3. (a) What is memory management operator in C++?

    (b) Explain static memory allocation and dynamic memory allocation.

4. What are different types of inheritance supported by C++ ? Explain each of it using an example.

5. What is constructor ? Explain the different types of constructor with an example.

6. Describe Exception handing concept with an example. How to implement exception handing in C++.

7. What are different way to achieve the polymorphism in C++? Explain the pure polymorphism with example.

8. Explain stream class, stream class hierarchy and stream manipulator of C++.

9. Write short notes on any **three** of the following :
    (a) Function Overloading
    (b) dynamic Memory Management
    (c) Generic Function
    (d) Class Templates
    (e) Specifying Exceptions

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BCA(III)-301

2020

Time : 3 Hours

Full Marks : 80

Candidates are required to give their answers in

their own words as far as practicable.

The questions are of equal value.

Answer five questions in which Q. No. 1 is compulsory.

1. Choose the correct answer from the given alternatives :

    (a) A structure is a data type in which :
        (i)   Elements can be of different type
        (ii) Each element must have the same type.
        (iii) Each element must be of pointer type
        (iv) None of these

    (b) Which of the following is not an OOPS concept?
        (i)   Encapsulation
        (ii) Polymorphism

(iii) Exception

(iv) Abstraction

(c) The declaration of the structure is also called as ?

(i) Structure creator

(ii) Structure signifier

(iii) Structure specifier

(iv) Structure creator & signifier

(d) During dynamic memory allocation in CPP, new operator returns _____ value if memory allocation is unsuccessful.

(i) False

(ii) Null

(iii) Zero

(iv) None of these

(e) Types of inheritance in C++ are :

(i) Multilevel

(ii) Multiple

(iii) Hierarchical

(iv) All the above

(f) Generic catch handler is represented by _____.

(i) Catch (..,)

(ii) Catch (---)

(iii) Catch (...)

(iv) Catch (void x)

(g) Which among following is used to open a file in binary mode ?

(i) ios:app

(ii) ios::out

(iii) ios::in

(iv) ios::binary

(h) Which among following is correct syntax of closing a file in C++ ?

(i) Myfile$close();

(ii) Myfile@close();

(iii) Myfile:close();

(iv) Myfile.close();

2. (a) What is Object Oriented Programming ?

(b) What are the different data types present in C++ ?