Printed Pages : 1 **Roll No.** | | | | | | | | | | | **ECS602**

B. TECH.

THEORY EXAMINATION (SEM–VI) 2016-17

SOFTWARE ENGINEERING

Time : 3 Hours ***Max. Marks : 100***

Note : *Be precise in your answer.*

SECTION – A

1. Attempt all parts of the following questions: 10 x 2 = 20

(a) What is the software crisis?

(b) Write major software characteristics.

(c) Write the methods of requirements elicitation.

(d) Write the differences between software and software engineering.

(e) What is the difference between Verification and Validation?

(f) How software design can be classify?

(g) Write major software Design Tools.

(h) Write the names of design principles.

(i) Write the differences between Top- downs and bottom-up approaches.

(j) What is software quality?

SECTION – B

2. Attempt any five parts of the following questions: 5 x 10 = 50

(a) What is meant by "Formal Technical Review"? Should it access both programming style as well as correctness of software? Give reasons.

(b) Compare ISO and SEE-CMI model.

(c) What is Risk management? How are project risks different from technical risks?

(d) What is a data flow diagram? Explain rules for drawing good data flow diagrams with the help of a suitable example.

(e) Explain software quality assurance (SQA) with life cycle.

(f) Explain software development life cycle. Discuss various activities during SDLC.

(g) List five desirable characteristics of good SRS document. Discuss the relative advantages of formal and informal requirement specifications.

(h) What are the characteristics of a software process?

SECTION – C

Attempt any two parts of the following questions: 2 x 15 = 30

3. What do you understand by coupling and cohesion? What roles they play in software design? Describe the properties of best coupling and cohesion giving examples of each.

4. What is a Structure Charts? Explain rules for drawing good Structure Charts diagrams with the help of a suitable example.

5. Define the following**:**

(i) Water fall Model (ii) Spiral Model