TABLE OF SPECIFICATIONS FOR EXAM QUESTIONS

University of Liberal Arts Bangladesh

Department: Computer Science and Engineering (CSE)
Midterm Examinations, Semester: Fall 2020

Program: B.Sc. in CSE

Course Code: CSE404 Course Title: Software Engineering Credit Hr: 3
Time: 1 Hours Total Marks: 25

Name & Designation of the Examiner: Satyaki Das, Lecturer

Learning Outcomes (LO):

- 1. **Describe** the objective of Software Engineering
- 2. **Explain** terms related to important software engineering methods, process models, SRS, project management, testing.
- 3. **Understand** a practical problem, **apply** software engineering principles and techniques to design a software to solve the problem.
- 4. **Identify** product-related relevant information from Client's input and **propose** solutions to solve the problems
- 5. **Integrate** with a team and be willing to resolve conflicts.
- 6. Learn to clearly communicate to **point out** ideas and concerns

Levels in Bloom's Cognitive Domain:

C1: Remember C2: Understand C3: Apply C4: Analyze C5: Evaluate C6: Create

Question No.	Learning Outcomes (CO)	Level in Bloom's Cognitive Domain along with Allocation of Marks							
		C1	C2	C3	C4	C5	C6		
1	2	5							
2	2		5						
3	3, 4			10					
4	4				5				
Total Allocation of Marks	25	5	5	10	5				

Question No.		Learning Outcome						
		CO1	CO2	CO3	CO4	CO5	CO6	
1			5					
2			5					
3				5	5			
4					5			
Total Allocation	25	0	10	5	10			
of Marks								

Date: 23.11.2020

Signature of the Examiner

Department of Computer Science and Engineering University of Liberal Arts Bangladesh

Mid-Term Examination (Fall 2020)

Course: Software Engineering (CSE 404)

Section: 1 --- Duration: 1 Hour

Course Title: Software Engineering

Name & Designation of the Examiner: Satyaki Das, Lecturer

PLEASE ANSWER ALL QUESTIONS.

Total 25 Marks

QUESTION 1

Why is software engineering different from other engineering principles? "Software doesn't wear out." -Explain

(2+3=5 Marks)

QUESTION 2

Zahid and Jewel were having a conversation on software development. Zahid stated, "Getting any ideas regarding the quality of the software is impossible before it is developed." Do you agree? Explain your opinion.

Define the terms "verification" and "validation". How are they different?

(2+3=5 Marks)

QUESTION 3

Consider the following usage scenario for PGDApply:

PGDApply is used for prospective students to apply for the PGDIT program online. At first the program chairperson will upload the admission circular on the website. Afterwards, the site used for submitting application forms will be activated on the starting date mentioned in the circular. Interested candidates will be able to apply for admission online by filling up the application form. The application form will contain these fields: Name of Applicant, Father's Name, Mother's Name, E-mail Address, Mobile Number, Permanent Address, Date of Birth, Nationality, and academic information.

An applicant needs to upload his/her photo to enable the "Submit" button. Image size must be less than 100 KB. Image must be in JPEG (.jpg extension) format and the resolution must be (350 pixels * 400 pixels). After the applicant confirms the correctness of the information and agrees to the terms and conditions of the program, he/she will click the "Submit" button to continue. Then the software will generate a 6-digit application ID. The software will also store the given information in the database. The applicant will receive the application ID and the submitted information.

Prepare the use case diagram and the activity diagram for PGDApply.

(5+5=10 Marks)

QUESTION 4

What are the various types of testing activities proposed in the V-Model? How are they different from one another? (5 Marks)