Sub: Computer Science (083) Class: XII Max Marks: 15
Date: Set: I Time: 90 Mins

PART – I Programming in Python:

(2)

1. Write an interactive menu driven program to implement a stack. Each node in the stack is storing the information about a Player[Player ID, Player Name, Player Country]. Your program should perform the following operations as per the user's choice **1.push** () **2. pop** () **3. display** () and 4. **exit** () (Note: take care of Stack is full or Stack is empty)

PART-II SQL (4)

Create tables GRADUATE and NEWGR, populate the tables as shown below.

GRADUATE:

SNO	NAME	STIPEND	SUBJECT	AVERAGE	DIVN
1	Karan	400	Physics	68.00	C
2	Divakar	450	Comp Sc	94.00	A
3	Divya	300	Chemistry	86.00	В
4	Sabina	500	Mathematics	84.00	В
5	John	400	Biology	88.00	В

NEWGR:

SNO	SNAME	PGSUB
1	Namita	Medical
2	Surya	Engineering

Answer the following by writing valid SQL queries, based on the tables given above:

- i) To display the names of those students who have obtained DIVISION B and sort the relation by their NAME.
- ii) To increase the STIPEND by 10% for only those whose AVERAGE is between 86 to 95.
- iii) To list the names of those students whose SNO is similar in both the tables.
- iv) To show how many students are present in each DIVISION of graduate table.
- v) To find the difference between the HIGHEST AVERAGE and LOWEST AVERAGE for those who got DIVISION B.

PART - III PRACTICAL REPORT

(3)

PART - IV PROJECT (5)

 $PART - V \qquad VIVA - VOCE \tag{1}$

Sub: Computer Science (083) Class: XII Max Marks: 15
Date: Set: II Time: 90 Mins

PART – I Programming in Python:

(2)

1. Write an interactive menu driven program to implement queue. A node is storing the information about a student [RollNo, SName, Class, Fee]. Your program should contain *insert* (), *delete* (), *display* () and *exit* ().

(Note: take care of Queue is full or Queue is empty)

PART-II SQL

Create the tables COACH and NEWCOACH, populate the table with records as given.

COACH: (4)

COACHID	CNAME	AGE	SPORTS	DOA	PAY	SEX
100	KUKREJA	35	KARATE	27/03/2015	1000	M
200	RAVINA	34	CRICKET	20/01/2017	1200	F
300	TARUN	33	BASKET BALL	01/01/2020	2000	M
400	KUSH	41	SWIMMING	13/01/2019	900	M
500	SHAILYA	37	BASKET BALL	19/02/2018	750	F
600	DAVID	32	CRICKET	13/01/2014	850	M

NEWCOACH:

COACHID	GAME	FEES
200	CRICKET	3600
300	POLO	3800

Answer the followings valid SQL commands

- i) Display the TOTAL, AVERAGE, LOWEST and HIGHEST pay of all coach.
- ii) Display only those sports where number of coaches are less than 2 in each sport.
- iii) List the COACH NAME, AGE, DOA, SEX and FEES for only those coaches whose game is cricket in both tables.
- iv) Show the details of only FEMALE coach of those whose age is below 40, sorted by their PAY.
- v) Display all those whose name starts with 'S' or 'R' in COACH relation.

PART - III PRACTICAL REPORT

(3)

$$PART - IV PROJECT$$
 (5)

$$PART - V \qquad VIVA - VOCE \tag{1}$$

Sub: Computer Science (083) Class: XII Max Marks: 15
Date: 28.03.2021 Set: III Time: 90 Mins

PART – I Programming in Python:

(2)

1. Write an interactive menu driven program to implement queue. A node is storing the information about an employee [Employee No, Employee Name, Department, Salary]. Your program should contain *insert* (), *delete* (), *display* () and *exit* ().

(Note: take care of Queue is full or Queue is empty)

PART- II SQL (4)

Create a table ITLAB and NEWLAB populate the following **records** as given below *ITLAB*

NO	Itemname	Cost	Dop	Warranty
1	Computer	20000	11/DEC/2000	2
2	Printer	7000	11/FEB/2001	1
3	Scanner	5000	12/MAR/2001	1
4	Camera	20000	01/FEB/2001	2
5	Plotter	12000	05/JUN/2004	3
6	Hub	4000	09/OCT/2002	1

NEWLAB

NO	Suppname	Scharge
4	JP group	10000.99
5	Verma and sons	8900.33
6	Delta services	9988.44

Write SQL query for the followings to:

- (i) Display those items whose name contains 'er' or 'ra'.
- (ii) Display all the details of lab items whose COST is in the range of 10000 to 15000.
- (iii) Display only those items whose cost is more than the average cost of the table.
- (iv) Add a new column to hold the NO_ITEMS.
- (v) Display ITEMNAME, COST and SUPPLIER NAME for only those whose NO is same in both tables.

PART - III PRACTICAL REPORT

(3)

PART – IV PROJECT

(5)

PART - V VIVA – VOCE

(1)

Sub: Computer Science (083) Class: XII Max Marks: 15
Date: Set: IV Time: 90 Mins

PART – I Programming in Python:

(2)

1. Write an interactive menu driven program to implement a stack. Each node in the stack is storing the information about a Car[Carno, Make, Country]. Your program should perform the following operations as per the user's choice 1.push () 2. pop () 3. display () and 4. exit () (Note: take care of Stack is full or Stack is empty)

(Note: Your program should be menu driven, consider new member functions, if required)

 $PART - II \qquad SQL:$ (4)

Create table BESTORDERS and NEWORDERS, add the records as shown below.

BESTORDERS:

ORDERNO	CUSTCODE	DOP	ITEM	QTY	AMOUNT
A010	C003	22-01-2018	Burger	10	100
A002	E003	24-01-2019	Pizza	5	100
A013	D001	24-02-2017	Veg roll	20	50
A004	C003	11-08-2019	Garlic bread	7	45
A005	E003	02-02-2018	Burger	20	250

NEWORDERS:

ORDERNO	SUPPLIER	PRICE
A002	Milton	200.55
A013	Brittania	300.55

Write SQL statements to perform the followings:

- i) To create a view VIEW1 that contains the all the details of **CUSTCODE** D001 only.
- ii) To count the number items having Burger.
- iii) To display the SUPPLIER NAME and CUSTCODE for only those whose ORDERNO is similar.
- iv) To count number of items whose AMOUNT is more than the AVERAGE AMOUNT of the table.
- v) To increase the size of the ITEM field to 5 units more than the existing width.

PART - III PRACTICAL REPORT

(3)

PART – IV PROJECT

(5)

PART - V VIVA - VOCE

(1)

Sub: Computer Science (083) Class: XII Max Marks: 15
Date: Set: V Time: 90 Mins

PART – I Programming in Python:

(2)

(3)

1.Python / MySQL connectivity

Write a program to implement Python / MySQL connectivity on Bill table and perform the following operations. Bill table consists of fields (Bill No, Customer Name, Customer City and Bill Amount).

- 1.Add New Record
- 2.Display the details of given Bill no
- 3.Display all the Bill details
- 4.Quit

(Note: Your program should be menu driven, consider new member functions, if required)

$PART - II \qquad SQL: \tag{4}$

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NEWORDERS:

ORDERNO	SUPPLIER	PRICE
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Write SQL statements to perform the followings:

- i) To create a view VIEW1 that contains the all the details of **CUSTCODE** D001 only.
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- iii) To display the SUPPLIER NAME and CUSTCODE for only those whose ORDERNO is similar.
- iv) To count number of items whose AMOUNT is more than the AVERAGE AMOUNT of the table.
- v) To increase the size of the ITEM field to 5 units more than the existing width.

PART - III PRACTICAL REPORT

PART - IV PROJECT (5)

 $PART - V \qquad VIVA - VOCE \tag{1}$