Total No. of Pages: 1

6th Semester

Mid Semester Examination

Roll No.....

B. Tech.

(March-2018)

MC 310: Software Engineering

Time: 1:30 Hours

Max. Marks: 25

Note: All questions are compulsory.

1. (a) Define the term Software Engineering. (1 Mark)

   (b) Write two disadvantages of waterfall model. (2 Marks)

   (c) Differentiate between functional and non-functional requirements. (2 Marks)

2. (a) Describe the difference between conceptual design and technical design. (1 Mark)

   (b) Briefly explain data flow diagrams and give an example of level-0 DFD (2 Marks)

   (c) Describe the relationship between cohesion and coupling. (2 Marks)

3. Explain the spiral model of software development. What are the limitations of such a model? (5 Marks)

4. (a) Describe the various steps of requirements engineering. Is it essential to follow these steps? (2.5 Marks)

   (b) What is the degree of a relationship? Give an example of each of the relationship deree. (2.5 Marks)

5. Define module coupling and explain different types of coupling. (5 Marks)

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Roll No.....

Total No. of Pages: 1

B. Tech.

6th Semester

(March-2019)

Mid Semester Examination

MC 310: Software Engineering

Time: 1:30 Hours

Max. Marks: 25

Note: All questions are compulsory.

1. (a) What is Software Development Life Cycle (SDLC)? (1 mark)
   (b) Describe briefly the characteristics of software as a product. (2 marks)
   (c) What are functional and non-functional requirements? (2 marks)

2. (a) What is the role of data dictionary? (1 mark)
   (b) Differentiate between SRS document and design document. (2 marks)
   (c) State two disadvantages of spiral model of software development. (2 marks)

3. (a) In the context of object-oriented design, explain the concept of abstraction. (2 marks)
   (b) Describe the various steps of requirements engineering process. (3 marks)

4. Define module cohesion and explain different types of cohesion. (5 marks)

5. Explain the different phases involved in waterfall model. Mention its drawbacks. (5 Marks)

END

Total No. of Pages: 1
6th Semester
Mid Semester Examination

Roll No.....
B. Tech.
(March-2020)

MC 310: Software Engineering

Time: 1:30 Hours **Max. Marks: 25**

Note: *All questions are compulsory. Figures in the right margin indicate marks.*

1. Answer the following questions: (1 x 5)
   (a) What is the most important feature of the spiral model?
   (b) Why is it desirable to have a module having low coupling and high cohesion?
   (c) What is the purpose of problem partitioning?
   (d) Define a software metric.
   (e) Write the desirable characteristics of an SRS document.

2. Answer the following questions: (2 x 5)
   (a) Discuss briefly the major areas of applications of a software.
   (b) Contrast between functional and object oriented approaches of system design.
   (c) Give two non-functional requirements and briefly explain their implications to system design?
   (d) What do you think happens when requirement validation reveals an error? Who is involved in correcting the error?
   (e) What do you understand by modularity in software development? Why is it needed?

3. What is requirements engineering? Describe the various steps of requirements engineering process. (5)

4. Describe prototyping model of software development. Under what circumstances this model is suitable over other models? (5)

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