP to input name of the person,number of days late and type of books('T' for Textbook and 'G' for General books).Calculate and display the number of days returned late, fine and name of the person against whom the book is issued.)

Question 9 A teacher wants to calculate the volume of a cuboid , a cylinder and a cone as per the user's choice .

- a) Volume of a cuboid($v = l * b * h$)
- b) Volume of a cylinder($v = \pi r^2 h$)
- c) Volume of a cone($v = 1/3 \pi r^2 h$) [15]

