

ACAD-27 a)	Shri Ramdeobaba College of Engineering and Management, Nagpur -440013		Iss. No.: 01, Rev. No.: 00
Ref. Clause(s): 9.1			Date of Rev: 01/01/2018
Department:CSE	Semester: V Course Code: CST351 Course Name:Database Management Systems	Shift: I	Page: 01/01
Programme:B.E.	Test: 1	Date of Exam:23-08-2021	
Max Marks:15	Session:2021-22	Time: 01 Hour (10.30 AM to 11.30 AM)	

Q.1	a)	Differentiate between the following (i) Procedural and Non-Procedural DMLs. (ii) Instance and Schema.	03	CO1	L2																		
	b)	Why SQL is called as Fourth generation language?	02	CO1	L2																		
Q.2	a)	Consider the following database schema and write the SQL queries. Participant (<u>PID</u> , PNAME, GENDER, CID) Course (<u>CID</u> , CNAME, CREDIT) (i) Find the name of the participants whose third character in the name is A. (ii) Display the course id, course name, and number of Participants enrolled in each course. (iii) Display the course id in which more than 50 female participants have enrolled.	05 1 2 2	CO1	L4																		
Q.3	a)	Solve the following Questions. (i) Assume that there is a set of FDs that satisfy a relation r(A,B,C).An instance of this relation is shown below. Find the functional dependencies that are satisfied by r. <table border="1"><tr><td>A</td><td>B</td><td>C</td></tr><tr><td>f</td><td>e</td><td>e</td></tr><tr><td>d</td><td>e</td><td>e</td></tr><tr><td>b</td><td>c</td><td>e</td></tr><tr><td>a</td><td>c</td><td>d</td></tr><tr><td>a</td><td>b</td><td>c</td></tr></table> (ii) Consider following set F of functional dependency. F={ XY→W, Y→Z, WZ→P, WP→QR, Q→X } Using inference axioms, show that the functional dependency XY→Q holds,	A	B	C	f	e	e	d	e	e	b	c	e	a	c	d	a	b	c	05 [2] [3]	CO2	L3
A	B	C																					
f	e	e																					
d	e	e																					
b	c	e																					
a	c	d																					
a	b	c																					