

**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 primary purpose of an ERP system?
 - (a) To automate business processes
 - (b) To manage customer relationships
 - (c) To analyze large datasets
 - (d) To improve supply chain efficiency.
- (ii) Which of the following is an example of SCM software?
 - (a) Microsoft Excel
 - (b) Oracle ERP
 - (c) SAP SCM
 - (d) Adobe Photoshop.
- (iii) Which of the following statements about OLAP is true?
 - (a) OLAP is used for transaction processing
 - (b) OLAP databases are optimized for read operations
 - (c) OLAP is primarily used for storing unstructured data
 - (d) OLAP is not suitable for complex analytical queries.
- (iv) Which of the following is not a module of SAP ERP?
 - (a) Human Capital Management (HCM)
 - (b) Financial Accounting (FI)
 - (c) Sales and Distribution (SD)
 - (d) Supply Chain Management (SCM).
- (v) Which of the following is NOT a common CRM software feature?
 - (a) Sales Force Automation
 - (b) Inventory Management
 - (c) Customer Support
 - (d) Marketing Automation.
- (vi) What is the role of a Business Intelligence (BI) system in an organization?
 - (a) To manage human resources
 - (b) To support strategic decision-making
 - (c) To automate manufacturing processes
 - (d) To track customer orders.

- (vii) Which of the following is NOT a characteristic of a data warehouse?
 - (a) Subject-oriented
 - (b) Integrated
 - (c) Time-variant
 - (d) Operational.
- (viii) What is the purpose of a data mart?
 - (a) To store raw data
 - (b) To provide a centralized repository for all data
 - (c) To provide data for a specific business unit or department
 - (d) To replace the need for a data warehouse.
- (ix) Which of the following is a characteristic of a Transaction Processing System (TPS)?
 - (a) Focus on handling unstructured data
 - (b) Emphasis on real-time processing
 - (c) Use of decision support tools
 - (d) All of the above.
- (x) In a star schema, the fact table is surrounded by
 - (a) Dimension tables
 - (b) Index tables
 - (c) Aggregate tables
 - (d) Lookup tables.

Fill in the blanks with the correct word

- (xi) OLAP technology allows users to analyze multidimensional data interactively from multiple perspectives, providing rapid access to ____ information.
- (xii) ERP systems integrate various functions across an organization into a single system to streamline processes and information flow, eliminating ____ data and promoting collaboration.
- (xiii) Base Cuboid is also known as _____.
- (xiv) SAP S/4HANA Cloud is tool used in _____.
- (xv) _____ is a concept within SCM that refers to the strategic coordination of the entire supply chain, from sourcing raw materials to delivering finished products to customers.

Group - B

- 2. (a) Identify the sources and tools of the digital data for business decision-making . [[C02](Remember/LOCQ)]
 - (b) Analyze with example how business is affected by Ratio and Interval types of data. [[C03](Apply/IOCQ)]
 - (c) Classify the three categories of Enterprise Management System. [[C01](Understand/LOCQ)]
- 3 + 6 + 3 = 12**
- 3. (a) Discuss briefly the role of information as a strategic asset. [[C02](Understand/LOCQ)]
 - (b) Analyze with example how business is affected by Nominal and Cardinal types of data. [[C04](Analyse/IOCQ)]

- (c) Explain the 'Five Competitive Forces' with potential strategic use of Information Resources.

[[CO4](Understand/LOCQ)]

2 + 6 + 4 = 12

Group - C

4. (a) Differentiate between base cuboid and apex cuboid. [[CO5](Understand/LOCQ)]
(b) Explain roll-up, drill-down, slice and dice operations with proper example? [[CO2](Understand/LOCQ)]
(c) Explain when Data Mart is appropriate. [[CO1](Understand/LOCQ)]
3 + 6 + 3 = 12
5. (a) Draw the lattice of cuboids with diagram for the Sales division of a Retail company. Explain each of the components of the diagram. [[CO6](Apply/IOCQ)]
(b) Suppose that a data warehouse consists of the three dimensions time, doctor, and patient, and the two measures count and charge, where charge is the fee that a doctor charges a patient for a visit.
(i) Draw a snowflake schema diagram for the above data warehouse.
(ii) Starting with the base cuboid [day, doctor, patient], what specific OLAP operations should be performed in order to list the total fee collected by each doctor in 2023? [[CO5](Analyse/IOCQ)]
(c) What is FICO? [[CO4](Remember/LOCQ)]
4 + (3 + 3) + 2 = 12

Group - D

6. (a) Describe the processes of Human Resource Management (HM), Warehouse Management (WM) in ERP. [[CO4](Remember/LOCQ)]
(b) Give a case study and evaluate the performance of partial materialization technique over full materialization technique in speeding up business decision making process. [[CO3](Evaluate/HOCQ)]
(c) Explain with example why Fact Constellation Schema is not suitable for the Data Marts. [[CO5](Apply/IOCQ)]
5 + 4 + 3 = 12
7. (a) Explain the Bullwhip Effect in SCM. [[CO4](Understand/LOCQ)]
(b) Compare and contrast dimension table and fact table with example. [[CO3](Remember/LOCQ)]
(c) What is SAP Leonardo? [[CO4](Remember/LOCQ)]
4 + 5 + 3 = 12

Group - E

8. (a) Explain the working of e-Procurement with example. [[CO3](Understand/LOCQ)]
(b) Explore and write a case study of the Total Customer Development Hierarchy in CRM. [[CO4](Apply/IOCQ)]

- (c) What is meant by CRM Process Mapping? [[CO4](Remember/LOCQ)]
4 + 5 + 3 = 12
9. (a) Discuss briefly the key components of a CRM system. [[CO3](Understand/LOCQ)]
- (b) Discuss the concept of sustainability in SCM and its importance. [[CO4](Understand/LOCQ)]
- (c) What are some challenges in SCM? [[CO4](Remember/LOCQ)]
5 + 5 + 2 = 12
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Cognition Level	LOCQ	IOCQ	HOCQ
Percentage distribution	64.58	29.17	4.17

Course Outcome (CO):

- CSBS3203.1.** Classify various functional areas of management and information systems therein and information technologies involved.
- CSBS3203.2.** Evaluate the current role of IT in an organization for fulfilment of organizational goals and objectives and implementation of strategies.
- CSBS3203.3.** Analyse the role of business processes in support of implementation of enterprise systems
- CSBS3203.4.** Evaluate the implementation process of Enterprise Systems.
- CSBS3203.5.** Describe how Enterprise systems use relational database management systems to manage organizational data and retrieve information for decision making.
- CSBS3203.6.** Analyse cases relevant to enterprise systems vis-a-vis decision making.

**LOCQ: Lower Order Cognitive Question; IOCQ: Intermediate Order Cognitive Question; HOCQ: Higher Order Cognitive Question.*