

ENTERPRISE SYSTEM AND IT SOLUTIONS
(CSBS 3203)

Time Allotted : 2½ hrs

Full Marks : 60

Figures out of the right margin indicate full marks.

*Candidates are required to answer Group A and
any 4 (four) from Group B to E, taking one from each group.*

Candidates are required to give answer in their own words as far as practicable.

Group – A

1. Answer any twelve:

12 × 1 = 12

Choose the correct alternative for the following

- (i) What is the difference between data and information?
 - (a) Data is processed; information is raw
 - (b) Data is unprocessed; information is processed and meaningful
 - (c) Data and information are the same
 - (d) Data is a source of revenue
- (ii) Which method is used to gather data from websites programmatically?
 - (a) Relational Database Access
 - (b) Data APIs
 - (c) Web Scraping
 - (d) Open Data Sources
- (iii) The process of collecting, analyzing, and transforming data into useful insights is called
 - (a) Data mining
 - (b) Data warehousing
 - (c) Data modelling
 - (d) Data transformation
- (iv) What type of decisions does a Management Information System (MIS) primarily support?
 - (a) Operational decisions
 - (b) Strategic decisions
 - (c) Tactical decisions
 - (d) All of the above
- (v) What is the purpose of Computer-Based Information Systems (CBIS) in decision-making?
 - (a) To replace human decision-makers
 - (b) To automate decision-making entirely
 - (c) To provide data and tools to help decision-makers make informed decisions
 - (d) To eliminate the need for managers
- (vi) In OLAP, what does the term "drill-down" refer to?
 - (a) Moving to a lower level of detail
 - (b) Moving to a higher level of summary
 - (c) Analyzing data horizontally
 - (d) None of the above

- (vii) What is a Data Mart?
 - (a) A smaller, specialized version of a data warehouse
 - (b) A database for storing non-business-related data
 - (c) A collection of data from only one department
 - (d) A real-time transaction processing system
- (viii) The Enterprise Asset Management (EAM) module helps organizations to?
 - (a) Manage customer relationships
 - (b) Plan production schedules
 - (c) Manage and optimize the use of assets throughout their lifecycle
 - (d) Track supplier performance
- (ix) The goal of Customer Relationship Management (CRM) is to
 - (a) Automate financial transactions
 - (b) Maximize customer satisfaction and loyalty
 - (c) Improve warehouse management
 - (d) Streamline production processes
- (x) Extended ERP (XRP) includes
 - (a) Only financial modules
 - (b) Integrating business functions like CRM and SCM into ERP systems
 - (c) Replacing ERP with cloud solutions
 - (d) A more basic version of ERP systems

Fill in the blanks with the correct word

- (xi) Data from different sources are extracted, transformed, and loaded into the data warehouse through the process known as _____.
- (xii) SAP stands for _____.
- (xiii) The practice of optimizing the flow of goods and services, from raw material to final product, to meet customer demand is known as _____.
- (xiv) A popular CRM system used by businesses to manage customer interactions and relationships is _____.
- (xv) One of the most well-known ERP software systems used by businesses worldwide is _____.

Group - B

- 2. (a) Briefly discuss structured data, unstructured data and semi structured data with example. [[C02](Remember/LOCQ)]
- (b) Discuss feature extraction and feature reduction techniques in the light of feature engineering. [[C02](Remember/LOCQ)]
- (c) Discuss the difference between internal and external data. Provide examples of each in the business environment. [[C01](Understand/LOCQ)]

3 + 4 + 5 = 12

3. (a) What are the characteristics of an Expert System (ES)? Illustrate with an example from business. [[C02](Understand/LOCQ)]
 - (b) Analyze with example how business is affected by Nominal and Cardinal types of data. [[C04](Analyse/IOCQ)]
 - (c) Differentiate between Enterprise Management System (EMS) and ERP? [[C03](Understand/LOCQ)]
- 5 + 4 + 3 = 12**

Group - C

4. (a) Describe the key components of an Information System (hardware, software, data, people, and processes). [[C03](Understand/LOCQ)]
 - (b) What is a Decision Support System (DSS), and how does it assist in the decision-making process within organizations. [[C04](Understand/LOCQ)]
 - (c) Compare and contrast between data warehouses and data lakes? [[C03](Understand/LOCQ)]
- 5 + 4 + 3 = 12**
5. (a) Differentiate between base cuboid and apex cuboid. [[C05](Understand/LOCQ)]
 - (b) Briefly discuss why a data warehouse is called subjected-oriented and non-volatile. [[C06](Understand/LOCQ)]
 - (c) Suppose that a data warehouse for Big-University consists of the following four dimensions: student, course, semester, and instructor, and two measures count and avg_grade. When at the lowest conceptual level (e.g., for a given student, course, semester, and instructor combination), the avg_grade measure stores the actual course grade of the student? a) Draw a snowflake schema diagram for the data warehouse and b) Starting with the base cuboid [student, course, semester, instructor], what specific OLAP operations should one perform in order to list the average grade of CS courses for each Big University student. [[C05](Analyse/IOCQ)]
- 3 + 3 + (3 + 3) = 12**

Group - D

6. (a) Discuss the reasons for the growth of ERP market. [[C04](Understand /LOCQ)]
 - (b) Explain Closed Loop MRP with example. [[C03](Understand/LOCQ)]
 - (c) Describe the key functionalities of the Sales and Distribution (SD) module in an ERP system and how it integrates with other modules. [[C03](Remember/LOCQ)]
- 4 + 4 + 4 = 12**
7. (a) Discuss briefly the different tools and technologies provided by SAP to support various aspects of business operations. [[C03](Remember/LOCQ)]
 - (b) Explain with example why Fact Constellation Schema is not suitable for the Data Marts? [[C05](Apply/IOCQ)]
 - (c) What is SAP Fiori? [[C03](Remember/LOCQ)]
- 4 + 5 + 3 = 12**

Group - E

8. (a) Evaluate the role of Blockchain Technology in aiding SCM. Justify your answer with proper example? *[(C04)(Understand/LOCQ)]*
(b) Write a short note on e-CRM. *[(C04)(Remember/LOCQ)]*
(c) Discuss briefly the different tools and technologies provided by SAP to support various aspects of business operations? *[(C03)(Remember/LOCQ)]*
5 + 3 + 4 = 12
9. (a) Evaluate the role of different CRM tools over legacy systems in facilitating in business automation. *[(C02) (Apply / IOCQ)]*
(b) Explain the Customer Life Cycle in CRM with diagram. *[(C06)(Understand/LOCQ)]*
(c) What is meant by CRM Process Mapping? *[(C04)(Remember/LOCQ)]*
6 + 4 + 2 = 12
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Cognition Level	LOCQ	IOCQ	HOCQ
Percentage distribution	78.13	21.87	0