

B.E. Fourth Semester (Computer Science & Engineering, Computer Engineering) (CGS)
10313 : Object Oriented Programming : 4 KS 03 / 4 KE 03

P. Pages : 2

Time : Three Hours



AW - 3044

Max. Marks : 80

- Notes :
1. Due credit will be given to neatness and adequate dimensions.
 2. Assume suitable data wherever necessary.
 3. Illustrate your answer necessary with the help of neat sketches.
 4. Use of pen Blue/Black ink/refill only for writing the answer book.

1. a) Write a program to read and display details of 10 students using Array of objects. **7**
b) What is the use of data member and member function that is declared as a static in a class? Explain with help of suitable example. **6**

OR

2. a) Define a class string that could works as a user defined string type. Write a complete program to test your class to see that it does the following operations. **8**
 - i) Creates uninitialized string objects.
 - ii) Creates objects with string constants.
 - iii) Concatenates two string properly.
 - iv) Display a desired string object.
b) Explain the difference between constructor and method with help of example. **5**
3. a) What are new and delete operator? Give its syntax and explain with example. **6**
b) Write a program to overload arithmetic assignment operator (+ =) to add two distances. **8**

OR

4. a) Explain pointers for object with example. **6**
b) What are different data type conversions in C++? Explain the conversion routines that are used for each. **8**
5. a) Write a program to illustrate multiple inheritance. **7**
b) What is containership? Explain with example. **6**

OR

6. a) Explain with example overriding of member function in Inheritance. **7**
b) Explain public & private inheritance with example. **6**

7. a) What is polymorphism? Explain Runtime polymorphism with suitable example. 7
- b) Explain following terms 7
- i) Friend function
 - ii) Virtual function
 - iii) Static functions.

OR

8. a) What is 'this' pointer? How data members are accessed with 'this' pointer? Explain with suitable example. 7
- b) What is default assignment operator '='? What is does when applied to objects. 7
9. a) Explain the function 6
- i) Tellg()
 - ii) Seekg().
- b) Write a C++ program to illustrates the use of command line arguments. 7

OR

10. a) What are different functions for manipulation of file pointers? Explain each in brief. 7
- b) What is stream? Give the stream class hierarchy. 6
11. a) Explain the various components of standard Template Library. 7
- b) What are templates? Explain function Template and class Template. Give its declaration. 6

OR

12. a) What is exception? How exceptions are handled in C++? Explain with example. 7
- b) Write a function template which returns the minimum element. Contained in an array. 6
