## G H PATEL P G DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY MASTER OF COMPUTER APPLICATIONS (MCA)

## SEMESTER - I PS01CMCA31 (PYTHON PROGRAMMING) 8<sup>TH</sup> FEBRUARY, 2021

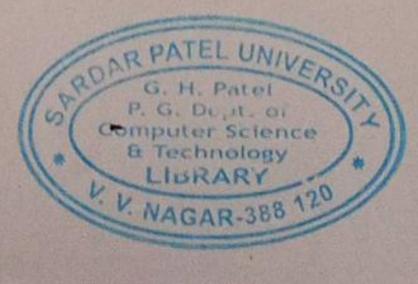
Time: 11:00 a.m. to 12:30 p.m.

Marks: 30

+2

Note: Answers of all the questions (including multiple choice questions) should be written in the provided answer book only.

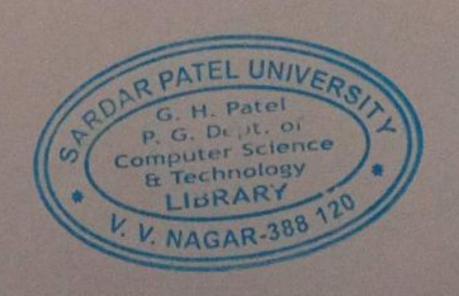
Q-1	Pick in yo	up the most ap our answer book	propriate answer	from the given alte	ernatives and write	(04)	
			Python program fi	le is -			
		[A] py	[B] .python	[C].pe	[D] .pi		
	(ii)	Which one of the	e following symbols	, is used to write a co	omment line?		
		[A] &	[B] %	[C] \$	[D] #		
	(iii)	is a	function returns da	ta type of a variable.			
		[A] return()	[B] type()	[C] Both [A] & [B]			
	(iv)	is used to print message on screen.					
		[A] print()	[B] println()	[C] out()	[D] None of these		
Q-2	Attempt ANY THREE from the following:						
	11	<ol> <li>Differentiate to a control of the last of</li></ol>	se statement with between list and tup r() and lower(). mes of common sec ir keywords of Pytho	quence operations.			
Q-	3 (a)	ation areas.	(05)				
	(b)	le examples.	(05)				
				OR .			
	(b) List and explain various types of operators taking suitable examples.						
Q	-4 (a	a) What is List? Explain any four list methods/functions with an example.					
	(b) Write Python script to read N number of elements through keyboard, add them to a list variable, and display minimum number among them.						
				OR			
	(k	) What is Tuple	? Explain tuple by to	aking suitable exampl	e.	(05)	



#### G. H. Patel P. G. Department of Computer Science and Technology MASTER OF COMPUTER APPLICATION (MCA)

### SEM- I Internal Examinations PS01CMCA33: DATABASE MANAGEMENT SYSTEMS Wednesday, 10th February, 2021

Max. Marks: 30 Time: 11:00 am to 12:30 pm [4] Q-1 Choose the most appropriate option for each question: 1. Which of the following keyword is not used in constraint? (A) Foreign (B) Check (C) Primary (D) Create Where the metadata are stored in database? (B) Meta dictionary (A) System Catalog (D) None of these (C) DBA command is use to remove the records from a table. (B) INSERT (A) SELECT (D) UPDATE (C) DELETE 4. Which of the following is not a types of join? (B) Outer join (A) Inner join (D) None of these (C) Cross join [6] Q-2 Answer the following questions (ANY THREE): 1. Give one example of Simple attribute and multivalued attribute. 2. Give an example of derived attribute and composite attribute. List out any four data types in oracle. Difference between Char and Varchar data type. Q-3 Answer the following questions: Explain entities and attributes. Draw various notations for ER diagram. [5] Explain Primary key and foreign key constraints with an example. [5] OR [5] Consider the following table. Student Master (Student Id, Student Name, Birth Date, Mobile, City) Write down the answers of following queries. 1. Add new record in student master table. 2. To display all students detail. 3. Remove all the records whose Student\_Id greater than 20. 4. Change the City is equal to 'Ahmedabad' for Student\_no less than 5. 5. Display students name in alphabetical order. Q-4 Answer the following questions: Explain CREATE command syntax with an example. [5] Explain any five in-built functions with an example. [5] OR List types of joins. Explain any two with an example. [5] \*\*\*\*\*\*



# G H Patel P G Dept of Comp Sc and Tech, S P University MCA I Semester Examinations, 2021 PS01CMCA35: Computer Fundamentals

Time: 1 Hour 30 Minutes Date: 12/02/2021 Marks: 30

		Marks: 3	0			
1.	Cl	hich one out of the felt.	7.00			
(i)	W	hich one out of the following:	[0			
	(i) Which one out of the following is a fastest memory?  (A) Hard Disk (B) RAM (C) Cache (D) Registers.					
(ii) What is the size of the exponent part of the representing floating-point numbers?		hat is the size of the exponent part of the trees	-			
(iii)	-	is an operation possible on a linear data structure.  a) Insert (b) Delete (c) Search (d) All of these				
(iv)						
	(1)	is an example of linear data structure. b) Tree (b) Array (c) Graph (d) None of these				
Q2.	1	Answer the following questions in brief (ANY THREE):	[06			
(i)	) ]	List the steps involved in instruction execution by a CPU.				
(ii	) (	Construct a Hamming code for the character 'C' (ASCII: 67) considering odd parity.				
(iii	i)	Represent the binary number -110.1011 in the IEEE single-precision format.				
(iv	v) List only operations possible on stack data structure.					
(2	Draw a singly linked list of your choice.					
Q3.		Answer in Detail.				
(#	A)	Draw the block diagram of a simple computer. Write the main functions of various components shown in the diagram.	[05]			
(1	B)	Write a short note on pipeline machines.	[05]			
		OR				
		Write a short note on array processors.				
Q	4.	1. Answer in Detail.				
(	(A)	A) Draw diagram of various types of data structure and write about each type in one line.				
	(B)	Explain concept of one dimension and two dimension array by giving suitable examples of both.  OR	[05]			
		Explain binary searching technique with suitable example.				
		XXXXXX	1			