

# Question Paper

Exam Date & Time: 25-Jun-2022 (02:00 PM - 05:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

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

**Marks: 100**

**Duration: 180 mins.**

**Saturday, June 25, 2022**

**Answer all the questions.**

- 1) Explain A. Abstraction B. ENCAPSULATION with examples. (10)  
(TLO3.2) (10 Marks)
- 2) Explain the concept of Polymorphism with examples. (TLO3.2) (10)  
(10 Marks)
- 3) Explain the concept of LAMDA Functions in JAVA with (10)  
example. (TLO3.2) (10 Marks)
- 4) Explain the static method, block and variable in JAVA. (10)  
(TLO3.1) (10 Marks)
- 5) What is UML? Explain the CLASS diagram concept with (10)  
example. (TLO1.2) (2+8=10 Marks)
- 6) With a neat diagram, explain the TCP client - server example (10)  
in JAVA. (TLO3.2) (10 Marks)
- 7) Explain the following classes with examples A. FileWriter B. (10)  
FileReader C. FileOutputStream D. FileInputStream E. File  
(TLO3.2) (2\*5=10 Marks)
- 8) Explain A. Throw vs Throws B. Final vs Finalize vs Finally. (10)  
(TLO3.2) (5+5=10 Marks)
- 9) With a neat diagram, explain AGILE Model. (TLO4.1) (10) (10)  
Marks)
- 10) With a neat diagram, explain the Software Defined Life Cycle. (10)  
(TLO1.1) (10 Marks)

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