2007-HIMACHAL PRADESH UNIVERSITY
B.TECH IV SEMESTER DEGREE EXAMINATION
SYSTEM ANALYSIS AND DESIGN
(COMPUTER SCIENCE & ENGINEERING, INFORMATION TECHNOLOGY)

PAPER ID : IT-4004

TIME-3 HOUR
MARK-100

NOTE: ANSWER ALL QUESTIONS

SECTION-A[10*8=80]

1. What is System Analysis and Design? Discuss the duties of a System Analyst.

2. Describe a Library as a system. What is the input, the output, the boundary, the components, their inter-relationships, the constraints the purpose, the interfaces, the environment? Draw a diagram of this system.

3. Discuss the importance of data flow diagrams. What is the difference between a data flow diagram and context diagram?

4. A car rental company wants to develop an automated system that would handle car reservations, customer billing and car actions. Usually a customer reserves a car, picks it up and then returns it after certain period of time. When car is returned, the customer receives a bill and pays the specified amount. In addition to renting out cars, every six months of so, the auto rental company auctions the car that have accumulated over 20,000 miles. Draw the ER diagram for the system.

5. What is an input design? Discuss the importance of human computer interaction.

6. What are the various system design tools? Explain with an example.

7. What are the steps in the implementation of the system? Explain with example.

8. Discuss the importance of documentation and its needs.

SECTION-B[10*2=20]

9. Attempt the following questions:

(i) What are the various attributes of software quality?

(ii) What is the difference between inspections and walkthroughs?

(iii) What is a validation technique?

(iv) Explain in brief various software testing strategies.

(v) What are the different objectives kept in mind while doing integration testing?

(vi) For designing a railway ticket reservation system, which language out of structured language and OOL should be chosen?

(vii) At what place are the Alpha, Beta testing done?

(viii) What is the difference between integration testing and module testing?

(ix) What are the training needs for the system implementation?

(x) What is a parallel run?