B.E. / B.Tech. Computer Science & Engineering (Model Curriculum) Semester-IV
SE204CS - Object Oriented Programming

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Notes : 1. All questions carry equal marks.
2. Assume suitable data wherever necessary.
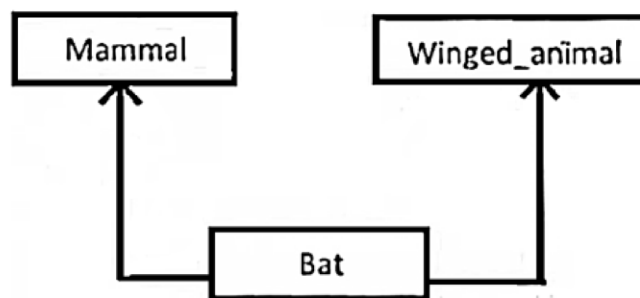3. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Explain operators in C++. **8**

b) Explain local and global variable in C++ with example. **8**

OR

2. a) What is an object? What is the need of an object and how they are created? Illustrate with an example. **8**

b) Explain switch statement with an example. **8**

3. a) Write a C++ program to overload sum() function using different types of parameters. **8**

b) Illustrate the concept of object as function arguments with example. **8**

OR

4. a) Explain memory allocation for objects with an example and draw the neat representation of it. **8**

b) Differentiate between friend function and member function with example in C++. **8**

5. a) Explain dynamic initialization of objects with an suitable example. **8**

b) Explain multiple inheritance by implementing below example: **8**

OR

6. a) Differentiate between constructor and destructor with an example. **8**

b) Explain the need of virtual base class with an example. **8**

7.	a)	Explain the need of this pointer and implement this pointer with a constructor through an example.	**8**
	b)	Differentiate between virtual function and pure virtual function with example.	**8**

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OR

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8.	a)	Write a program to implement array of pointers to objects with an example.	**8**
	b)	What are pointers ? Explain the need of pointers with example.	**8**
9.	a)	Explain console I\O operations:	**8**

        i)   width()
        ii)   fill()
        iii) precision()
        iv) setf()

	b)	What is generic programming in C++? Explain its need.	**8**

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OR

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10.	a)	Implement function templates with multiple parameters.	**8**
	b)	Explain overloading of template function in C++.	**8**

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