

**BRAC University (Department of Computer Science and Engineering)**  
**CSE 470 (Software Engineering) | Fall 2023**

**Quiz 2 (Set A)**

**Full Marks: 15**

**Duration: 20 minutes**

**Name:**


**Student ID:**

**Section:**

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1. Imagine a hospital management system where the patients can either book an appointment with a doctor or do a number of check-ups/tests. The doctors have specializations in various sectors like medicine, surgery, gastrology, neurology etc. Besides doctors, there are nurses, technicians and administrative staffs working to help the patients. After an appointment, the doctor prescribes medicines to the patient. In the prescription, the dosage and duration of the medicines to be taken are mentioned. Also, in the prescription, the doctor can suggest some tests like blood hemoglobin test, cholesterol, ECG etc. The technicians conduct the tests. It takes 1-5 days for the test result to come depending on the test. The patient pays the visit fee of the doctor and also the fees of the tests conducted.

The hospital is situated in a remote area and expects a complete system to conduct all the work through the website. Since the application area is very sensitive, they expect the service to be available 24/7. Also, the website will be used by local people, so they expect the developers to keep this in mind. If the overall feedback is positive after a certain time, they wish to expand the platform for some other hospitals too.

- a. Mention 3 functional and 3 non-functional requirements from the given scenario.  
[ 6 marks ]
- b. Design a class diagram  that reflects the above system best. Use standard rules and notations. [ 9 marks ]