

# Question Paper

Exam Date & Time: 13-Aug-2022 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal School of Information Sciences, Manipal  
Second Semester Master of Engineering - ME (Embedded Systems) Degree Examination (Makeup) - August 2022  
**Embedded Software Design [ESD 5203]**

**Marks: 100**

**Duration: 180 mins.**

**Saturday, August 13, 2022**

**Answer all the questions.**

- 1) With a neat diagram, explain JDK, JRE (TLO3.1) (10 Marks) (10)
- 2) Explain the concept of Inheritance with examples. (TLO1.1) (10 Marks) (10)
- 3) Explain the concept of CLA in JAVA with examples. (TLO3.1) (10 Marks) (10)
- 4) Explain the concept of Interface with an example. (TLO3.1) (10 Marks) (10)
- 5) Explain the Thread class with example in JAVA. (TLO4.2) (10 Marks) (10)
- 6) Explain Object Diagram with example. (TLO1.2) (10 Marks) (10)
- 7) A. Explain the Primitive Data Types in JAVA. (10)  
B. What are Wrapper classes and how they differ with Primitive Data Types. (TLO3.2) (5+5 = 10 Marks)
- 8) Explain DataOutputStream and DataInputStream with examples. (TLO3.2) (5+5 = 10 Marks) (10)
- 9) With a neat diagram, explain the Spiral Model. (TLO2.2) (10 Marks) (10)
- 10) With a neat diagram, explain JUNIT Testing. (TLO4.3) (10 Marks) (10)

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