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Question Paper Code: 30120

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2023.

Fourth Semester

Bio Medical Engineering

CS 3391 - OBJECT ORIENTED PROGRAMMING

(Common to : Computer Science and Engineering/Computer and Communication Engineering/Medical Electronics/Computer Science and Business Systems/Information Technology)

(Regulations 2021)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. What is bytecode?
- 2. Write the general form of the for-each version of the for statement.
- 3. What is the use of final keyword?
- 4. How dynamic method resolution is achieved in Java?
- 5. List the values associated with the parameters of setpriority() method of Thread class?
- 6. Define deadlock.
- 7. State the purpose of Valueof() method in String class.
- 8. List any two methods available in DataOutput Interface.
- 9. What is the use of adapter class?
- 10. List any two forms of CheckBoxMenuItem constructors.

PART B — $(5 \times 13 = 65 \text{ marks})$

11. (a) Explain in detail about Java's iteration statements with example.

Or

- (b) What is a Constructor? Explain with example.
- 12. (a) What is a package? Explain in detail about how the packages provide access control to various categories of visibility for class members.

Or

- (b) Explain in detail about the basics of inheritance and elaborate on any two inheritance mechanisms in Java.
- 13. (a) Explain in detail about Java's Built-in Exceptions. Explain any three exceptions.

Or

- (b) Discuss in detail about the methods to create a thread in Java.
- 14. (a) Discuss in detail about the restrictions and limitations of using generics in Java Programming.

Or

- (b) Explain the following statement "StringBuffer class create mutable stings". Explain about StringBuffer class. Compare String class with StringBuffer class.
- 15. (a) Explain in detail about the commonly used event listener interfaces with a sample program.

Or

(b) Write a Java Program that demonstrates mouse event handlers.

PART C —
$$(1 \times 15 = 15 \text{ marks})$$

16. (a) Write a java program with nested try statements that raises divide by zero exception and out of bound exception, if the program contains a statement with division operator and a divisor as a command line argument.

Or

(b) Write a java Program to copy a text file into another text file and to raise exceptions for all cases.