



[4658] – 602

Seat No.	
-----------------	--

T.E. (Information Technology) (Semester – I) Examination, 2014
SOFTWARE ENGINEERING
(2012 Course)

Time : 3 Hours

Max. Marks : 70

Instructions : 1) Answer Q. 1 or Q. 2, Q. 3 or Q. 4, Q. 5 or Q. 6, Q. 7 or Q. 8, Q. 9 or Q. 10.

2) **Neat** diagrams must be drawn **wherever** necessary.

3) Figures to the **right** side indicate **full** marks.

4) Assume suitable data if **necessary**.

1. a) Define software . Compare software and hardware based on their failure curves. 5
 b) Software engineering process framework activities are complemented by which umbrella activities ? How do process models differ from one another ? 5
- OR
2. a) Discuss agility principles used in agile software development. 5
 b) Compare scripted testing verses exploratory testing. 5
3. a) Describe the IEEE template for eliciting software requirement specifications. What information is produced as a consequence of requirements gathering ? 5
 b) What do you need to know in order to develop an effective use case ? Describe a standard use case documentation template. 5
- OR
4. a) What are different approaches or elements of a requirement analysis model ? 5
 b) What is the INVEST model of agile requirements gathering ? 5
5. a) What are the software design quality attributes and quality guidelines ? 8
 b) Explain any two software architectural styles. 8
- OR
6. a) Give a brief overview of important software design concepts that span both traditional and object-oriented software development. 12
 b) Why is software architecture important ? 4
7. a) Explain the Seeheim model of human-computer dialog management. 8
 b) How do you deal with different stereotypes of users in information gathering phase of user-centered design ? 8

OR

P.T.O.

[4658] – 602

- | | |
|------------------------------------------------------------------------------------------------------------|-----------|
| 8. a) Explain mechanisms applied in user interface design for fulfilling Theo Mandel's three golden rules. | 12 |
| b) What is Fitt's Law ? How is it used in UI design ? | 4 |
| 9. a) Explain the cleanroom process model. | 10 |
| b) How do we certify a software component during cleanroom testing ? | 8 |

OR

- | | |
|--------------------------------------------------|-----------|
| 10. Write short notes on following : | 18 |
| a) Elements of a Configuration Management System | |
| b) Test Driven Development Process | |
| c) Technology Evolution. | |
-

B/II/14/