



# COLLEGE OF ENGINEERING, PUNE

(An Autonomous Institute of Government of Maharashtra.)  
SHIVAJI NAGAR, PUNE - 411 005

## END Semester Examination

(CT-411/IT-14002) Software Testing and Quality Assurance

Course: B.Tech.

Branch: Information Technology

Semester: Sem VII

Year: 2014-2015

Max.Marks:60

Duration: 3 Hours Time:- 2.00pm to 5.00pm

Date:26/11/2014

### Instructions:

MIS No.

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1. Figures to the right indicate the full marks.
2. Mobile phones and programmable calculators are strictly prohibited.
3. Writing anything on question paper is not allowed.
4. Exchange/Sharing of anything like stationary, calculator is not allowed.
5. Assume suitable data if necessary.
6. Write your MIS Number on Question Paper

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|------------|--|-----------|
| <b>Q 1</b> | How normal distribution can be used in quality testing of a software?  | <b>10</b> |
| <b>Q 2</b> | What are quality theories proposed by Juran and Demming? Explain in detail.  | <b>10</b> |
| <b>Q 3</b> | Explain in detail, HP's software quality monitoring with its software products.  | <b>10</b> |
| <b>Q 4</b> | State and explain in detail code coverage testing and code complexity testing.<br>OR<br>Compare functional and non-functional testing. | <b>10</b> |

- Q 5**      What should be made available in order to calculate defect rate for the new and changed code?      **10**
- Q 6 a**      Enlist various points in test planning.      **5**
- b**      Write down the table for Type I and Type II errors in testing a hypothesis  $\theta = \theta_0$  against an alternative  $\theta = \theta_1$ .      **5**