(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID: 113652

Roll No.

B.TECH.

Theory Examination (Semester-VI) 2015-16

SOFTWARE TESTING

Time: 3 Hours Max. Marks: 100

Section-A

- 1. Attempt all parts, All parts carry equal marks. Write answer of each part inshort. (2×10=20)
 - (a) What are the test tools recommended for the design phase testing?
 - (b) What is risk-based testing?
 - (c) What is fail-safe method?
 - (d) What are the advantage of Independent Testing.
 - (e) What is the key difference between preventative and reactive approaches to testing?
 - (f) What determines the level of risk?
 - (g) Which method is used for testing prototypes?

- (h) What do you mean by RAD?
- (i) Define the concept of six sigma.
- (j) What is Defect Seeding?

Section-B

2. Attempt any five questions from this section. $(10 \times 5 = 50)$

- (a) Explain the concepts of equivalence class partitioning and boundary value analysis.
- (b) What are the different Methodologies in Agile Development Model? Explain.
- (c) Consider the following techniques. Which are static and which are dynamic techniques & why?
 - i. Equivalence Partitioning.
 - ii. Use Case Testing.
 - iii. Data Flow Analysis.
 - iv. Exploratory Testing.
 - v. Decision Testing.
- (d) (i) Draw & explain the fish bone/Ishikawa diagram?
 - (ii) Explain the PDCA cycle and discuss where testing fits in it?
- (e) (i) How does load testing work for websites?

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- (ii) What are the different kinds of variations used in Six Sigma?
- (f) (i) Define data-driven testing. Explain its features, applications & working.
 - (ii) How many types of application boundaries are present? Explain how they are identified using the litmus test?
- (g) (i) What different sources are needed to verify authenticity for CMMI implementation?
 - (ii) How one can determine the estimate for black box testing for a given project? How TPA works?
- (h) Explain capability levels in a continuous representation? Continuous model is the same as the staged model. Justify the statement.

Section-C

Attempt any two questions from this section.

 $(15 \times 2 = 30)$

- 3. Can you explain the different methodology for the execution and the design process stages in Six Sigma?
- 4. What is CMMI and explain the different maturity levels in a staged representation?
- 5. What are the different ways of doing Black Box testing? Explain.