

Quarterly Examination 2017-2018

Std. : X
Subject : COMPUTER APPLICATIONS

Full Marks : 100
Time : 2hrs.+15mins.

Section A (40marks) (Attempt all questions)

- 1) Answer following question (10 marks)
- a) Principles of OOP ? (2)
 - b) What is a expression ? (2)
 - c) Why is class known as object factory (2)
 - d) what is the value of $((5/0.0)-(5/-00.0))$? (2)
 - e) Scanner class belong to which package ? (2)
- 2) Write output of the following : (5x2=10)
- a)

```
for(int x=15;x>1;x-=2)
{
if(x>10)
System.out.print(++x);
else
System.out.print(--x);
}
```
 - b)

```
int x=10;
x+= --x+x++ + ++x;
find the value of x
```
 - c)

```
when a=4;
a/= a++ + --a + a - -
```
 - d)

```
char var='z';
var=(var=='a')?var:'a';
System.out.print(var);
```
 - e)

```
int a=10, c=0;
while (a!=0)
{
a--;
if(a==5)
continue;
c++;
}
System.out.print(c);
```

3) Write expression for the following :

(2x5=10)

- a) $a=0.05-2y^3 / x-y$
- b) $d=(a+b)^n/\sqrt{3+b}$
- c) write output of following

```
String s="kerala samajam";  
int p=s.indexOf('a');  
System.out.print(p);  
System.out.print(p+s);
```
- d)

```
String s="Benetton";  
System.out.print(s.indexOf(s.charAt(4)));
```
- e) write the result of

```
x-y+x/y(Math.pow(x,2));  
System.out.println(x);
```

4) Write 2 difference among following :

(2x5=10)

- a) = = and equals();
- b) rint and random functions
- c) if else and ternary
- d) Boolean literal and character literal
- e) class and object

(SECTION-B)

ANSWER ANY 4 QUESTION (15x4 = 60)

1) Write programs to accept a sentence from the user and print largest word.

Input - we are good

Output - good

2) Write a program to accept an option from the user among 1 to 3 and print the patterns as per option entered

If option is 1	If option is 2	If option is 3
1	666666	12345
22	55555	12345
333	4444	12345
4444	333	12345
55555	22	
	1	

- 3) Write a menu driven program using switch to accept an option from the user among 1 or 2 and do as per option entered

If the option is 1 accept any word and print it in palindrome form Input- god Output- goddog

If the option is 2 accept a number and check its perfect number or not

Input - 6

Output - 6 is a perfect number

- 4) Write a program to print all palindrome numbers between 100 to 1000.
- 5) Write a program to accept a sentence in upper case and convert first alphabet of each word in lower case.

Input — KASHMIR BELONGS TO INDIA

Output — KASHMIR bELONGS tO iNDIA

- 6) Write a program to accept any one option from the user between 1-3 and solve series as per option entered by the user

if option is 1 solve $s = (a+1)/3 + (a+2)/5 + (a+3)/7 + \dots$ till n

if option is 2 solve $s = 2! + 4! + 6! + \dots$ till n!

if option is 3 solve $s = 2/3 - 4/5 + 6/7 - 8/9 + \dots$ till n

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