

Open Elective-II : Java Programming

P. Pages : 2

Time : Three Hours



PSM/KW/23/2885/2907

Max. Marks : 70

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Due credit will be given to neatness and adequate dimensions.
 8. Assume suitable data whenever necessary.

1. a) What are the main feature of java? 5
b) What is the importance of java? 4
c) Explain the data types in Java programming language? 5

OR

2. a) Write short note on. 9
i) Class.
ii) Object.
iii) Encapsulation.
b) What is the overview of history of java programming language? 5
3. a) Explain the following operator used in java programming. 7
i) Arithmetic operator.
ii) Relational operator.
iii) Logical operator.
b) What is significance of wrapper classes in java programming? 7

OR

4. a) State the difference between string and string buffer classes? Explain any two methods of string classes with suitable java code? 7
b) Write the difference between vectors and arrays? 7

5. a) What is applied statistics in data science? 7
b) What are the four types of data in statistics? 7

OR

6. a) Explain switch case and conditional operator in java with suitable example? 7
b) Write all primitive data types available in Java with their storage sizes in bytes? 7
7. a) Develop a program to create a class 'Student' having data members 'Roll-No', 'Name' and 'Maks'. Derive a class 'Student Info' having data member 'Result' and method to initialize and display the information for three objects? 7
b) What are the types of inheritance? Explain with suitable example? 7

OR

8. a) Write a program to create a class 'salary' with data members 'empid', 'name' and 'basic salary'. Write an interface 'Allowance' which stores rates of calculation for da as 90% of basic salary, hra as 10% of basic salary and pf as 8.33% of basic salary. Include a method to calculate net salary and display it. 7
b) Explain exception handling mechanism. W.r.t. try, catch, throw and finally? 7
9. a) What is difference between File Rader & File Writer in Java? 7
b) Write the server socket class method in java programming language? 7

OR

10. a) What is stream and file handling in Java? 6
b) What is the serialization & Deserialization in java programming with suitable example? 8
