487/S

D/SC-2012119

Time : 3 Hours]   [Total Marks : 70

1. Attempt any **two** :   20

    (1) Explain Component base software engineering process.

    (2) Explain the System Design Process.

    (3) What is the use of Metrics ? Explain Class Oriented Metrics.

2. Attempt any **five** :   30

    (1) What is domain ? Explain domain analysis with example.

    (2) Write a note on Object Oriented Paradigm.

    (3) Explain CRC model index card.

    (4) Explain Object Oriented Testing strategies.

    (5) Write a short notes on interclass test case design.

    (6) Describe component qualification, adaptation and composition.

    (7) List out Management of object-oriented software project. Explain any one.

3. Attempt any **two** :   20

    (1) Explain object behaviour model in detail.

    (2) Describe clean room strategy. Explain and design refinement and verification.

    (3) Explain various steps for design of Object Oriented System.

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U/SC 02099132

M.Sc. IT & CA (Sem. III) Examination
November-2012
P-302 : Advanced Software Engineering

Faculty Code : U/SC
Subject Code : 02099132

Time : 3 Hours]   [Total Marks : 70

1. Explain any **six**.   **(30)**

    (1) Explain elements of Object Oriented model.

    (2) Explain Data Modelling Concepts.

    (3) Explain Water Fall model.

    (4) Explain Requirement Engineering Tasks.

    (5) Describe Metrics for Object Oriented Design.

    (6) Briefly explain CK Metrics Suite proposed by Chidamber and Kemerer.

    (7) Explain Testing methods applicable at the class level.

2. Describe any **four** :   **(20)**

    (1) Describe the Design Model.

    (2) Describe Software Design Concepts.

    (3) Describe Economics of CBSE.

    (4) Explain translation of the analysis model into the design model.

    (5) What is Integration Testing ? Explain its type.

3. Attempt any **two** :   **(20)**

    (1) Explain Cleanroom process model in detail.

    (2) Explain Process model that supports CBSE in detail.

    (3) What is CRC Model ? Briefly explain about usage of CRC Model along with CRC index card.

G-27

D/SC-2012119

M.Sc. IT & CA (Sem. III) Examination
November-2012
ADVANCED SOFTWARE ENGINEERING : PAPER-CMY : 3002

Faculty Code : D/SC
Subject Code : 2012119

Time : 3 Hours]   [Total Marks : 70

1. Answer the following (Any **Four**) :   **(20)**

   (1) Explain Component Qualification, Adaptation and Composition.

   (2) Explain Class Responsibility Collaboration card in detail.

   (3) Describe Characteristics of Object-Oriented Metrics.

   (4) State the role of design patterns in OOD.

   (5) Explain Testing Methods Applicable at the Class Level.

2. Answer the following (Any **Four**) :   **(20)**

   (1) Explain features of Object Oriented Paradigm.

   (2) Explain OOA process.

   (3) Explain Cleanroom Testing.

   (4) Discuss the CBSE process in brief.

   (5) Explain Design Patterns in detail.

3. Answer the following (Any **Three**) :   **(30)**

   (1) Describe Cleanroom Design. Explain Design Refinement and Verification with advantages of design verification.

   (2) Explain Object Oriented Testing Strategies in detail.

   (3) Explain object oriented analysis to object oriented design transformation process with appropriate diagrams.

   (4) Discuss various proposed class oriented metrics.

M. Sc. (IT & CA) (Sem. - II) Examination
November - 2011
CMY3002 : Advanced Software Engineering
(New Course)

Time : **3 Hours**]   [Total Marks : **70**

1   Answer the following questions : (any three)   **15**
   (a)   Write a note on Object Oriented Paradigm.
   (b)   Explain how to manage Object Oriented software projects.
   (c)   What is domain ? Explain Domain Analysis.
   (d)   What is testing ? Explain various Testing methods.

2   Answer any **two** :   **20**
   (a)   Write and explain various steps for Design of Object Oriented system.
   (b)   Differentiate The System Design Process and Object Design Process.
   (c)   What is matrics ? Explain Object Oriented Metrics.

3   Answer the following questions : (any **three**)   **15**
   (a)   Explain Clean Room Software Engineering.
   (b)   Write a note on Clean room design.
   (c)   Explain procedure for Component based development.
   (d)   List and explain Characteristics of Object Oriented Matrics.

4   Answer any **two** :   **20**
   (a)   Write a detail note on The component based software engineering process.
   (b)   Draw and explain Object Relationship model.
   (c)   Explain the System Design Process.

M.Sc (IT & CA) Semester – 3
Paper – CMY3002 Advanced Software Engineering
(New course)

[Total time : 3 hours]   [Maximum marks : 70]

[30]

Q. 1   Attempt any ten of the following:
   (1)   Explain class size in metrics proposed by Lorenz and Kidd.
   (2)   Explain state box specification in clean room software engineering.
   (3)   What is component qualification?
   (4)   Briefly explain inheritance.
   (5)   Briefly explain Encapsulation and polymorphism.
   (6)   Only draw the diagram for typical process sequence for an OO project.
   (7)   Only draw the domain diagram for input and output for OOA.
   (8)   Briefly explain OO design pyramid.
   (9)   Explain integration testing in OO context.
   (10)   What is fault based testing in OO context? Explain in brief.
   (11)   Explain random testing for OO classes.

[30]

Q. 2   Attempt any five of the following:
   (1)   Briefly explain operation oriented matrics.
   (2)   What is design verification in clean room software engineering? Explain its advantages.
   (3)   Write short note on certification in clean room software engineering.
   (4)   Briefly define component composition and component updation.
   (5)   What is component adaptation? Explain it in detail.
   (6)   Briefly explain an OO estimating approach.

[10]

Q. 3   Attempt any one of the following
   (1)   Explain MOOD metrics suite in detail.
   (2)   Explain the clean room process model.

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