

PRAGATI ENGINEERING COLLEGE: SURAMPALEM
(AUTONOMOUS)
II B. Tech II Semester Regular/Supplementary Examinations, May-2024
JAVA PROGRAMMING
(Common to CSE, CSE(AI&ML), CSE(AI), CSE(DS) and IT)

Time: 3 hours

Max. Marks: 70

Answer ONE Question from each Unit
All Questions Carry Equal Marks

| Q. No. | Questions | | BTL | CO | Marks |
|------------|-----------|------------------------------------------------------------------------------------------------------------------------|-----|-----|-------|
| UNIT – I | | | | | |
| 1. | a) | What are the drawbacks of procedural languages? Explain the need of object-oriented programming with suitable program. | K2 | CO1 | 7M |
| | b) | Elaborate on the principles of Object Oriented Programming. | K2 | CO1 | 7M |
| OR | | | | | |
| 2. | a) | What are the primitive data types in Java? Write about type conversions. | K2 | CO1 | 7M |
| | b) | Discuss different types of Operators used in Java. | K2 | CO1 | 7M |
| UNIT – II | | | | | |
| 3. | a) | Explain the concepts of classes, objects and methods in OOP | K1 | CO2 | 7M |
| | b) | With suitable code segments illustrate various uses of ‘final’ keyword. | K3 | CO2 | 7M |
| OR | | | | | |
| 4. | a) | Explain the different parameter passing mechanisms used in Java with an example. | K2 | CO2 | 7M |
| | b) | Explain method overriding with a suitable example program. | K2 | CO2 | 7M |
| UNIT – III | | | | | |
| 5. | a) | Define inheritance. Explain different forms of inheritance with suitable code segments. | K2 | CO3 | 7M |
| | b) | Differentiate between interface and abstract class. | K4 | CO3 | 7M |
| OR | | | | | |
| 6. | a) | Demonstrate method overriding with an example. | K3 | CO3 | 7M |
| | b) | What is interface? Explain how to implement the interface in Java. | K2 | CO3 | 7M |
| UNIT – IV | | | | | |
| 7. | a) | Define package. Show how to create and access a package with an example. | K2 | CO4 | 7M |
| | b) | Give examples to illustrate the usage of wrapper classes. | K3 | CO4 | 7M |
| OR | | | | | |
| 8. | a) | Define exception handling in Java and discuss its importance in writing robust and fault-tolerant code. | K2 | CO4 | 7M |
| | b) | Explain the difference between checked exceptions and unchecked exceptions. | K3 | CO4 | 7M |
| UNIT – V | | | | | |
| 9. | a) | Compare and contrast the features of StringBuilder and StringBuffer classes. | K2 | CO5 | 7M |
| | b) | Define AWT? Describe about various components in AWT. | K2 | CO5 | 7M |
| OR | | | | | |
| 10. | a) | Explain life cycle of a Thread with neat sketch. | K2 | CO5 | 7M |
| | b) | Define JDBC architecture. Provide examples to illustrate the components of JDBC architecture. | K3 | CO5 | 7M |