**GANPAT UNIVERSITY**

**U.V. PATEL COLLEGE OF ENGINEERING**

**B.TECH (COMPUTER ENGINEERING / INFORMATION TECHNOLOGY) SEM - V**

**SECOND INTERNAL EXAMINATION – OCTOBER-2020**

**2CEIT502 – SOFTWARE ENGINEERING**

**Time: 1 Hour] [Total: 20 Marks**

|  | Instructions: (1) All questions are Compulsory.  (2) Figures to the right indicate full marks. |  |
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| Q1. | Which three problems you may encounter during requirement analysis? You have to just **identify** the problem from following cases and **give justification** in one/two lines:   1. In a Retail store management, your customer has prescribed to use one specific back-end database software to use during development. Also the customer wants to store the images as a binary data into the database instead of path of the image file. Later, you found that to store the images into a database such datatype is not available. 2. In a railway ticket booking, the railway minister has declared to give 25% discount to senior citizens customers by deducting the discount from original price of ticket. However during analysis of requirement; you found that one of the requirements states that the discounted price should not be deducted but the customer has to pay full ticket price and then discount price will be credited to his account. 3. In an online shopping portal, your client has demanded to put the account of his customer on suspension if the customer is refusing to accept deliveries of orders often. | [4] |
| Q2. | The SRS document will be used by what **types** of users? **Justify** the use of each user. | [4] |
| Q3. | Suppose you want to develop a national project on Animal healthcare and preservation. The software product is estimated to be 60,000 Lines of Code (LoC). The average salary of your developer team is 17,000 per month. Now **determine the following**:   1. Identify the type of the project based on development complexity 2. Efforts required to develop the project 3. Nominal development time 4. Development cost | [4] |
| Q4. | Prepare an **activity diagram** for computing a restaurant bill. There should be a charge for each delivered item. The total amount should be subject to tax and a service charge of 18% for groups of six of more. For smaller groups, there should be a blank entry for a gratuity according to the customer’s discretion. Any coupons or gift certificates submitted by the customer should be subtracted. | [4] |
| Q5. | Prepare a Data flow diagram(**DFD**) on the following case study(**Give Levels of DFD**):  A software called check armstrong number accepts one integer number as an input from user in the range of 0 to 1000 and would determine that the enter number is armstrong or not The software generates only YES or NO kind of responses as an output. | [4] |