Total No. of Questions : 9]   [Total No. of Printed Pages : 4

(1049)

B.C.A. (CBCS) RUSA VIth Semester Examination

4399

SOFTWARE ENGINEERING

Paper : BCA-0605

Time : 3 Hours]   [Maximum Marks : 70

Note :– Attempt *five* questions in all, selecting *one* question each from every Unit. Part–A (Q. No. 1) is compulsory.

Part–A

(Compulsory Question)

1. Attempt all parts :

   (A) Select the correct option for MCQ's.

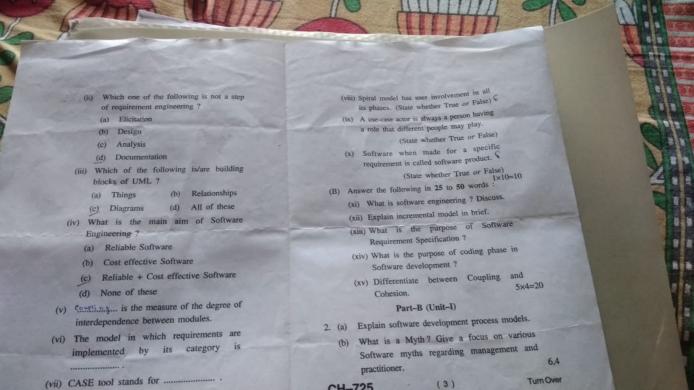   (i) Software consists of :

   (a) Set of instructions +
   Operating procedures

   (b) Programs + hardware manuals

   (c) Programs + documentation
   + Operating procedures

   (d) Set of Programs

(ii) Which one of the following is not a step of requirement engineering ?

(a) Elicitation

(b) Design

(c) Analysis

(d) Documentation

(iii) Which of the following is/are building blocks of UML ?

(a) Things   (b) Relationships

(c) Diagrams   (d) All of these

(iv) What is the main aim of Software Engineering ?

(a) Reliable Software

(b) Cost effective Software

(c) Reliable + Cost effective Software

(d) None of these

(v) Coupling... is the measure of the degree of interdependence between modules.

(vi) The model in which requirements are implemented by its category is ....

(vii) CASE tool stands for ....

(viii) Spiral model has user involvement in all its phases. (State whether True or False)

(ix) A use-case actor is always a person having a role that different people may play.

(State whether True or False)

(x) Software when made for a specific requirement is called software product.

(State whether True or False)

$1 \times 10 = 10$

(B) Answer the following in 25 to 50 words :

(xi) What is software engineering ? Discuss.

(xii) Explain incremental model in brief.

(xiii) What is the purpose of Software Requirement Specification ?

(xiv) What is the purpose of coding phase in Software development ?

(xv) Differentiate between Coupling and Cohesion.

$5 \times 4 = 20$

Part-B (Unit-I)

2. (a) Explain software development process models.

(b) What is a Myth? Give a focus on various Software myths regarding management and practitioner.

6,4

3. (a) "Software Engineering is a layered Technology." Justify.

(b) How the selection of appropriate model is done ? 5,5

Part–C (Unit–II)

4. (a) Explain briefly about requirements validation.

(b) What is the goal of requirement analysis phase ? 5,5

5. (a) What is difference between architecture and design ?

(b) What according to you is a good software design ? 5,5

Part–D (Unit–III)

6. (a) Explain object oriented analysis and design principle.

(b) What are the design principles ? Explain in detail. 5,5

7. (a) Discuss sequence and collaboration diagrams.

(b) What is dynamic Modeling ? Explain. 5,5

Part–E (Unit–IV)

8. (a) How detail design differs from system design ? Explain with the help of an example.

(b) What is Program Design Language (PDL) ? 7,3

9. (a) What are Programming/Coding Techniques. Discuss in detail.

(b) Explain the process of code inspection. 6,4

CH–725 (4)