

2014

(Second Semester)

MASTER OF COMPUTER APPLICATIONS

Paper No: MCA 203

(System Analysis & Design)

Full Marks : 60

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer Question No 1 and **any four** from the rest

1. Answer the following questions briefly: **2x6=12**

- a) Differentiate between logical and physical design.
- b) What is cost benefit analysis?
- c) Explain Entity Relationship diagram with an example.
- d) What are the principal activities of a modern quality system?
- e) Differentiate between walkthrough and inspection.
- f) List any four functions of a system analyst?

2. a) What is system requirement? How are requirements determined. **3+3= 6**

- b) What is prototyping? Explain the significance and characteristics of a prototype? $3+3=6$
3. a) Explain in brief the different data modeling methods. 6
- b) What is data dictionary? Explain its significance in system analysis and design? $3+3=6$
4. a) Identify the different categories of system documentation? What are the characteristics of good documentation. $3+3=6$
- b) What is an user interface? What purpose should an user interface serve? $3+3=6$
5. a) Explain the different steps involved in database design with examples. 6
- b) Differentiate between PERT and GANTT Chart? What are the different components that make up a PERT Chart. $3+3=6$
6. a) Discuss the importance of audit feature in software. What audit considerations are included in system design? $3+3=6$
- b) Define quality assurance as it pertains to software? Why is it an important aspect of systems engineering? $3+3=6$

7. a) What do you understand by feasibility analysis? What considerations are involved in feasibility analysis? $3+3=6$
- b) What is system development life cycle? How does it relate to system analysis? $3+3=6$
8. a) Design E-R Diagram for the following : $3+3=6$
- i) Customer deposits money in his account.
 - ii) Teacher teaches many subjects to students.
- b) Prepare physical and logical DFD's for the following activities: $3+3=6$
- i) Returning a book to the library
 - ii) Online booking of a flight ticket.

*****II/MCA/203*****