Computer Application

Total :40 marks Time:1 hr

Question 1. [10]

- (a) What is a token in Java?
- (b) What is the need of JVM.
- (c) Write the syntax of a class definition
- (d) State the difference between == operator and = operator.
- (e) What do you mean by constant? Explain with example.

Question 2.

- (a) What is data type? Give one example.
- (b) Explain any two OOPS principles.
- (c) What will be the value of t, if t = 10 before these statements?
 - (i) t = ++t + (--t) * 2;
 - (ii) t += t-- + ++t + --t;
- (d) If boolean x =true, y = false and z = true what will be the result of the following statements:
 - (i) $x \mid | !y \&\& z$
 - (ii) $x \mid | !(y \&\& z)$
- (e) Write any four rules for naming classes.

Question 3. [10]

Write a program to compute the tax according to the given conditions and display the output as per given format.

| Total Annual Taxable Income | Tax Rate |
|-----------------------------|--------------------------------|
| Upto Rs. 1,00,000 | No tax |
| From 1,00,001 to 1,50,000 | 10% of the income exceeding |
| | Rs. 1,00,000 |
| From 1,50,001 to 2,50,000 | Rs. 5,000 + 20% of the income |
| | Exceeding Rs. 1,50,000 |
| Above Rs. 2,50,000 | Rs. 25,000 + 30% of the income |
| | exceeding Rs. 2,50,000 |
| | |

Question 4 [10]

Design a class for Employees of an organization to accept name and basic salary of an employee and calculate gross salary as per given conditions:

| Basic Salary | DA | LIC |
|--------------|----|-----|
| Upto 20000 | 20 | 7 |
| <50000 | 30 | 10 |
| Otherwise | 35 | 12 |

DA(Dearness Allowance) and LIC (A deduction for the Life Insurance Corporation Premium) are calculated as percentages on the basic salary earned by the employee.

A standard Provident Fund Deduction of 8.33% on the basic salary is also levied on all the employees. Print a well formatted Salary Slip with all the details.