



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2010/2011**

COURSE NAME : SOFTWARE QUALITY ASSURANCE
COURSE CODE : BIT 3113
PROGRAMME : BACHELOR OF INFORMATION
TECHNOLOGY
EXAMINATION DATE : APRIL / MAY 2011
DURATION : 2 HOURS 30 MINUTES
INSTRUCTION : ANSWER ALL QUESTIONS.

THIS QUESTIONS PAPER CONSISTS OF THREE (3) PAGES

- Q1** Automated testing represents an additional step in the integration of computerized tools into the process of software development. The main types of automated tests are: (a) code auditing, (b) coverage monitoring, (c) functional test, (d) load test and (e) test management.

Discuss **THREE (3)** advantages and **TWO (2)** disadvantages of automated tests.

(10 marks)

- Q2** Assume a software system fails.

a) Explain **TWO (2)** possible risks of software failure that display the highest severity of failure.

(2 marks)

b) Provide **THREE (3)** examples of software development projects that display the lowest severity of failure.

(3 marks)

- Q3** Explain why big bang testing is inferior to any method of incremental testing conducted for software packages that are not small.

(8 marks)

- Q4** a) Discuss a definition of controlled document according to IEEE standard.

(5 marks)

b) Explain **FOUR (4)** objectives of managing controlled documents.

(8 marks)

c) Explain **FOUR (4)** components of procedures in a documentation control.

(8 marks)

d) Describe **THREE (3)** items to make sure the documentations prepared complete, readability and availability.

(6 marks)

- Q5** Mr. Zamri is an exceptional programmer. Testing his software modules reveals very few errors, far fewer than the team's average. He keeps his schedule promptly, and only rarely is he late in completing his task. He always finds original ways to solve programming difficulties, and uses an original, individual version of the coding style. He dislikes preparing the required documentation, and rarely does he do it according to the team's templates. A day after completing a challenging task, on time, he was called to the office of the department's chief software engineer. Instead of being praised for his accomplishments (as he expected), he was warned by the company's chief software engineer that he would be fired unless he began to fully comply with team's coding and documentation instructions.

Justify why the company's chief software engineer action towards Mr Zamri is appropriate.

(10 marks)

Q6 One can expect that in many cases, participants in an inspection session are able to suggest solutions for a detected defect or, at least, point out possible directions for its solution. While it is clear that these suggestions are crucial for the development team, it is commonly recommended to avoid any discussion about solutions during the inspection session.

a) Determine **TWO (2)** advantages of the recommendation.

(4 marks)

b) Recommend **THREE (3)** expectations from the moderator and the review team would you prefer to observe in a session other than mentioned above.

(6 marks)