

## Quarterly Examination 2017-2018

Std. : IX  
Subject : COMPUTER APPLICATIONS

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

### Section A [40 marks] (Attempt all questions]

1. Answer following question (20 marks)
- a) Write any 2 advantages of OOP. (2)
  - b) What is a method ? (2)
  - c) What is a class ? (2)
  - d) What is the difference between pre increment and post increment. Explain with example. (2)
  - e) Write difference between floor( ) and round( ). (2)
  - f) Write a Java statement to find square root of 16 (2)
  - g) What is the difference between int and char data type. (2)
  - h) Name any two types of Java programs. (2)
  - i) Write difference between = and == . (2)
  - j) What is data abstraction ? (2)
- 2) Write output of the following (2x3=6)
- a) 

```
m=2, n=15;
m+=m - - + ++n + m*n;
System.out.print(m+ "\t" +n);
```
  - b) 

```
x=1 , y=1;
if(n>0)
{
x=x+1;
y=y+1;
}
What will be the output if n assumes :
i) 1 ii) 0
```
  - c) 

```
System.out.println (Math.sqrt(25));
System.out.println(Math.abs(-3.4));
```
- 3) Write expression for the following (2x4=8)
- a)  $c=(a^2+b^2)3$
  - b)  $c=\pi r^2 h$
  - c)  $d=x^3 + y^3 - xy/2$
  - d)  $q=(m+n)^4/(m*n)$

4) Evaluate the expression

(2x3=6)

Here  $a=8$  ,  $b=10$  and  $c=4$

a)  $s = a++*(~b/c*c)$

b)  $t = (-a + --b)/c$

c)  $w = (b++ * ++a * --c)$

**(SECTION -B) ANSWER ANY 4 QUESTION (4x15 = 60 MARKS)**

- 1) a) Write a program to accept a number and check it is divisible by 5 and 8 both or not.  
b) Write a program to accept an age of a person and display whether person is an adult or not.

- 2) Write a program to accept an amount from the user and calculate discount on it as per given conditions

Amount	Discount
Less than equal to 4000	5%
More than 4000 and less than equal to 6000	7%
More than 6000 and less than equal to 9000	10%
More than 10000	12%

Calculate and display discount and amount payable

- 3) Write a program using switch to accept an option from the user among 1 to 3 and solve given formulaes

If the option is 1 solve Area of rectangle =  $a*b$

If the option is 2 solve Perimeter of rectangle =  $2*(a+b)$

If the option is 3 solve Diagonal of rectangle =  $a^2 + b^2$

- 4) Write a program to accept a character from the user and check whether its a lower or uppercase alphabet, a digit, a space Or a special character.

- 5) Write a program to accept monthly salary from the user and calculate gross salary as per given detail

DA = 25% OF BASIC

HRA = 15% OF BASIC

PF = 8.33% OF BASIC

NET PAY = BASIC+DA+HRA

GROSS PAY=NET PAY-PF

Print basic and gross pay in different lines.

- 6) Write a program to accept any one option among 1 to 3 in variable opt. and any two numbers from the user in x and y.

If option is 1 print maximum among x and y

If option is 2 print minimum among x and y

If option is 3 raise power of x to y

(using switch)