

Indian Institute of Engineering Science and Technology, Shibpur
Department of Information Technology

B.Tech (IT) 6th Semester Mid Semester Examinations, March 2022
Software Engineering (IT-3203)

Full Marks:30

Time: 45 Minutes

Attempt ALL questions

Q.No.	Particulars	Marks
1.	Draw a schematic diagram representing the prototyping model of software development. Hence specify under what circumstances this model of software development proves to be more beneficial over the iterative waterfall model, in spite of associated overhead cost due to the prototype development.	10
2.	Being the software designer, identify and specify any TWO major functional requirements with the corresponding mainline and alternate sequences . “ <i>Doctor Patient Portal</i> ” This is a doctor patient handling and managing system that helps doctors in their work and also patients to book doctor appointments and view medical progress. The system allows doctors to manage their booking slots online. System allows for doctor search through categories, name and location. Patients are allowed to book empty slots online (for their required date and time) and those slots are reserved in their name. User may even cancel their bookings by login into the system anytime. When user is successful, an appointment confirmation email is sent regarding the slot booked. The system manages the appointment data for multiple doctors for various date and times. Each time a user visits a doctor his/her medical entry is stored in the database by doctor. Next time a user logs in he may view his/her entire medical history as and when needed. At the same time a doctor may view patients’ medical history even before the patient visits him. This allows for an automated patient doctor handling system through an online interface. This system also consists of organ donor module. This module allows for organ donation registration as well as organ search. The module is designed to help urgent organ requirements through easy/instant searches. User who is going to donate organ has to register himself by filling the details. User can search donor based on type of organ.	10
3.	Draw Level 0 and Level 1 Data Flow Diagram (DFD) of the above system, described in Q.3.	10
