M. C. A. (Sem. III) (CBCS) Examination

November / December - 2018

Software Engineering : 3020

Time : $2\frac{1}{2}$ Hours]   [Total Marks : **70**

1 (a) Answer the following :   **4**
   (1) Give full form of CMMI.
   (2) Give full form of RAD.
   (3) Waterfall model also known as linear sequential model. True or False ?
   (4) Scrum is an agile framework for managing knowledge work, with an emphasis on software development. True or False ?

   (b) Answer any **one** in brief :   **2**
   (1) Define Extreme programming.
   (2) List different phases of waterfall model.

   (c) Answer any **one** in detail :   **3**
   (1) Explain Incremental process model.
   (2) Write a note on spiral model.

   (d) Answer any **one** :   **5**
   (1) Explain Agile Process Model.
   (2) Explain component based Development.

2 (a) Answer the following :   **4**
   (1) Give full form of SRS.
   (2) Give full form of QFD.
   (3) The process of collecting the software requirement from the client then understand, evaluate and document it is called as _____.
   (4) In requirement negotiation, a software engineer decides the how will the project be achieved with limited business resources. True or False ?

(b) Answer any **one** in brief : 2

   (1) What is Requirement engineering ?

   (2) What is Requirement elicitation ?

(c) Answer any **one** in detail : 3

   (1) Explain requirement validation.

   (2) What is requirement negotiation ?

(d) Answer any **one** : 5

   (1) How to Elicit requirements?

   (2) Explain Requirement Engineering process.

3 (a) Answer the following : 4

   (1) Give full form of DFD.

   (2) _____ model describes the interaction in the system.

   (3) Give full form of CRC.

   (4) Behavioral modeling shows the dynamic nature of the system. True or False ?

(b) Answer any **one** in brief : 2

   (1) What is requirement analysis ?

   (2) List elements of analysis model.

(c) Answer any **one** in detail : 3

   (1) Explain object oriented analysis.

   (2) Explain scenario based modeling.

(d) Answer any **one** : 5

   (1) Explain class based modeling.

   (2) Explain any one behavioral model.

4 (a) Answer the following : 4

     (1) In _____ testing, individual units are combined and tested as a group.

     (2) In _____ testing, a complete and integrated software is tested.

     (3) Black box testing also known as behavioral testing. True or False ?

     (4) White box testing also known as glass box testing. True or False ?

   (b) Answer any **one** in brief : 2

     (1) What is unit testing ?

     (2) What is validation testing ?

   (c) Answer any **one** in detail : 3

     (1) Explain system testing.

     (2) Explain design model.

   (d) Answer any **one** : 5

     (1) Explain black box and white box testing.

     (2) Explain class based component design.

5 (a) Answer the following : 4

     (1) Give full form of UML.

     (2) The use case diagram is a representation of a user's interaction with the system. True or False ?

     (3) _____ represent static relationships between classes.

     (4) _____ diagram show the flow from one activity to another activity.

   (b) Answer any **one** in brief : 2

     (1) Define Association.

     (2) Define Multiplicity.

(c)   Answer any **one** in detail :   **3**

    (1)   Describe Use Case.

    (2)   Explain Inheritance and Generalization.

(d)   Answer any **one** :   **5**

    (1)   Explain class diagram with suitable example.

    (2)   Explain activity diagram with suitable example.

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