Question Paper Code : 47117

M.E./M.Tech. DEGREE EXAMINATION, JANUARY 2018

First Semester

Computer Science and Engineering

CP 5154 – ADVANCED SOFTWARE ENGINEERING

(Common to M.E. Computer Science and Engineering (With Specialization in Networks)/M.E. Multimedia Technology/M.E. Software Engineering)

(Regulations 2017)

Time : Three Hours   Maximum : 100 Marks

Answer ALL questions

PART – A   (10×2=20 Marks)

1. What is prototyping ?

2. Outline the need for software configuration management.

3. What is a requirements specification document ?

4. What is an association class ? Give example.

5. Define coupling.

6. What is a design pattern ?

7. Write a note on unit testing.

8. State the difference between black box testing and white box testing.

9. What is meant by DevOps ?

10. List the disadvantages of DevOps.

PART – B   (5×13=65 Marks)

11. a) Explain with a diagram the spiral life cycle model.   (13)

(OR)

   b) What is risk ? Write a detailed note on risk management.   (13)

12. a) Prepare a software requirements specification document for a "Train Ticket Reservation and cancellation system".   (13)

(OR)

   b) Model an use case diagram for a "Banking System". State the functional requirements you are considering.   (13)

13. a) What is cohesion ? Explain with an example any three types of cohesion. (13)

(OR)

   b) Explain with an example model-view-controller architecture.   (13)

14. a) What is integration testing ? Explain with an example the types of integration testing.   (13)

(OR)

   b) i) Appraise the purpose of regression testing. What are the major activities carried out during regression testing ?   (7)

   ii) Why do we need system testing ? Explain with an example.   (6)

15. a) i) Outline the different characteristics of DevOps.   (7)

   ii) Appraise the issues related to operational feasibility of DevOps.   (6)

(OR)

   b) Appraise the pros and cons of using cloud as a platform for software development and deployment.   (13)

PART – C   (1×15=15 Marks)

16. a) Model a class diagram for a "Library Management System". State the functional requirements you are considering.   (15)

(OR)

   b) An on-line transaction processing system has to be implemented in a hospital which can accommodate 200 inpatients. Prepare a project plan and schedule. State the functional requirements you are considering.   (15)

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