

Shahjalal University of Science & Technology
Institute of Information and Communication technology
1st Year 2nd Semester Examination, 2019
Course Code: SWE-125 (Introduction to Software Engineering)

Credit: 3 Full Marks: 100 Time: 3 Hours

(Answer four questions taking two from each group)

Group A

- | | | |
|------|--|----|
| Q.1. | a) Why is development cost of software so high? | 4- |
| | b) Write down some key challenges in software development. | 4- |
| | c) Why can't we find all errors before we give the software to our customers? | 3 |
| | d) Why do we continue to have difficulty in software development projects? | 4- |
| | e) Draw a spiral view of software requirement process. | 4- |
| | f) What is cost of software failures? | 3 |
| | g) Define Milestones and deliverables. | 3 |
| Q.2. | a) What are the roles of a software manager? Explain. | 6 |
| | b) Write down some myths that believed by software manager and customer. | 8 |
| | c) Explain risk management process with proper diagram. | 5 |
| | d) Explain different risk types with potential indicators. | 6 |
| Q.3. | a) How a Project Starts? | 3 |
| | b) What is a software process? What are some generic process models? | 6 |
| | c) Explain Incremental Delivery model with proper diagram. | 8 |
| | d) Describe Water Fall Model with figure. Also state some disadvantages and disadvantages of this model. | 8 |

Group B

- | | | |
|------|---|----|
| Q.4. | a) What is MVC? Explain. | 3 |
| | b) Write down some root causes of software failures. | 4 |
| | c) Write short notes on: | 18 |
| | i. Unit Testing | |
| | ii. Integration Testing | |
| | iii. Regression Testing | |
| | iv. Black Box Testing | |
| | v. White Box Testing | |
| | vi. Top Down Testing | |
| Q.5. | a) What is UML diagram? What are the uses of UML diagram? | 2 |
| | b) Explain Functional and Non Functional requirement with examples. | 6 |
| | c) Identify some problems in domain requirements. | 3 |
| | d) Explain Normal and Expected requirement with examples. | 6 |
| | e) What are the techniques of analyzing requirement engineering? Explain interviewing method. | 8 |