| Reg. No.: | <u>                                     </u> |  |
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## Question Paper Code: 1043192

## B.E. / B.Tech. DEGREE EXAMINATIONS, NOV/ DEC 2024 Third Semester

## Computer Science and Engineering U20CS303 / U20IT302 – OBJECT ORIENTED PROGRAMMING (Regulation 2020)

(Common to Information Technology)

| Time: Three Hours | Maximum: 100 Marl |
|-------------------|-------------------|
|                   |                   |

## Answer ALL questions

 $PART - A \qquad (10 \times 2 = 20 \text{ Marks})$ 

- 1. What do you mean by friend function?
- 2. How the pointers are represented in C++ with example?
- 3. What is meant by Encapsulation?
- 4. Which operator cannot be overloaded in C++?
- 5. What is the syntax used for writing class template?
- 6. Give the syntax for exception handling in C++? How many blocks are used?
- 7. What are the two types of an exception specification?
- 8. Define unexpected () function.
- 9. Define File streams and list out them.
- 10. List out the file streams in C++.

| 11. (a) | Explain about pointers and Functions in C++. (16)   |
|---------|---|
|         | (OR)  |
| (b)     | Write about Basic concepts of oops and Operators with example. (16  |
| 12. (a) | What is the need for parameterized constructor? Explain the function of constructors with their declaration inside a class. (16)                        |
|         | (OR)  |
| (b)     | What is meant by function overloading? Write the rules associated with Function overloading. Give suitable example to support your answer? (16)         |
| 13. (a) | Explain all types Inheritance with example. (16   |
|         | (OR)  |
| (b)     | Analyze the differences between multilevel and hybrid inheritance. Which one is more beneficial in a large-scale application, and why? (16)             |
| 14. (a) | Explain about blocks of Exceptions with examples. (16   |
|         | (OR)  |
| (b)     | Given a piece of code that throws multiple exceptions, analyze the flow of control and explain how the try, catch, and finally blocks are executed. (16 |
| 15. (a) | Explain Stream classes hierarchy with example. (16)   |
| 41.     | (OR)  |
| (b)     | Discuss the following.  (i) Define File  (ii) Mode of File  (iii) Operations of File  |

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