United International University (UIU)
Dept. of Computer Science & Engineering (CSE)

Mid Term Exam, Trimester: Summer 2021
Course Code: CSI 321, Course Title: SOFTWARE ENGINEERING
Total Marks: 20, Duration: 1 hour 15 minutes

Any examinee found adopting unfair means will be expelled from the trimester/ program as per UIU disciplinary rules.

(Answer All Five Questions)

Question # 1:

What is DevOps? Suppose, you establish a small startup after your graduation. Write down some of the major reasons why you should/ should not go with DevOps? (CO1)   [3]

Question # 2:
Draw UML diagram for the following scenario using appropriate design pattern:

EA Sports is a game production industry. They are famous for their FIFA game series. Suppose, they launched the game *FIFA 21* last year, and this year they want to develop a newer version called *FIFA 22* reusing the existing implementation of *FIFA 21.* So, they plan to improve the graphics and AI in the newer version. (CO2)   [5]

Question # 3:
What are the stages in SDLC that may require the involvement of product/ business team? Support your argument. (CO1)   [3]

Question # 4:
Which type of Version Control System *Git* is, and why? What is the correlation between Git and GitHub? (CO2)   [4]

Question # 5:
Draw UML diagram for the following scenario using appropriate design pattern:

Suppose you are the head-coach of BD cricket team. When your team play at home-ground, you go with a heavy spinning attack. When you play outside Asia, your strategy changes and more seamers come to the team. And when you play at any other venue in Asia, you try to keep a balance between seamers and spinners. (CO2)   [5]