Bachelor Level / fifth-semester / Science Full marks: 60 **Computer Science and Information Technology(CSC315)** Pass marks: 24 (System Analysis and Design) Time: 3 hours Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Group A

Long Answer Questions:

Attempt Any Two: (2x10=20)

1. **What do you mean by system analysis? Explain the system development life cycle with examples.**

2. **Draw a DFD diagram of the following up to level 2.**

Customer sends enquiry to commercial department, receives quotations from the sales department and places an order. Based on the customer order, the work order is sent to the planning department for planning scheduling and control, in turn, the planning department raises a job order on the "shop floor". On completion, delivery notes and invoice are made out and the costing department also prepares an orderwise comparative statement of estimated and actual costs.

3. **How can you transform an E-R diagram into relations? Explain with suitable examples.**

Group B

Short Answer Questions:

Attempt Any Eight: (8x5=40)

4. **What are the system analyst and design tools?**

5. **Design the E-R diagram of the following.**
   a) Customer withdraws money from his account.
   b) Students attend classes.

6. **Explain the data dictionaries with examples.**

7. **Explain the cost-benefit analysis with examples.**

8. **What is the difference between a 2 NF and 3NF relations?**

9. **What do you mean by file organization?**