TOTAL PAGES : 2

22CMP324BN

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2025
(Third Semester)

Branch - **COMPUTER SCIENCE**

MAJOR ELECTIVE COURSE – II : DATA AND WEB WAREHOUSING

Time: Three Hours Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Which of the following is the main purpose of a data warehouse? a) Transaction processing b) Programming c) Decision support d) Network optimization	K1	CO1
	2	In data warehousing, ETL stands for: a) Extract, Transmit, Link b) Evaluate, Transform, Link c) Extract, Transform, Load d) Evaluate, Transfer, Load	K2	CO1
2	3	Which schema represents a central fact table connected to dimension tables? a) Hierarchical schema b) Snowflake schema c) Star schema d) Factless schema	K1	CO2
	4	Data cleansing in warehousing is important for _____ a) Reducing storage b) Increasing query time c) Ensuring data accuracy d) Data visualization	K2	CO2
3	5	Web warehousing primarily focuses on _____ a) Network security b) Transactional systems c) Database normalization d) Online analytical processing on web data	K1	CO3
	6	Knowledge management systems help organizations to _____ a) Backup databases b) Reduce software costs c) Store files only d) Convert data into actionable knowledge	K2	CO3
4	7	In web warehousing, "visioning" refers to _____ a) Designing web pages b) Analyzing server logs c) Identifying potential business value d) Creating visual dashboards	K1	CO4
	8	Which of the following is a challenge in web warehouse solution selection? a) Visioning of value propositions b) Query syntax c) Database connectivity d) Network latency	K2	CO4
5	9	Web OLAP is used for _____ a) Web server configuration b) Online transactions c) Website SEO d) Analytical processing via web interface	K1	CO5
	10	Data mining tools in web warehousing are used to _____ a) Store images b) Encrypt files c) Extract patterns and trends d) Optimize network traffic	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Explain the architecture of a data warehouse and its components.	K2	CO1
		(OR)		
	11.b.	Describe the data warehousing process, including project management considerations.		
2	12.a.	Compare star schema and snowflake schema with examples.	K2	CO2
		(OR)		
	12.b.	Explain the data extraction and cleansing process in data warehousing.		
3	13.a.	Discuss the role of knowledge management in web warehousing.	K2	CO3
		(OR)		
	13.b.	Explain the application of knowledge management principles in web warehousing.		
4	14.a.	Analyze the process of visioning and value prepositions in web warehouse development.	K4	CO4
		(OR)		
	14.b.	Explain the principle challenges faced while selecting web warehouse solutions.		
5	15.a.	Discuss Web OLAP architecture and its performance challenges.	K4	CO5
		(OR)		
	15.b.	Explain the use of web-based data discovery tools for statistical and graphical analysis.		

SECTION -C (30 Marks)

Answer **ANY THREE** questions

ALL questions carry **EQUAL** Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Draw and explain the Data Warehouse Blueprint along with project lifecycle considerations.	K2	CO1
2	17	Design a star schema for an e-commerce company and explain fact and dimension tables.	K3	CO2
3	18	Explain the role of knowledge networks in web warehousing with examples.	K4	CO3
4	19	Compare web warehousing modeling and visioning with traditional data warehousing.	K4	CO4
5	20	Analyze and propose a suitable web-based OLAP and data mining approach for a global sports dataset.	K4	CO5

Z-Z-Z END