(2½ Hours)

Note: 1) All questions carry equal marks and are compulsory.

[Total Marks: 75]

2) Figures to the right indicate maximum marks for a question

Q.1   **A**

Attempt any two sub-questions from (a), (b),(c) in MS-EXCEL(True/False)   02

(a) The cell in which data is entered is called the active cell.

(b) A workbook can contain worksheets and chart sheets.

(c) A spreadsheet consists of a grid made of rows and columns.

B

Attempt any two sub-questions from (d), (e),(f) in MySQL(Multiple Choice)   02

(d) To indicate that there should be 5 integer and 2 decimal position we use _____.
A)decimal(5,2)   B)decimal(7,2)   C)decimal(9,2)   D)decimal(2,5)

(e) To view the names of the databases in MySQL we use _____.
A) Show Tables   B)View Databases   C)Show Database   D)Show Databases

(f) The Key which helps to uniquely identify each row of the table is called _____ key.
A) Primary   B)Foreign   C)Secondary   [/9-]=D)Main

C

Attempt any six sub-questions from (g),(h),(i),(j),(k),(l),(m),(n),(o) in Data Communications, Networking and Internet. (True/False).   06

(g) Channel refers to the medium between the sender and receiver.

(h) In a data communication process, the sending device can only be a computer.

(i) A group of 4 bits is called a byte.

(j) Banking system and ticket reservation system are examples of distributed processing.

(k) Core banking system is an application that uses WAN.

(l) Bus topology is suitable for a local area network.

(m) A proxy server is used to share an Internet connection.

(n) Different documents can be linked on the Internet by using the hyperlink feature.

(o) The Internet is controlled by a government agency of the United States.

D

Attempt any five sub-questions from (p),(q),(r),(s),(t),(u),(v),(w) in Data Communications, Networking and Internet. (Multiple Choice)   05

(p) The transmission medium that carries the message is referred to as the _____.
A) protocol   B) gateway   C) communication channel   D) receiver

(q) The extended ASCII code system uses _____ bits for data representation.
A) 7   B) 8   C) 16   D) 32

(r) Which of the following protocols is used for email _____
A) SMTP   B) FTP   C) http   D) both (a) and (c)

(s) Which of the following is used to segment a large network into two smaller networks_____
A) Hub   B) Bridge   C) Router   D) Modem

(t) Which of these domains is restricted to qualified organizations_____
A) com   B) org   C) net   D) edu

(u) To match all the words in your search, the Boolean _____ operator should be used.
A) AND   B) OR   C) NOT   D) BOTH

(v) What is the full form of URL?
A) Uniform Resource Library
B) United Resource Locator
C) Universal Resource Locator
D) Uniform Resource Locator

(w) Which of these is a meta search engine?
A) Google
B) Yahoo
C) AltaVista
D) Dogpile

Q.2 A Answer any one sub-question from (a),(b) in Data Communications, Networking and Internet

08

(a) Differentiate between LAN and WAN
(b) Write and explain components of data communication.

B Answer any one sub-question from (c),(d) in Data Communications, Networking and Internet

07

(c) Explain following topologies: 1. Ring 2. Bus
(d) Write advantages and disadvantages of twisted pair cable.

Q.3 A Answer any one sub-question from (a) , (b) in MySQL

08

(a) Write MySQL statement to create a table called HOTEL having the following columns Registration Number (RNO, integer, Primary Key), Room Type (RTYPE, character with variable width 15 columns, default value NORMAL"), Check in Date (SDATE, Date) and Tariff (TARIFF, width 8 with 2 decimals, should not be negative).

(b) Write MySQL statement to create a table called LIBRARY containing columns Accession Number (ASNUM, integer, should be increased by 1 automatically), Book Name (NAME, character with variable width 25 columns, should not be empty), Author Name (AUTHOR, character with width 20 columns), Price of the Book (NUM, 7 integer and 2 decimals) and Date of Purchase (PURDT, Date).

Q.3 B Answer any one sub-question from (c) , (d) in MySQL

07

(c) There exist a table RTRAVELS containing columns Travellers Number(TNO, integer), Name (TNAME, character), Destination City (CITY, Character 10), Date of Travel (DOT, date) and Fare (FARE, integer). Write MySQL statements for the following.
  i. Display the structure of the table RTRAVELS.
  ii. Enter the following one row of data in this table.

TNO	TNAME	CITY	DOT	FARE
101	AKASH	HYDERABAD	2024-09-25	8000

  iii. Add a new column Age (AGE, integer) at the beginning of the table RTRAVELS.
  iv. Delete the rows where destination city is PUNE.
  v. Change the Date of travel of traveller with name "SAMEER" to May
  vi. Change the size of the column TName to 25 columns.
  vii. Delete the table RTRAVELS.

(d) Explain the following built-in functions in MySQL
1) LEFT( )   2)TRIM( )   3)MONTH( )   4) LENGTH( )
5) MOD( )   6) POW( )   7) NOW( )

Q.4 A   **Answer any one sub-question from (a) , (b) in MySQL**   08

(a) There exists Table name: Employee details (EMP_DETAILS)column s in the table: Employee no.(Primary key)((emp_no), first name (fname), Surname (Surname), middle name (Mname), age(Age), date of birth(DOB), gender(Gender), name of the department(Dept), designation(Desi), and salary(Sal).
Write MySQL statements for the following.
i) To display Employee no., first name, surname, last name and salary. Use the heading as Emp. No., Name and Salary. Use concat to display name as one entity combining first name, surname, last name.
ii) To display Employee no., first name, surname, last name whose first name begins with the letter S.
iii) To display Employee no., first name, surname, last name and age in the order of Surname.
iv) To display Employee no., first name, surname, last name and date of birth of those who are born in the month of June in the chronological order of date of birth.

(b) There exist a table book containing the columns account number(ACNNo), book name(Bname), Number of copies(NOC) ,Value of the book(B_rate) and date of Publication(Dof_P).
Write the my SQL statement for the following
i) Display all the rows from the following table book.
ii) Display all the book details in alphabetical orders of book name
iii) Display the account number, book name and date of Publication from the table.
iv) Display Minimum number of books, Maximum number of books, Average of book as per book name.

Q.4 B   **Answer any one sub-question from (c) , (d) in MySQL**   07

(c) There exists a table Flipcart having the columns Purchaser's Number (PNO, integer), Purchaser's Name (PNAME, character), Receipt Number (RNO, integer, primary key), Total Cost (TCOST, integer) and Date of Purchase (PURDT, date).
Write MySQL statements for the following.
i)Display Purchaser's name, Receipt Number and Total Cost from this table where Date of Purchase is January 1, 2018.
ii) Display Purchaser's Name and Total Cost where Total Cost is equal to the maximum Total Cost.
iii) Display Date of Purchase, maximum and minimum Total Cost grouped by Date of Purchase.
iv) Display Purchaser's Name, Total Cost and "Discount" as 15% of Total Cost.

(d) There exists a table Eclass containing columns Roll Number (RNO, integer, primary key), Name (SNAME, character), Age (AGE, integer), Fees (FEES, decimal (8, 2)). There exists another table PER containing columns Roll Number (RNO, integer, primary key), Total marks (TOTAL, integer). Write MySQL statements for the following.

i)Display Name, Age and Total marks of a student with Roll Number 200 using both the tables.

ii) Display Name, Age and Total marks of students getting Total Marks more than or equal to 600 using both the tables.

iii) Display Roll number and Total marks of students who have scored more than average Total Marks using table PER.

iv) Display Name and Fees of students who pay maximum Fees using table Eclass.

Q.5 A   Attempt any ONE sub-question from (a), (b) in MS Excel   08

(a)   The following data has been entered in a worksheet:

	A	B	C	D	E	F
1	PRODUCT	COST PRICE	QTY	TOTAL COST	PROFIT AMT	SELLING PRICE
2	Desktop	6000	10			
3	Hard Disk	8500	2			
4	Keyboard	400	15			
5	Scanner	8050	14			
6	Printer	12500	6			
7						
8	PROFIT	5%				

Write steps to find the Total Cost, Profit Amount and Selling Price in columns D, E and F respectively.

(b)   For the following spreadsheet write the steps to -
a) Sort the data in the ascending order of Batsman
b) Calculate subtotal of runs scored by each team.

	A	B	C	D
1	SR NO	BATSMAN	TEAMS	RUNS SCORED
2	1	DARSHIT	MI	54
3	2	AMAN	GT	87
4	3	MALHAR	CS	63
5	4	KRISH	RR	80
6	5	SRIKANT	RR	72
7	6	JOHN	MI	66
8	7	AKBAR	MI	48

B

(c) **Attempt any ONE sub-question from (c), (d) in MS EXCEL**   07
Answer the following using spreadsheet giving the marks scored by students in 5 class tests

	A	B	C	D	E	F	G	H
1	NAME	Test 1	Test 2	Test 3	Test 4	Test 5	TOTAL	AVG
2	Sachin	76	78	98	54	115		
3	Ganga	45	56	54	45	12		
4	Kala	36	85	56	89	65		
5	David	59	45	54	25	78		
6	Kumar	45	25	12	14	58		
7								

Write the steps to
1. Calculate the Total and Average score in column G and H.
2. Test-wise calculate the Highest and the Lowest score in row 8 and 9.

(d) **Explain the following built-in functions in MS-EXCEL**
1. INT ()   2. AVERAGE ()   3. FV ( )   4. MIN ()
5. ROUND ()   6. MOD ()   7. SQRT( )

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