

**Total number of printed pages – 4**      **B. Tech**  
**PEEC 5410**

**Eighth Semester Examination – 2008**

**INFORMATION SYSTEMS AND DESIGN**

**Full Marks – 70**

**Time : 3 Hours**

*Answer Question No. 1 which is compulsory  
and any **five** from the rest.*

*The figures in the right-hand margin  
indicate marks.*



1. Answer the following questions :      2 × 10
- (a) What are the characteristics of good SRS ?
  - (b) What do you mean by “structured walkthrough” of a system ?
  - (c) Justify the need of HIPO chart in structured programming.

- (d) What are the main threats to project schedule and cost on large software projects ?
  - (e) Explain what is represented in a “data flow” diagram.
  - (f) What is need of system audit ?
  - (g) What are four feasibility measures applied to a system development plan ?
  - (h) What are the input and outputs of the system design phase ?
  - (i) In the system design process, what is in a “Preliminary report” ?
  - (j) Differentiate between Program testing and program debugging.
2. (a) What ability the system analyst is supposed to have in order to anticipate risk of the proposed project that might go wrong in future ? What are the techniques of risk management ?      5

**P.T.O.**

**PEEC 5410**

**2**

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- (b) What are the Gantt Chart and PERT Diagram ? How do they help in developing preliminary schedule ? 5
3. (a) Explain how does the effective communication help to establish and maintain good working relationships with clients and colleagues. What are the different techniques to extract requirements from the clients ? 5
- (b) What is a decision tree ? How does it help in analysis ? Explain with a suitable example. 5
4. Analyze the order processing system of a student's cooperative store of one educational system using the concept of Data Flow Diagram. Explain its various steps. 10
5. (a) How does Prototype development strategy help in system development ? Explain its strength and weakness. 5
- (b) Compare between the steps followed in a conventional flow oriented design and object oriented design. 5
6. Highlight the steps followed for two different testing strategies. 10
7. How do the HIPO chart and Warnier/Orr Diagram help in design ? Explain the steps followed for them. 10
8. What are the different types of : 10
- (a) Coupling
- (b) Cohesion.

**PEEC 5410**

**3**

**P.T.O.**

**PEEC 5410**

**4**

**- C**