

Duration: 2 Hours 30 min

Max Marks: 75

Note : All questions are compulsory

- Q 1 A** Attempt any Two sub questions from a),b) & c) in MS-Excel (True or False) **2**
- a The cell in which we enter the data is called an active cell.
  - b A formula can obtain references to other cell.
  - c Excel formula are generally calculated from right to left.
- B** Attempt any Two sub questions from d),e) and f) in My SQL. (Multiple Choice) **2**
- d To make changes in the data already entered in the table we used.
    - 1) Alter Table    2). Update and Set    3). Select    4).Create
  - e The \_\_\_\_\_ clause is used to not save the transaction
    - 1) Commit    2) Start    3) End    4) Rollback
  - f To Open a database Class the statement is \_\_\_\_\_
    - 1) Open Class    2). Select Class    3). Use Class    4). Choose Class
- C** Attempt any Six sub questions from g),h),i),j),k),l),m),n), and o) in Data Communication ,Networking and Internet ( True or False ) **6**
- g One cable is used In BUS topology.
  - h Web pages are created using HTML.
  - i MAN is spread over many countries.
  - j A blog is a digital diary.
  - k In OSI model there are 7 layers.
  - l Protocol is not necessary for data communication.
  - m The opening page of a website is called its home page.
  - n Google is a Meta search engine.
  - o Hot spot are available on public spaces.
- D** Attempt any Five sub questions from p),q),r),s),t),l),u),v), and w) in Data Communication ,Networking and Internet (Multiple Choice) **5**
- p The part before the @ symbol in an Email address is \_\_\_\_\_
    - a) Domain name    b) User name    c) The subdomain    d) protocol
  - q In \_\_\_\_\_ topology all the nodes are connected with a single cable
    - a) Bus    b) Ring    c) Star    d) Mess
  - r The network spanning a single organization is \_\_\_\_\_
    - a) MAN    b) LAN    c) WAN    d) Google
  - s Which of the following is not a topology
    - a) Star    b) Bus    c) Ring    d) Satellite
  - t Which of the following is not wire based media
    - a) Microwaves    Fiber optic    c) Twisted pair    d) Coaxial
  - u \_\_\_\_\_ is the central device used in star topology
    - a) Router    b) Bridge    c) Hub    d) Modem

- v TCP stands for Transmission \_\_\_\_\_ Protocol  
 a) Combine                      b) Control                      c) Connect                      d) Call
- w The dial up account is the \_\_\_\_\_ internet access account  
 a) Fastest                      b) Slowest                      c) Superfast                      d) google

**Q 2 A** Attempt any one sub questions from a) & b) in Data Communication ,Networking and Internet **8**  
**a** Write short note on      1) Bus Topology                      2) Star Topology  
**b** Explain various types of Computer Networks.

**B** Attempt any one sub questions from c) & d) in Data Communication ,Networking and Internet **7**  
**c** Explain HUB and SWITCH used in networking.  
**d** Explain the different use of internet..

**Q 3 A** Answer any one sub question from a) and b) in My SQL **8**  
**a** Write statement in MySQL to create a table called DONATION containing columns IDNumber(DNO,integer,primarykey),name(NAME,character with width 20),Amount(AMT,integer), Date(DT,Date) which should not be empty  
**b** Write statement in MySQL to create a table called ACCOUNT containing columns Account Number ( ANO,integer,primary key),Account holder name(NAME,Character with width 25),Gender (GEN,Boolean),types of account(TYPE, Character with width 25),Balance(BALANCE,very large)

**B** Answer any one sub question from c) and d) in My SQL **7**  
**c** Explain the following in built function in My SQL  
 1) UPPER ()                      2) MID(str,len)                      3) Date()                      4) DAYNAME()  
 5) MOD(x,y)                      6) SQRT()                      7) MAX()  
**d** There exist a table called SALARY containing the column Employee number(ENO,integer, primary key),Name(ENAME,character),date of birth(DOB,date),Gender(GEN,character with width 1) and salary (SAL,5 integer and 2 decimal places)  
 Write MYSQL statement for the following  
 i) Display the structure of the table SALARY  
 ii) Add a new column date of joining (DOJ,Date ) at the end of the table  
 iii) Rename the column DOB to DBT  
 iv) Change the size of the column SAL to 6 integer and 2 decimal  
 v) Increase the salary of all employee by 1000  
 vi) Delete the row where employee no is 48  
 vii) Rename the table SALARY as SAL

**Q 4 A** Answer any one sub question from a) and b) in My SQL **8**  
**a** There exist a table called RAIL containing the column Station name (SNO, integer), Station Name (SNAME, character), Amount collected (AMT, Numeric) Write MySQL statement for the following  
 i) Display station number, station name, and amount collected  
 ii) Display station number, station name whose amount collected is below the average amount collected  
 iii) Display station number, maximum and total amount collected from station grouped

- by station name.
- iv) Display station number whose amount collected is equal to the highest amount collected
  - v) Display all the rows from this table in the ascending order of amount collected
- b** There exist a table called BOOKS containing the column Accession number (ASNUM, integer, primary key), book Name (NAME, character), Author Name (Author, Character) and number of pages (NUM, integer), There exist another table ISSUE containing the column student number (SNUM, integer), Accession number (ASNUM, integer, primary key) and date of issue (DOI, date) .  
Write MySQL statement for the following
- i) Display book name, author name, and date of issue for books having more than 300 pages using both the tables.
  - ii) Display book name, student number, accession number and date of issue for books issued before September 1,2016. using both the tables
  - iii) Display book name, author name and number of pages from the table BOOKS for those books where the number of pages is equal to the average number of pages.
  - iv) Display book name, student number, accession number in the alphabetical order of books name from the table BOOKS.
  - v) Display student Number, accession number and date of issue for all the rows from the table ISSUE where students number is between 21 and 30

**B** Answer any one sub question from c) and d) in My SQL

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- c** There exist a table SPECIALIZATION with columns roll number (RNO, integer), name of the student (SNAME, Character), subject offered ( SUB, character) and marks obtained in TY BCom examination (MARKS, integer)  
write MySQL queries for the following:
- i) Display all the rows in ascending order of roll numbers and descending order of marks and
  - ii) Display all the rows from the table
  - iii) Display all the rows where the subject offered is advertising
  - iv) Display all the rows which contains 'sa' anywhere in the name of the student
  - v) Display roll number and name of the student in alphabetical order of the names
- d** There exist a table EXAMINATION containing columns exam seat number (ESNO, integer), name of the student(SNAME, character), gender (GEN, character), marks (MKS, numeric) and grade (GRADE, character)  
Write MySQL queries for the following
- i) Display all the rows where the grade is B
  - ii) Display seat number, name and marks of students whose marks are equal to to lowest marks
  - iii) Display seat number, marks and grade of students whose marks are above average marks
  - iv) Display gender, minimum marks and maximum marks of students grouped by grade

**Q 5 A** Answer any one sub question from a) and b) in MS- EXCEL

**8**

**a** The following data has been entered in a worksheet.

	A	B	C	D
<b>1</b>	<b>Emp.No</b>	<b>Emp.Name</b>	<b>Department</b>	<b>Salary</b>
<b>2</b>	555	Arham	HR	40000
<b>3</b>	232	Sarah	Admin	65000
<b>4</b>	254	Sachin	HR	32000
<b>5</b>	365	Peter	Sales	32000
<b>6</b>	999	Manoj	HR	45000
<b>7</b>	666	Sanket	Admin	54000

Write step to

- 1) Create a pivotal table showing the highest salary department wise in column E
- 2) Create a pivotal table showing Average salary department wise in column H

**b** The following spread sheet contains the amounts invested, the rate of interest and the period of investment in years. Write the steps to obtain the simple and compound interest in columns C and D.

	A	B	C	D
<b>1</b>	<b>Name</b>	<b>Amount</b>	<b>S.I</b>	<b>C.I</b>
<b>2</b>	Ravish	500000		
<b>3</b>	Dev	250000		
<b>4</b>	Aabha	190000		
<b>5</b>	Annie	560000		
<b>6</b>	Number of years (n)	10		
<b>7</b>	Rate of Interest (r%)	8		

Given that, Simple Interest (S.I) =  $(p*n*r)/100$

Compound Interest (C.I) =  $p*(1+r/100)^n - p$

Where P = Amount , R = rate of interest N= No of years

**B** Answer the following using spreadsheet

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**c** Consider the following worksheet in MS- EXCEL

	A	B	C	D	E	F
<b>1</b>	<b>Name</b>	<b>Basic</b>	<b>HRA</b>	<b>DA</b>	<b>Total</b>	<b>Tax</b>
<b>2</b>	Arham	30000				
<b>3</b>	Sarah	20000				
<b>4</b>	Sachin	221000				
<b>5</b>	Peter	25000				
<b>6</b>	Manoj	60000				

Write step to find

- 1) HRA as 25% of basic or 10,000 whichever is less in column C
- 2) DA as 110% of basic rounded to the nearest integer in column D
- 3) Total as Basic + HRA +DA in column E
- 4) Tax as 33.33% of Total in column F

**d** Explain the following function in MS- EXCEL

- i) PV()
- ii) COUNT()
- iii) ROUNDUP()
- iv) NPER()
- v) MAX()
- vi) MOD()
- vii) ABS()

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