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41521/E210

Reg. No. | | | | | | | | |

V Semester B.C.A. 4 Degree Examination, Nov./Dec. - 2019
SOFTWARE ENGINEERING
(Regular)
Paper : BCA4

Time : 3 Hours **Maximum Marks : 80**

Instructions to Candidates:

1) All sections are compulsory.
2) Draw neat diagrams whenever necessary.

SECTION - A

1. Answer all the **TEN** full questions: **(10×2=20)**

a) What are any two challenges faced by software engineers?

b) Define a process framework.

c) What is the goal of requirement engineering? List the 3 main types of requirements.

d) What are system models? Mention the various system model types.

e) List any 4 characteristics of a good design.

f) Define cohesion and coupling in component level design.

g) What is the aim of Integration testing? List the types of Integration testing.

h) What is debugging? List any 2 debugging strategies.

i) What is a project risk and technical risk? Give an example for each.

j) What is software quality control?

SECTION - B

Answer any **FOUR** questions of the following: **(4×5=20)**

2. Explain the different categories of software.

3. Illustrate an activity diagram for a BANK ATM withdrawal use case.

4. Define an architectural style. Explain the Data centered architecture with a neat diagram.

5. Briefly explain any 5 Mc call's software quality factors.

6. What is the role of an SQA (Software quality assurance) group?

P.T.O.

SECTION - C

Answer any **FOUR** questions of the following: **(4×10=40)**

7. Explain the following software process models with a neat diagram:
   a) Incremental model
   b) Prototyping model
8. Elaborate in detail the structure of a requirements document or a SRS.
9. Write in detail the golden rules to user interface design.
10. Write short notes on following concepts with respect to software Measurement:
    a) Size-oriented and Function-oriented metrics
    b) Object-Oriented metrics.
11. Explain in detail the RMMM plan in Risk management.