Time: 3 hours   **Maximum Marks: 100**

1. Identify the functional requirements to develop an application for Student Marks Analyzing System. Draw the use case or DFD diagram, create the table design and prepare test plan(atleast two) and generate the following reports:

    a. Rank List

    b. Mark sheet of a student

2. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for Student Marks Analyzing System which generates the following reports:

    a. For the given Subject prepare Rank List

    b. Mark sheet of a student

3. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for Student Marks Analyzing System which generates the following reports:

    a. Classwise Mark Statement

    b. Mark sheet of a student

4. Identify the functional requirements, draw the State diagram, prepare test plan (atleast two). Develop Text Editor and show how the Font & Edit Menu works

5. Identify the functional requirements, draw the State diagram, prepare test plan (atleast two). Develop Text Editor and show how the Color & Font Menu works

6. Identify the functional requirements, draw the State diagram, and prepare test plan (atleast two). Develop Text Editor and show how the File & Color Menu works

7. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for maintaining a Telephone Directory which generates the following reports:

    a. List of duplicate names in the directory with different phone numbers

    b. List the areawise telephone numbers (given the area name)

8. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for maintaining a Telephone Directory which generates the following reports:

    a. Given a telephone number, display the details

    b. Given a name, display the list of phone numbers with details

9. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for maintaining a Telephone Directory which generates the following reports:

   a. Details of Doctors / Restaurants / Schools

   b. Given a telephone number, display the details

10. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for maintaining an English Dictionary which generates the following reports:

    a. List of words starting with a given alphabet

    b. Given a word, display words with same meaning

11. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for maintaining an English Dictionary which generates the following reports:

    a. Given a word, display the synonym and antonym

    b. Given a word, display a statement which explains the meaning of the word

12. dentify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan to (atleast two) develop an application for maintaining a Technical Dictionary which generates the following reports:

    a. Given a word, display the details about that technology

    b. Given a technical word, display under which category the word comes

13. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for maintaining an Inventory in an Electronics Shop that generates the following reports:

    a. Details of Products purchased for the shop between two given dates (product id, product name, brand, size, color, cost, etc.)

    b. All Supplier details (Suppliername, address, brand associated with, products associated with, etc.)

14. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for maintaining a Inventory which generates the following reports:

    a. Details of products sold between two given dates (product id, name, brand, size, cost,etc.)

    b. Re-order report on a date (product id, name, re-order level, re-ordered quantity, etc.)

15. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for maintaining a Inventory which generates the following reports:

   a. Sales Report on a date (product id, name, brand, size, cost,etc.)

   b. Products available under a Brand (brand name, product id, name, size, color, cost, etc.)

16. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for Library Management System which generates the following reports:

   a. Books supplier report (Suppliername, address, publisher associated with, etc.)

   b. Details of Books issued on a date (member id, title, author, publisher, edition, cost, etc.)

17. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for Library Management System which generates the following reports:

   a. Book Publishers report (name, address, etc.)

   b. Book Titlewise report (title, author name, publisher, edition, cost,etc.)

18. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan to develop an application for maintaining a General (Public) Library that generates the following reports:

    a. Report on Details of Members (name, id, life/monthly, address)

    b. Details of Books which costs more than Rs.1000/- (title, author, publisher, edition, cost)

19. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for a Banking System that generates the following reports:

    a. Details about the customers(name, no, amount, interest rate, no.of years) who have taken Housing Loans

    b. Details(A/c. No., amount, credit/debit) of last 10 transactions (deposits & withdrawals) done by a customer

20. Identify the functional requirements, draw the use case or DFD diagram, create the table design and prepare test plan (atleast two) to develop an application for a Banking System that generates the following reports:

    a. Details(A/c. No., amount, credit/debit) about the transactions (deposits & withdrawals) on a day

    b. Details(name, a/c.no., address) about the customers whose balance is less than Rs.5,000/-

Mark allotment pattern

Functional requirements	Use Case / DFD / State Diagram & Table Design	User Interface & Application Development	Verification & Validation Testing	Reports	TOTAL
15	15	40	10	20	100