



Jigo

BA-1865

Second Year B. C. A. (Sem. III) Examination

September / October – 2009

305 - Software Engineering

(New Course)

Time : 3 Hours]

[Total Marks : 70

Instruction :

नीचे दशांशिक निशानीवाणी विगतो उत्तरवही पर अवश्य कपवी.  
Fillup strictly the details of signs on your answer book.

Name of the Examination :  
S.Y. B.C.A. (SEM. 3)

Name of the Subject :  
305 - SOFTWARE ENGINEERING (NEW)

Subject Code No. : 1 8 6 5 Section No. (1, 2,....) : NIL

Seat No. : 0 0 0 5 7 9

Pradevika  
Student's Signature

1 Explain the following terms in brief : (any seven) 14

- (1) QFD
- (2) 40-20-40 RULE
- (3) Structured analysis
- (4) Abstraction
- (5) Test Stub
- (6) System design
- (7) Smoke testing
- (8) Requirement analysis.

2 Answer the following : 8+6=14

- (a) What is functional dependency ? How can we achieve higher functional independence ? Explain why one should prefer higher cohesion and low coupling.
- (b) Explain various feasibility study in detail.

OR

- 2 (a) Explain 'structural partitioning' in detail. Also give it's impact on software design.
- (b) Differentiate between structural and functional testing. Explain any one functional testing methology in detail.

3 (a) Write short notes on the following : (any three) 9+5=14

- ⑤ (1) Testing fundamentals ✓<sup>30</sup>  
② (2) Components of SRS  
(3) Requirement Gathering Techniques  
① (4) Prototype Model.

(b) Attempt the following : (any one)

- 5 (1) Write the limitations of Classical life cycle model.  
(2) Discuss software characteristics with diagram.

4 Answer the following :

3+3+4+4=14

- 30 (1) Discuss the problems likely to occur if module has low cohesion.  
(2) Which are the guidelines that a software designer would follow ? Why ?  
② (3) Briefly describe top-down refinement, listing both-advantages and drawbacks. ✓  
4 (4) Discuss Unit and Integration Testing. -

OR

- 4 (1) Which design concepts are used for deriving the optimal S/W design ?  
5 (2) What is the characteristic of requirement specifications ? (5/3)  
(3) Write a note on fact-finding techniques.  
(4) What is an SRS ? Write the advantages of it. What should it address ?

5 Answer the following : (Narrate your assumption, if any) 14

Draw DATA FLOW DIAGRAM at least up to 2<sup>nd</sup> level and create DATA DICTIONARY for any banking automation system.

(catim)