JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- SEPTEMBER 2018

B.Tech. V Semester

COURSE CODE: **10B1WCI515**   MAX. MARKS: **15**

COURSE NAME: **Software Testing & Debugging**

COURSE CREDITS: **04**   MAX. TIME: **1Hr**

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means. Vague answers will credit to zero marks.

1. Justify the following statements with suitable reasoning and examples
    a. Functional and non functional requirements of a project are different
    b. Code inspection is more formal than code walkthrough.
    c. Exhaustive testing is not possible.
    d. Maintenance phase requires maximum effort in software development life cycle model
    e. Verification is different from validation

                                                                        [5]

2. Explain and compare V model and modified V model with suitable diagrams. Why modified V model is faster than V, classical waterfall and iterative waterfall model.   [2+1]

3. A program determines the previous date in the calendar. Its input is entered in the form of dd-mm-yyyy with the following range: mm belongs to [1,12], dd belongs to [1,31] and yyyy belongs to [1900,2025]. Its output would be the previous date or an error message. Design test case table using equivalence class partitioning.   [2]

4. A program computes a^b where a lies in the range (1,10) and b within (1,5). Design test case table for this program using simple and robust boundary value analysis testing techniques separately.   [2]

5. What is the significance of CMM (Capability Maturity Model) and TMM (Testing Maturity Model) in software industry? Differentiate TMM levels 3, 4 and 5 with each other with suitable reasoning.   [1+2]