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Y—484—2019

FACULTY OF SCIENCE

B.Sc. (Second Year) (Third Semester) (Backlog) EXAMINATION

NOVEMBER/DECEMBER, 2019

(CGPA Pattern)

COMPUTER SCIENCE

Paper VII

(Object Oriented Programming Using C++)

(MCQ & Theory)

(Tuesday, 17-12-2019)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—40

N.B. :— (i) Attempt all questions.

(ii) Assume suitable data, if necessary.

MCQ

1. Select the *correct* answers for the following : 10

(i) In OPP, data is hidden and cannot be accessed by

(a) External functions (b) Member functions

(c) Variables (d) Internal functions

(ii) are the basic run time entities in object oriented system.

(a) Variables (b) Objects

(c) Class (d) Program

(iii) refers to the act of representing essential features without including the background details.

(a) Polymorphism (b) Abstraction

(c) Encapsulation (d) Dynamic Binding

P.T.O.

- (iv) means ability to take more than one form.
- | | |
|-----------------|-------------------|
| (a) Abstraction | (b) Encapsulation |
| (c) Inheritance | (d) Polymorphism |
- (v) refer to the names of variables, functions, arrays, classes etc.
- | | |
|-----------------|------------|
| (a) Objects | (b) Class |
| (c) Identifiers | (d) Tokens |
- (vi) are widely used in C++ for memory management and to achieve polymorphism.
- | | |
|---------------|-------------------|
| (a) Tokens | (b) Pointers |
| (c) Functions | (d) None of these |
- (vii) Only can have access to the private data members and private functions.
- | | |
|----------------------|-----------------------|
| (a) Member functions | (b) Class and objects |
| (c) Inline functions | (d) None of these |
- (viii) is called compile time polymorphism.
- | | |
|--------------------------|---------------------|
| (a) Operator Overloading | (b) Dynamic Binding |
| (c) Casting | (d) None of these |
- (ix) When the properties of one class are inherited by more than one class, it is called
- | | |
|------------------------------|----------------------------|
| (a) Multiple Inheritance | (b) Multilevel Inheritance |
| (c) Hierarchical Inheritance | (d) None of these |
- (x) is one that is *not* used to create objects.
- | | |
|--------------------|-------------------|
| (a) Abstract class | (b) Class |
| (c) Variable | (d) None of these |

Theory

2. Explain in detail basic concepts of OOP. 10
- Or*
- (a) Explain structure of C++ program. 5
- (b) Explain function overloading with an example. 5
3. (a) Explain with example nesting of member functions. 5
- (b) Explain copy constructor with an example. 5
- Or*
- (a) Write C++ a program to find factorial of a given number. 5
- (b) Explain operator overloading. 5
4. Write a C++ program to demonstrate multiple inheritance. 10
- Or*
- (a) Explain opening and closing a file with an example. 5
- (b) Explain destructor with an example. 5