

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - III Computer Science & Engineering : WINTER : 2024
SUBJECT: ITC-I: OBJECT ORIENTED METHODOLOGY

Day : Friday
Date : 13/12/2024

W-25314-2024

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Use of **CALCULATOR** is allowed.
- 4) Draw neat and labeled diagrams **WHEREVER** necessary.

- Q.1 Draw and explain the concept of JDK, JRE and JVM with suitable diagram. (10)
OR
Describe types of JAVA Operators with suitable example. (10)
- Q.2 Describe about various access modifiers used in JAVA with suitable example. (10)
OR
Describe the role of the 'this' keyword in object-oriented programming. (10)
Discuss how the "this" keyword is used to reference the current object within a class, avoiding ambiguity between instance variables and method parameters. Provide examples to demonstrate the usage of the "this" keyword in different scenarios.
- Q.3 Describe JAVA garbage collection mechanism. Also, describe the concept of destructor in JAVA with suitable example. (10)
OR
Define constructor and also explain its types with suitable example. (10)
- Q.4 How dynamic polymorphism is achieved. Explain it with suitable example (10)
OR
Describe the role of the "Super" keyword in method overriding, including its use to invoke superclass methods from overridden methods in subclasses. Provide examples demonstrating method overriding and the use of "Super" keyword. (10)
- Q.5 Define Thread. Describe complete lifecycle of thread. (10)
OR
Explain Throw statement will work in JAVA. Explain it with the help of Suitable example. (10)
- Q.6 Describe different stages in the life cycle of an Applet. Distinguish between init() and start() method. (10)
OR
Define Applet and its uses. Also, explain Applet life cycle. (10)

* * * * *