H   Roll No. ....

TCS–302

B. TECH. (CSE) (THIRD SEMESTER) MID SEMESTER EXAMINATION, 2019

SOFTWARE ENGINEERING

Time : 1 : 30 Hours

Maximum Marks : 50

Note : (i) This question paper contains two Sections.

(ii) Both Sections are compulsory.

Section—A

1. Fill in the blanks/True-False :   (1×5=5 Marks)

   (a) Waterfall model is the Simplest model of software development paradigm also known as linear sequential development model.   (True/False)

   (b) V-shape is also known as Verification and Validation model.   (True/False)

   (c) Organizational stability is the average effective global activity rate in an evolving E-type system is invariant over the lifetime of the product.   (True/False)

(d) Build & Fix Model is suitable for programming exercises of 100-200 LOC (Line of Code).   (True/False)

(e) Diagonal Prototype is not one of the types of prototype of Prototyping Model.
(True/False)

2. Attempt all the *five* parts :   (3×5=15 Marks)

(a) If you were a lead developer of a software company and you are asked to submit a project/product within a stipulated time-frame with no cost barriers, which model would you select ? Justify.

(b) How is Incremental Model different from Spiral Model ?

(c) What is verification and validation ?

(d) What is error tracking ? How is debugging being done ?

(e) Define software engineering. Describe evolving role of software.

Section—B

3. Attempt any *two* parts of choice from (a), (b) and (c).   (5×2=10 Marks)

(a) What do you mean by software crisis ? What is the difference between software engineering and conventional engineering ?

(b) What are the components of different software ? Comment on the statement software doesn't wear out.

(c) What are the requirements engineering process function ? Define requirement elicitation process.

4. Attempt any *two* parts of choice from (a), (b) and (c).   (5×2=10 Marks)

(a) What is iterative lifecycle model ? Explain its working. What do you understand by rapid prototyping ?

(b) Why it is so difficult to build correct software ? What do you mean by software myths ?

(c) What are *three* essential qualities of software ? Explain each in your own words.

5. Attempt any *two* parts of choice from (a), (b) and (c).   (5×2=10 Marks)

(a) What are the differences between software process model and software process ? Suggest two ways in which software process model might be helpful in identifying possible process improvement.

(b) What is a life cycle model ? Also explain what problems would occur if no cycle model is followed.

(c) Discuss different phases of the classical Waterfall model. List various advantages of using Waterfall model instead of ad-hoe build and fix model.

F. No. : c-43