

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT  
END TERM TEST  
SUMMER SEMESTER – JULY 2016  
B.Tech V Semester

COURSE CODE: 10B1WCI515

MAX. MARKS: 50

COURSE NAME: Software Testing and Debugging

COURSE CREDITS: 04

MAX. TIME: 2 Hrs

**Note:** All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

**Ques 1. [5 Marks]** Compare and contrast functional and non functional testing in brief. Also discuss the entry/exit criteria for non functional tests.

**Ques 2. [5 Marks]** Explain the important factors that govern performance testing. Also discuss the process and different challenges for performance testing in brief.

**Ques 3. [5 Marks]** Why we need the Adhoc testing? Also discuss the drawback of adhoc testing and their resolution in brief.

**Ques 4. [5 Marks]** Compare and contrast control flow and testing of object oriented systems? Also discuss the important issues in object oriented testing.

**Ques 5. [5 Marks]** Debugging is not testing and testing is not debugging. Justify the sentence? Also discuss the debugging process in brief. Also discuss the important debugging techniques in brief.

**Ques 6. [15 Marks]** If you take the train before 9:30 am or in the afternoon after 4:00 pm until 7:30 pm ('the rush hour'), you must pay full fare. A saver ticket is available for trains between 9:30 am and 4:00 pm, and after 7:30 pm. What are the partitions and boundary values to test the train times for ticket types? Which are valid partitions and which are invalid partitions? What are the boundary values? (A table may be helpful to organize your partitions and boundaries.) Derive test cases for the partitions and boundaries.

**Ques 7. [10 Marks]** Write the short notes on following with suitable diagram/examples

- (a) Taxonomy of Bugs
- (b) Instrumenting Program for Data Flow-Anomaly Detection.
- (c) Regression testing of GUIs
- (d) Load testing