**Quiz-1 After Midterm**

**Section J**

**(Don’t share your answer to the question-1 or the drawing with your friend. If detected two or more answer or drawing same then zero marks will be provided.]**

1. What are the purposed of activity diagram? In activity diagram, give an example of using forking. [5]

**ANS:**

An activity diagram visually presents a series of actions or flow of control in a system similar to a flowchart or a data flow diagram. Activity diagrams are often used in business process and software process modeling. They can also describe the steps in a use case diagram. Activities modeled can be sequential and concurrent.

A Fork notation in a UML Activity Diagram is a control node that splits a flow into multiple concurrent flows. In activity diagram Forks are used for showing parallel execution of activities. A fork may have one incoming transition and two or more outgoing transitions each of which represents an independent flow of control A fork represents the splitting of a single flow of control into two or more concurrent flows of control.

2. Analyzing the following case draw an activity diagram following swim-line concept. [15]

CASE

The Human Resource department of a company has implemented an on-line Interview System for the job-seekers. In this system the job-seeker at firs needs to submit his/her basic information along with a mobile number. The server of the system generates an OTP CODE to that mobile number. The job seeker then has to insert that OTP CODE. The server verifies the inserted OTP CODE. If it is not matched then the server generates a new code and asks the job-seeker to renter it. However, if the job-seeker fails to enter the OTP-CODE correctly for three times the server disconnects the job-seeker and the scenario ends here.

However, if the job-seeker enters the right OTP-CODE then the HR component will open a panel of questions. The job-seeker has to answer these questions within a specified time. However, if he/she fails to answer in time, the server disconnects the job-seeker and scenario ends.

If the job-seeker is succeeded to answer in time then HR- component evaluates the answers. After this evaluation the HR component sends the result to the job-seeker and at the same time notifies the date for the oral interview. After then the server updates data and disconnects the job-seekers. Scenario ends here.

