

Question Paper



MANIPAL UNIVERSITY

SCHOOL OF INFORMATION SCIENCES
FIRST SEMESTER MASTER OF ENGINEERING - ME (Medical Software)
DEGREE EXAMINATION - NOVEMBER 2017
DATE : Tuesday, November 21, 2017
TIME : 10:00AM - 1:00PM
Software Engineering [MMS 607]

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Discuss 4 aspects of software engineering? (10)
- 2) What is full form of ACM and IEEE? Discuss ACM/IEEE Code of Ethics? (10)
- 3) Briefly discuss the below with an example (10)
a) As-is scenario, b) Visionary scenario c) Evaluation scenario d) Training scenario
- 4) Give brief description of UML modeling elements in class diagrams given below (10)
a. Association, aggregation, dependency. (Marks 6)
b. Inheritance relationships (Marks 4)
- 5) Give the software architecture diagram of a system with 5 important contributing factors? (10)
How we can segregate Software Architecture and Design into two distinct phases? What is Software architecture discuss in detail?
- 6) Why we need layout in user interface design? Give standard windows or Macintosh approach for screen layout? Name different properties or purposes of the layout? (4+4+2) (10)
- 7) List five major parts of the ISO 9001:2000 document Requirements and briefly explain them? (10)
- 8) Discuss Equivalence class partitioning and Boundary value analysis approaches used to design black box test cases for the following requirement. (10)
For a function that computes the square root of integer

values in the range between 0 and 5000.

- 9) Name 4 unit testing approaches at organizational level? (10)
Explain Isolation testing in detail? Discuss advantages and disadvantages of isolation testing? (2+6+2)
- 10) Briefly explain the following three Software Licensing models (10)
i) Beta or field test
ii) Capacity or performance
iii) Cross license

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