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

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

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

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Code :** | **14CS2042** | **Duration :** | **3hrs** |
| **Sub. Name :** | **SOFTWARE ENGINEERING** | **Max. marks :** | **100** |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Articulate the necessities of life cycle model. | CO1 | 10 |
| b. | Explain Rapid Application Development model for software life cycle development and various activities involved in each phase. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Describe Dynamic Systems Development model and the execution steps for efficient project deployment. | CO1 | 10 |
| b. | Predict the phases of Unified Process model. | CO1 | 10 |
|  |  |  |  |  |
| 3. | a. | Discuss about the Requirement Engineering tasks to be performed by the team to comprehend the necessities. | CO1 | 10 |
| b. | Sketch the Use case diagram for the following problem statement. ”“Consider a retail bank, which collects money from customers and in return gives the man interest at pre-determined rate. The system developed should calculate interest daily for each account having balance more than zero at the correct interest rate. This interest calculated would be cumulatively stored in a table, which will be updated every day. Remember that the balance on which interest is calculated daily will change because the customer may deposit or withdraw money. Every month the cumulative interest calculated will be credited to the customer. After this point of time the cumulative interest stored should be set to zero because the customer has benefited for the period specified. Before interest is credited to the customer’s account, tax should be debited from the interest according to prevalent government laws”. | CO1 | 10 |
| (OR) | | | | |
| 4. | a. | Compute the E-R diagram for the following situation.“The university conducts many courses and students can register for those courses.The registrar of the university will introduce any new courses. Also the registrar maintains the curriculum and students details. The examination will be conducted for the students and the degree is issued for the students who have completed the course successfully”. | CO1 | 10 |
|  | b. | Explain the interface design activities. What are the steps to be performed to accomplish interface design? | CO1 | 10 |
|  |  |  |  |  |
| 5. |  | Write a brief overview of important software design concepts. | CO1 | 20 |
| (OR) | | | | |
| 6. | a. | Summarize different kind of architectural styles exist in software and explain in detail. | CO3 | 10 |
|  | b. | Illustrate various testing strategies used for conventional software. | CO3 | 10 |
|  |  | |  |  |
| 7. | Write short notes on the following: | |  |  |
| a. | Basis Path Testing. | CO2 | 10 |
| b. | Control Structure Testing. | CO2 | 5 |
| c. | Blackbox Testing. | CO2 | 5 |
| (OR) | | | | |
| 8. | a. | Discover the steps which are required to perform statistical SQA. | CO3 | 5 |
| b. | Enumerate ISO 90001:2000 quality standard. | CO3 | 5 |
| c. | Explain the process of risk mitigation, monitoring and management. | CO2 | 10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. |  | Define agile view of process. Describe how to achieve the principles of agility? | CO1 | 20 |