[Time: 3 Hours]   **[Marks:60]**

Please check whether you have got the right question paper.

N.B: 1. Questions no.1 is compulsory carries 20 marks.

2. Attempt any four questions from Question 2 to 7. All questions carry equal marks(10 marks)

Q.1 Techno soft organization needs to develop Time Management Software for its executives. The software should let the executives register their daily appointment schedules. The information should be stored includes with whom meeting is arranged, venue, time, duration and purpose of the meeting. When a meeting involving many executives needs to be organized, the system should automatically find a common slot from the database of all executives. The system should inform all executives by e-mail about the meeting. If no common slot is available, TMS should help the secretary to rearrange the appointments of executives. U morning the TMS should e-mail every executives his daily appointments.

In this context answer the following:

(Make suitable assumptions wherever necessary; however state those assumptions very clearly)

i)   Draw Class diagram and Context level diagram.

ii)   Design MIS report and draw DFD.

Q.2 Solve **any two** of the following:

a)   Explain in brief Software Testing.

b)   Differentiate between bugs and failures.

c)   Explain in detail Risk identification and Risk projection.

Q.3 Discuss **any two** of the following techniques:

a)   Extreme Programming (XP)

b)   SDLC

c)   Smoke testing

Q.4   Solve **any two** of the following:

a)   Explain in brief the term "Feasibility study".

b)   Explain in brief agile software development model.

c)   Explain best practices for Software Requirement gathering.

Q.5 Differentiate **any two** of the following:

a)   Predictable risk and known risk

b)   Black box testing & white box testing

c)   Software usability and maintainability.

Q.6 Write short note on **any two** of the following:

a)   Software Reliability

b)   Spiral Model

c)   Computer Aided Software Engineering

Q.7 Solve **any two** of the following:

a)   Explain in brief the term "Software Configuration Management".

b)   Enumerate in brief the diagrams suggested under UML stating briefly their purpose.

c)   Define **any two** of the terms: 1. Error   2. Fault   3. Failure

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