Object Oriented Programming

P. Pages : 2

Time : Three Hours

|||| ||||||| ||| |||||
0913

TKN/KS/16/7438

Max. Marks : 80

_____

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. Solve Question 11 OR Questions No. 12.
8. Due credit will be given to neatness and adequate dimensions.
9. Assume suitable data wherever necessary.
10. Use of non programmable calculator is permitted.

1. a) Differentiate between Procedure Oriented Programming & Object Oriented Programming. **6**

b) Explain following terms with example. **8**
  i) Encapsulation. ii) Polymorphism.
  iii) Inheritance. iv) Late binding.

OR

2. a) Differentiate between Static & Non Static data members. **4**

b) Explain the concept of Arrays of objects with suitable example. **6**

c) Write a program to find the area of various Geometrical constructs like circle, Triangle rectangle etc. using constructor. **4**

3. a) What is the use of : : operator in C++? **4**

b) Explain pointer and Array with example? **6**

c) Write a program to overload binary operator using member function. **3**

OR

4. a) Explain function prototype & default argument in C++ with example. **6**

b) Explain NEW & DELETE operator in C++ with example. **7**

5. a) What are the different access specifiers used in C++? **3**

b) What is containership or classes within classes? Explain with example. **6**

c) Differentiate between function overloading & function overriding. **4**

OR

6.	a)	What is inheritance? What are different types of inheritance? Explain any one type of inheritance with an example.	**9**
	b)	Write a program using constructor overriding.	**4**
7.	a)	What is 'this' pointer? Give its example.	**4**
	b)	Differentiate between Static & Non Static functions.	**4**
	c)	Discuss Abstract class with example.	**5**

OR

8.	a)	What is the role of virtual function in C++?	**4**
	b)	Why did Pure virtual function need?	**5**
	c)	Explain pointer to object with example.	**4**
9.	a)	What is file pointer? Explain file pointer functions as follows. i) seekg ( ) ii) seekp iii) tellg iv) tellp ( )	**5**
	b)	How error can be handled during file operations?	**4**
	c)	Write a program in C++ to read the contents of one file and copy it to another file.	**4**

OR

10.	a)	What is the difference between opening a file using constructor function & opening a file using open function.	**5**
	b)	Explain unformatted I/O operation & formatted I/O operation functions in detail.	**5**
	c)	What are the various file opening mode?	**3**
11.	a)	What is exception? Explain how it is handled in C++?.	**6**
	b)	What is template? Explain function template with example Also state its advantages and disadvantages.	**8**

OR

12.	a)	Discuss iterates & specialized iterates.	**4**
	b)	Write a short note on **any three.**	**10**

i)   Sequential containers.   ii)   Associative containers.
iii) Multiple catch block.   iv)   Standard Template Library.
v)   User defined Exception.

****