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Question Paper Code : 40908

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2018

Fourth Semester

Electrical and Electronics Engineering

CS 6456 – OBJECT ORIENTED PROGRAMMING

(Electronics and Instrumentation Engineering/Instrumentation and Control

Engineering)

(Regulations 2013)

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions

PART – A

(10×2=20 Marks)

1. What is an object ? Give example.
2. Define an abstract data type.
3. What is a member function ?
4. Define polymorphism.
5. Outline the relationship between containers, iterators and algorithms.
6. Write the syntax for defining a function template.
7. What is a class ? Give an example for a class in java.
8. Name the access modifiers in java.
9. Define a package in java and write the syntax to declare a package.
10. What is multithreading ?

PART – B

(5×13=65 Marks)

11. a) Appraise the characteristics of object oriented programming languages. **(13)**

(OR)

- b) Compare the features of C++ and Java. **(13)**



12. a) Write a C++ program to sort an array of 'n' numbers in ascending order. Use classes and member functions. (13)
- (OR)
- b) What is an iterator ? Explain with an example iterators in C++. (13)
13. a) What is a template ? Outline the need for templates in C++ and appraise with an example the different types of templates. (13)
- (OR)
- b) What is inheritance ? Explain with an example the different types of inheritance in C++. (13)
14. a) Explain with an example the control statements in Java. (13)
- (OR)
- b) Write a Java program to accept two matrices, multiply the matrices and print the result. Use classes and methods. (13)
15. a) What is a java interface ? How to implement an interface ? Explain with an example. (13)
- (OR)
- b) What is exception handling ? Explain with an example exception handling in java. (13)

PART - C

(1×15=15 Marks)

16. a) Write a C++ program to perform the following : (15)
- Define a class account to represent a bank account. Include the following :
- Data members :
- Account number
 - Name of the depositor
 - Type of account
 - Balance amount in the account
- Member functions :
- To assign initial values
 - To deposit an amount
 - To withdraw an amount after checking the balance
 - To display name and balance
- (OR)
- b) Write a Java program to sort an array of 'n' names in alphabetic order. Use classes and methods. (15)