

Roll No.

Total Pages : 03

MCA/M-24

24534

INFORMATION SYSTEMS

MCA-20-45(ii)

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

(Compulsory Question)

1. (a) How can a manager demonstrate that he or she is a responsible end user of information systems ? **3**
- (b) Describe Moore's Law and Law of Mass Digital Storage. **4**
- (c) Explain how encryption protects information. **4**
- (d) What are different stages in knowledge management value chain ? Discuss. **4**

Unit I

2. (a) What is the role of information system in business ? **7**
- (b) Provide examples of several major types of information systems from your experiences with business organizations in the real world. **8**

3. How information systems are useful for a business organization ? Illustrate that in an information system, people use hardware, software, people and network as resources to perform input, processing, output, storage and control activities that transform data resources into information products. **15**

Unit II

4. Discuss the following : **15**
- (i) Network/Telecommunication platforms
 - (ii) Grid computing
 - (iii) Green computing
 - (iv) Cloud based software services and tools
 - (v) Virtualization.
5. (a) Discuss the following : **8**
- (i) Text Mining and Web Mining
 - (ii) Data Marts.
- (b) Define and describe an entity-relationship diagram and explain its role in database design. **7**

Unit III

6. (a) Describe the role of firewalls, intrusion detection system and antivirus software in promoting security. **7**

- (b) Discuss the following : **8**
- (i) Encryption and Public key infrastructure
 - (ii) Security issues for cloud computing.

7. (a) Discuss the challenges posed by enterprise applications. How can these challenges be addressed ? **8**
- (b) Discuss and compare supply chain planning systems and supply chain execution systems. **7**

Unit IV

8. (a) Define an Expert System. Describe how it works and explain its value to business. **6**
- (b) How do virtual reality, augmented reality and investment workstations support knowledge work ? **9**
9. (a) What is the role of information systems in helping people working in a group make decisions more efficiently ? **8**
- (b) Discuss Executive support systems. **7**