

# **BCSE301P – Software Engineering Lab (L53+L54)**

## **B.Tech. (Computer Science & Engineering)**

### **Term End Examination**

**Date: 21.11.2024**

**Max. Marks: 50**

### **General Instructions**

1. Do not possess mobile phones in ANY FORMS.
2. Do not turn around and talk to your neighbors.
3. Do not see other monitors. Unnecessarily don't open more tabs and switch between the windows.
4. For designing traditional diagrams / scheduling diagrams, use Microsoft VISIO / any online tool.
5. For designing Object Oriented Diagrams, use Rational ROSE / Star UML.
6. For user interface design, use Pencil tool / Figma.
7. For scheduling the project, you may consider semester start date and end date as the time duration.
8. Theory questions, for that the answers should be provide on the answer sheet only.
9. Copy all the diagrams and make it as a single word document and save that file with your register no as the file name.

(Note: Write your register number and name for identification inside the document).

10. Upload your file (.doc or .pdf format file only) using the link given by the faculty member during the laboratory examination.
11. Copy the allotted question with the number in the file that you prepare for uploading in the given link.
12. Authentication module will not be considered as one of the core modules ANYWHERE.

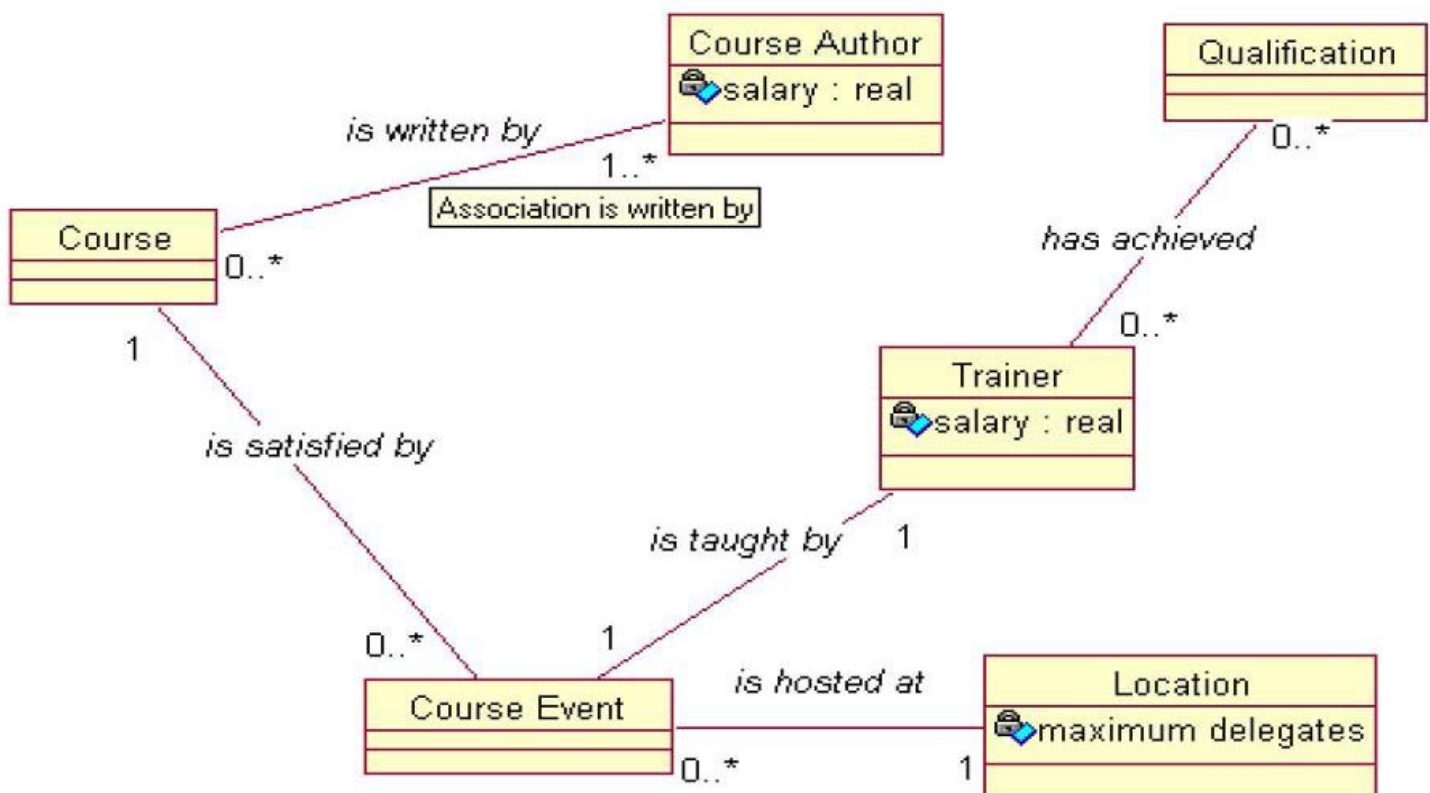
## QUESTION 1

Consider a Portal for online voting in order to select a member of parliament.

- Identify the core requirements and important stake holders for the given scenario. (10)
- Schedule the given project and identify the critical path of this project with a scheduling diagram. (20)
- Identify all the users of the system and draw a use case diagram. (10)
- Draw the architectural diagram of the system. (10)

## QUESTION 2

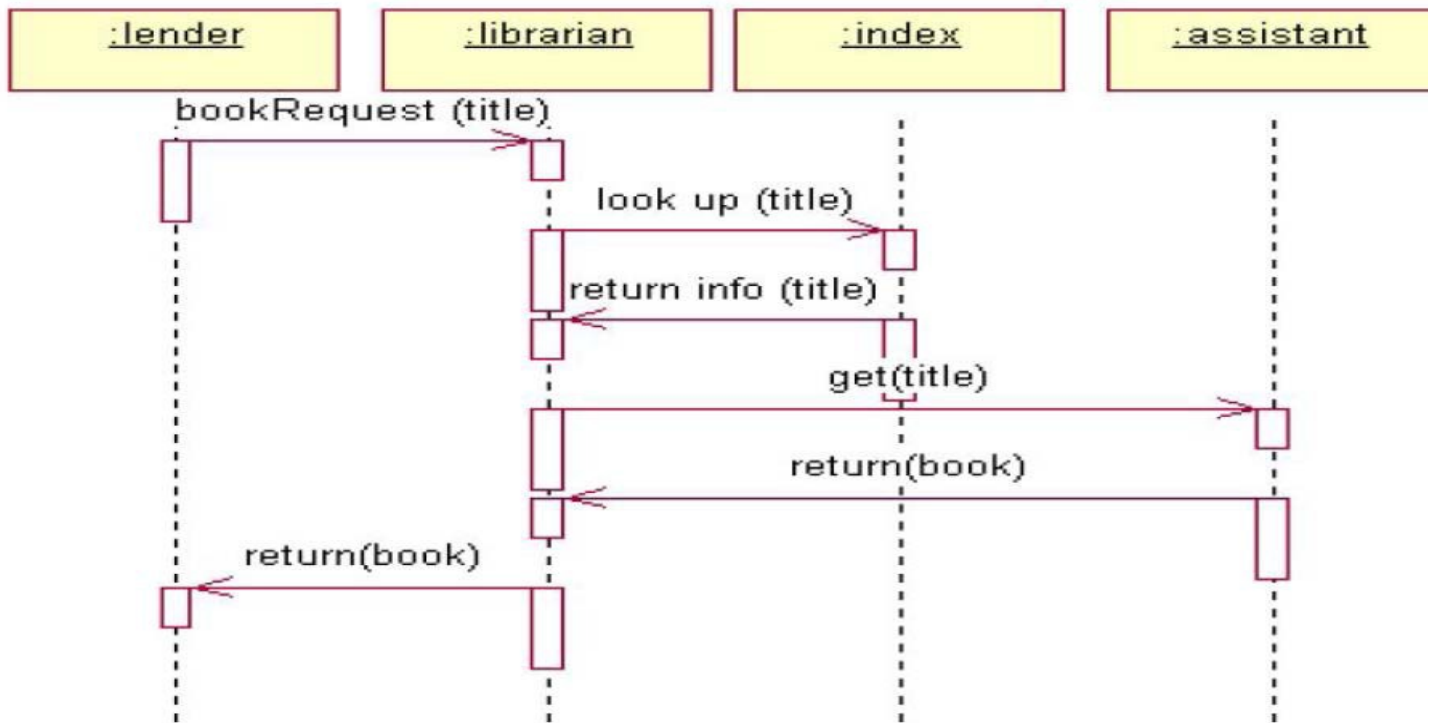
Consider the following diagram



- Name the system and explain any 5 functional and non-functional requirements. (10)
- Model your system activity with swim lanes. (10)
- Draw level 1 DFD for the given project. (10)
- Identify all the users of the system and draw a use case diagram. Expand anyone use case using a collaboration diagram. (20)

### QUESTION 3

Consider the following diagram



- Name the system and identify any 5 functional requirements and stake holders. (10)
- Draw the work break down structure for the given scenario. (10)
- Schedule the given project. (20)
- Design the user interface screen for book lending and fine remittance. (10)

### QUESTION 4

Consider Hospital Management system

- Identify five non-functional requirements and a suitable process model for the given scenario with proper justification. (10)
- Draw the three levels of Data Flow Diagram for the given scenario. (20)
- Design the user interface for any two core modules of the above scenario. (10)
- Identify the critical path of this project with a scheduling diagram. (10)

## **QUESTION 5**

Consider Movie ticket reservation system.

- a) Draw an activity diagram for the above-mentioned System. (10)
- b) Draw the state chart diagram for the given scenario. (10)
- c) Design the five test cases and draw DFD level 1 for the given scenario. (20)
- d) Specify the sequence of steps involved in the online payment for booking tickets using appropriate model. (10)

### **File upload link:-**

<https://forms.gle/jfXMBmCmGi2Wg8Qm7>

### **Note:-**

1. File name should be your registration number\_LFAT only (eg:- 21BCE0123\_LFAT).
2. Upload file only in .doc/.pdf format.