C 2503 A

B.C.A. (Three Year) DEGREE EXAMINATION, MARCH/APRIL 2018.

End Semester Examination

Second Semester

Part II

(Regular / Supplementary)
OBJECT ORIENTED PROGRAMMING USING C++

Time: 3 Hours Max. Marks: 70

PART — A

Answer any FIVE questions of the following. $(5 \times 4 = 20 \text{ Marks})$

- 1. Describe the applications of OOP technology.
- 2. What are the various data types in C++?
- 3. List the characteristics of a friend function.
- 4. Explain about Parameterized constructors.
- 5. Differentiate between function overloading and function templates.
- 6. Write a C++ program to illustrate multiple inheritance.
- 7. What is the need of Templates? Explain.
- 8. Explain the output manipulators: setw(), setprecision() and setfill().

PART — B

Answer ALL the following questions. $(5 \times 10 = 50 \text{ Marks})$

9. (a) Explain with the Basic Concepts of object oriented programming.

Or

(b) What are the advantages of using default arguments? Explain with an example program.

10. (a) Explain the visibility of base class members for the access specifiers: private, protected and public while creating the derived class and also explain the syntax for creating derived class.

Or

- (b) Explain copy constructor and destructor with suitable C++ coding.
- 11. (a) Define function overloading. Write a C++ program to define three overloaded functions to swap two integers, swap two floats and swap two doubles.

Or

- (b) What are the different forms of inheritance supported in C++? Discuss on the visibility of base class members in privately and publicly inherited classes.
- 12. (a) Explain about Template and its types with example.

Or

- (b) Implement quick sort as a generic function.
- 13. (a) Explain about File Pointers and their manipulations with example.

Or

(b) Explain about Exceptions Handlers and Standard Exceptions.

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