

(i) Printed Pages : 3

Roll No. ....

(ii) Questions : 9

Sub. Code : 

3	6	1	3
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Exam. Code : 

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**M.Sc. Information Technology 2<sup>nd</sup> Semester**

**(2054)**

**E-COMMERCE AND EMERGING TRENDS**

**Paper—M.S. 65**

**Time Allowed : Three Hours]**

**[Maximum Marks : 80**

**Note :—** Attempt *five* questions in all, including Q. 9 in Section-E, which is compulsory and taking *one* each from Section-A to Section-D.

**SECTION—A**

1. What types of electronic payment systems are required in E-Commerce ? Why are there different types of payment systems ? Explain the necessary characteristics of each type of payment system and give an example each of where it is used. 16
2. (a) What is a digital signature ? Why is it necessary in E-Commerce ? What are the necessary conditions a hash function used in digital signature should satisfy ?

- (b) What do you understand by EDI ? Is EDI used in B2C or B2B E-Commerce ? Why is EDI important in E-Commerce ? 8,8

### **SECTION—B**

3. What is business intelligence ? What is its main purpose ? Explain various components of business intelligence. What are the advantages of making decision using business intelligence over making decision without business intelligence ? 16
4. (a) What is Supply Chain Management ? Explain different approaches to Supply Chain Management.
- (b) Differentiate between OLTP and OLAP by taking examples. 8,8

### **SECTION—C**

5. (a) What is parallel computing ? Explain, in detail, different paradigms of parallel computing. Also, discuss merits and demerits of parallel computation.
- (b) What is message passing interface (MPI) ? What are its features ? Explain. 8,8
6. Define cloud computing and identify its core features. Describe the basic components of an IaaS-based solution for cloud computing. Provide some examples of IaaS implementation. 16

## **SECTION—D**

7. (a) What is mobile computing ? List the characteristics of Mobile Computing. Explain the Structure of Mobile Computing Application.
- (b) Illustrate Ad hoc Networks with pictorial representation.  
Give the uses of Ad-Hoc networks. 8,8
8. Write short notes on :—
- (a) Grid computing and its application areas.
- (b) Features of mobile operating system. 8,8

## **SECTION—E**

### **(Compulsory Question)**

9. (a) What is a firewall in the context of network security ?  
What are the functions of a firewall ?
- (b) Differentiate among structured, unstructured and semistructured digital data by taking examples.
- (c) Draw block diagram explaining Flynn's Classification of computer architectures.
- (d) Compare and contrast GSM and CDMA protocols used for cellular data communication with examples. 4,4,4,4