Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_

G:\logo and QP Template\logo 3 Feb 2018 final.tif

**End Semester Examination – Nov/Dec – 2018**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Code :** | **14CS3037** | **Duration :** | **3hrs** |
| **Sub. Name :** | **REQUIREMENTS ENGINEERING** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | | **Course**  **Outcome** | **Marks** |
| 1. | a. | Write down the different levels of requirements related problems that you have encountered on your project phase. | | CO1 | 10 |
| b. | Compare the requirements development and management sub-disciplines of software requirements engineering. What happens when bad requirements to good people? | | CO1 | 10 |
| (OR) | | | | | |
| 2. | a. | Examine the expectation gap in customer’s perspective and what are the good practices should follow the requirements elicitation | | CO1 | 10 |
| b. | Identify the customers, including end users, who are responsible for providing business and user requirements on your project. Which items from the Bill of Rights do these customers currently accept and practice? | | CO1 | 10 |
|  |  |  | |  |  |
| 3. | a. | What are the typical roles of a business analyst? What are the essential skillsets needed for requirements analyst? | | CO2 | 10 |
| b. | Consider yourself as a business analyst and you’re near the launch of a new project or in the midst of construction. How will you document the business requirements by using the vision and scope template? | | CO2 | 10 |
| (OR) | | | | | |
| 4. | a. | Write down the benefits of use case diagram and **Draw the use case scenario for the following:**  A customer arrives at the checkout to pay for various items. The cashier recordsthe bar code number of each item, as well as the quantity if it is greater than one. The cash register displays the price of each item and its description. When all the purchase are recorded, the cashier indicates the end of the sales. The cash register displays the total cost of the purchase. The customer can select his or her payment (cash/ cheque /credit card). | | CO3 | 10 |
| b. | Illustrate the Software Requirement Specification template adopted by the software development organization and describe the information to include in each section. | | CO3 | 10 |
|  |  |  | |  |  |
| 5. | a. | Mention the characteristics of requirement statements and requirements collections. | | CO4 | 10 |
| b. | We all have used an elevator. The following steps describe the scenario of what happens at the elevator door from outside.   1. The passenger presses the button of either up or down depending on where he wants to go. 2. Then he will see that the button he pressed is illuminated. 3. The elevator is now moving to his floor. 4. When the elevator reached his floor it stops. 5. Now the button which was illuminated now off. 6. The door opens and the passenger enters. 7. The door closes.    The objects:   1. **Passenger** (he is the actor). 2. **Floor button** (this is the interface class, the actor interacts with this object). 3. **Elevator controller** (this control class, which coordinates the activities of the scenario). 4. **Elevator** (the entity class, which represents the machine itself which moves up and down). 5. **Door** (another entity class, which represents the door which opens and closes).   For the above scenario draw the **activity diagram with swimlane** concept. | | CO3 | 10 |
| (OR) | | | | | |
| 6. |  | Explain about data dictionary and data analysis in detail. | | CO4 | 20 |
|  |  | |  |  |  |
| 7. | a. | | Write short notes of the following:   1. Tracking requirements status. 2. Resolving requirements issues. | CO3 | 10 |
| b. | | What is change control process? What are the roles and responsibilities of change control Board? | CO4 | 10 |
| (OR) | | | | | |
| 8. | a. | List the potential benefits of implementing requirement traceability. | | CO3 | 10 |
| b. | Explain the steps involved in requirement traceability Procedure. | | CO3 | 10 |
|  | |  | |  |  |
|  | | **Compulsory**: | |  |  |
| 9. | a. | Illustrate how requirements are related to other project processes. | | CO2 | 10 |
| b. | Mention the steps involved in software risk management. | | CO2 | 10 |