

BE/Insem./Oct. - 591

B.E. (Computer Engg.)

SOFTWARE TESTING AND QUALITY ASSURANCE

(2015 Pattern) (Semester - I)

: 1 Hour]

[Max. Marks : 30

Instructions to the candidates :

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6.
- 2) Figures to the right indicate full marks.
- 3) Assume suitable data if necessary.

a) Identify the Software Quality Attributes for the following scenarios: [6]

- i) Any popular websites such as Google.com, Amazon.com and YouTube.com is visited by thousands of users concurrently. What could be the top 2 architectural drivers (quality attributes) for this system? Justify your answer.

- ii) While updating Anti-Virus software, it take lot of time so the updating tool displays a progress bar showing the percentages of completion of work and how many files are scanned so far. Which quality attribute is being addressed by this tactic? Justify your answer.

- iii) A software makes use of adaptors to connect to SMS gateways of different service providers such as Airtel, Vodafone, BSNL, etc. All these adaptors implement the same interface. Depending on the service provider defined in the configuration file, the software instantiates (creates) an object of the appropriate adaptor class at run time and makes use of it to communicate with the SMS gateway.

- b) Define quality as viewed by different stakeholders of software development and usage. [4]

OR

P.T.O.

Q2) a) Identify the Software Quality Attributes for the following scenarios: [6]

- i) Now a days most of the peoples are using Internet banking for online transaction. What could be the top 2 architectural drivers (quality attributes) for this system? Justify your answer.
- ii) Company want build a game for the children's which they should play from any device. Also various input devices(i.e. mouse, joystick, touch screen etc...) may also integrated for playing a game.
- iii) A software company is in a process of building social networking site which will have very large number of users in near future. Also company wish to add new features in this site and during addition of new features site should provide all the current features without any disturbance What top 2 quality attribute is being addressed by this tactic? Justify your answer.

- b) Give an example quality in different areas of software development, and Benchmarking and metrics for the same. [4]

Q3) Explain following for Testing Process. [10]

- a) Misconceptions.
- b) Principles.
- c) Salient and policy of Software testing.
- d) Test Strategy.
- e) Test Planning.

OR

Q4) a) With respect Quality Management Systems explain the following. [6]

- i) Quality Management Systems Structure
- ii) Pillars of Quality Management System
- iii) Important aspects of quality management

- b) What are types of Requirements and Product? Also point out relationship between Quality and Productivity. [4]

Q5) a) What is automated testing in software testing? How do we decide what to automate in testing and the scope of automation? [6]

b) What is JMeter testing? Explain the features of Jmeter? At least Three. [4]

OR

Q6) a) What is Test Automation.

b) Different terms used in automation.

c) Skills needed for automation.

d) What to automate.

e) How to define scope of automation.

[10]
