

Reg No:

Question Paper Code : 11224

B.E. / B.TECH DEGREE EXAMINATION, NOV / DEC 2014

Third Semester

B.E - Computer Science and Engineering

13CS302 - OBJECT ORIENTED PROGRAMMING

(Regulations: Mepco – R2013)

Duration: Three Hours

Maximum: 100 Marks

Answer ALL Questions

PART A – (10 × 2 = 20 Marks)

1. State the differences between a class and an object.
2. What are explicit and implicit type conversions?
3. Define encapsulation.
4. What are the differences between a structure and a class?
5. Mention the differences between method overloading and method overriding.
6. From whom the 'private' access control hides the member?
7. What is dynamic binding?
8. What keyword in java is used to inherit a class from another class?
9. List the differences between Multi Processing and Multi Threading.
10. Write the expansion for AWT.

PART – B (5 × 16 = 80 Marks)

- 11.(a) i. Explain the characteristics of OOP (8 Marks)
- 11.(a) ii. Write a C++ program to find the average of 'n' integer number (8 Marks)
- OR**
- 11.(b) i. What are the differences between procedure oriented and object oriented programming (8 Marks)
- 11.(b) ii. Write a C++ program to find the second smallest element in an array of integers (8 Marks)
- 12.(a) Write a suitable program to overload 'new' and 'delete' Operators. (16 Marks)
- OR**
- 12.(b) Write a program to sort the integer and floating point data types using generic programming (16 Marks)
- 13.(a) i. Write a java program to find the sum of numbers up to 'n' numbers (6 Marks)
- 13.(a) ii. Write a java program to find LCM and GCM of given 2 numbers. (10 Marks)

OR

- 13.(b) i. Write a java program to find the given integer number is odd or even number (6 Marks)
- 13.(b) ii. Write a java program to check whether the given string is palindrome or not. (10 Marks)
- 14.(a) A company pays its employees on a weekly basis. There are 2 types of employees: Salaried employees are paid on a fixed weekly salary regardless of the extra hours worked. Hourly employees are paid by the hour and receive overtime pay (1.5 times their hourly salary rate) for all hours worked in excess of 40 hours. For the current pay period, perform the payroll calculation using polymorphism (16 Marks)
- OR**
- 14.(b) Create an interface namely stack with two methods Push () and Pop (). Implement stack interface to handle with fixed number of elements and variable number of elements in the stack (16 Marks)
- 15.(a) Explain how java over comes the polling mechanism using the methods wait (), notify (), and notify all (). (16 Marks)
- OR**
- 15.(b) i. Write short note on 'The Delegation Event Model'. (8 Marks)
- 15.(b) ii. Write short note on 'Component class' (8 Marks)