Wednesday, 17 November 2021

EAST WEST UNIVERSITY
Department of Computer Science & Engineering
B.Sc. in Computer Science and Engineering Program
MidTerm I Examination, Fall 2021 Semester

Course:	**CSE347 Information System Analysis and Design, Section-1**
Instructor:	**Md. Mohsin Uddin, Senior Lecturer, Department of CSE**
Total Marks:	**40 (20 will be counted for final grading)**
Time:	**1 Hour and 20 Minutes**

Note: There are **Six** questions, answer all of them. Course Outcome (CO), Cognitive Level and Marks of each question are mentioned at the right margin.

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1. Analyze your strategies as a project manager (PM) for each of the following project risks. [CO4,C4, Marks:10]

- The team leader is being replaced in the middle of a software project.
- Qualified software designers and developers are very difficult to find.

2. Some of the requirements of a system are mentioned below: [CO2,C3, Marks:4]

• Service availability • Membership facility • Return of books	• Pre booking of books • Security of the system • Issue of new books	• Visiting Books status • Reliability of the system

Classify the above requirements into functional and nonfunctional. **Justify** your answer.

3. Which requirement engineering process would be the most appropriate for each of the following scenarios? **Justify** your answer. [CO2,C3, Marks:6]

i. People often find it hard to describe what they do because it is so natural to them. Sometimes, the best way to understand it is to observe them at work.

ii. Using an executable model of the system to check requirements.

iii. Checking whether the requirements be implemented given available budget and technology.

4. Which type of system conversion can be implemented for software implementation phase of Software development lifecycle (SDLC) for each of the following scenarios? **Justify** your answer. [CO1,C3, Marks:6]

i. The problems such as errors in processing or inability to handle certain types of transactions arise in using the new system, the organisation can still fall back to the old system without loss of time or loss of service.

ii. The analyst or Project manager (PM) decided that the users cannot rely on the previous systems.

iii. The system is "one piece" and cannot be broken down in separate components.

5. Which phase of Software development lifecycle (SDLC) does the software development project reside in for each of the following scenarios? **Justify** your answers. [CO1,C3, Marks:4]

a. "The users are being trained."

b. "The feasibility report is being generated."

6. Which maturity level in CMM model would be the most appropriate for each of the following scenarios? **Justify** your answer. [CO3,C3, Marks:10]

i. "Continuous process improvement is enabled by quantitative feedback from the process and from piloting innovative ideas and technologies."

ii. "The software process for both management and engineering activities is documented, standardized, and integrated into a standard software process for the organization. All projects use an approved, tailored version of the organization's standard software process for developing and maintaining software."

iii. "Data on the effectiveness of the software process is used to perform cost benefit analyses of new technologies and proposed changes to the organization's software process."

iv. "Schedules, budgets,functionality, and product quality are generally unpredictable. Performance depends on the capabilities of individuals and varies with their innate skills, knowledge, and motivations. There are few stable software processes in evidence, and performance can be predicted only by individual rather than organizational capability."

v. "Detailed measures of the software process and product quality are collected. Both the software process and products are quantitatively understood and controlled."