BCM SCHOOL

A Senior Secondary School of BCM Foundation, Affiliated to CBSE, New Delhi
Sector 32 -A, Chandigarh Road, Ludhiana

HOLIDAYS HOMEWORK
CLASS-XII(SCIENCE)

SUBJECT:- ENGLISH

Dear students

As per CBSE guidelines students of class XII will prepare a project work. It must be done individually. There will be one project file based on any one topics given below.

Topics:

a. Mental health awareness: Raising awareness about the importance of mental health and ways to cope with mental issues.
b. Cyber Security : Analysing the importance of cyber security in today's digital world and ways to protect personal data and information.
c. Indian Literature : Analysing the works of prominent Indian English authors and their impact on Indian literature and culture.
d. Social Networking platforms: Is social Media an effective tool for quick and convenient communication, or is it just a sophisticated means for stalking people?
e. Climate Change : The greatest threat for survival.
f. Chat GPT- A threat to Human Resource.

Following points to be considered:

i. Students can choose any one topic of their choice and do any one activity based on the topic. Activities are:
   a. Interview b. One act play c. Audio/video presentation d. listen to Podacasts /Documentaries.
ii. Project to be divided into four phases: plan, research, create & present.
iii. What to include in the project:
   a. Cover page
   b. Table of contents
   c. A declaration by the student.
   d. Certificate of completion
   e. Statement of purpose/objectives
   f. Materials used (evidence of process and progress)
   g. Methodology for the project
   h. Description and analysis of the data/information
   i. Conclusions
   j. Photographs
   k. Limitations of the research/project work
   l. Recommendations
   m. Students' reflection sheet (what worked well, areas that need improvement, my action plan for improvement)
   n. Bibliography/ reference
   o. Assessment sheet

Solve the comprehension passages in your BBC Compacta Classroom Assignment 1, 2, 6 & 7

SUBJECT:- CHEMISTRY

A) INVESTIGATORY PROJECT (FOR CBSE EXAMINATION 2023-24)

Guidelines

Select any one of the topics from the mentioned list of projects.

Do internet research and watch you tube videos on relevant topic.

Prepare Project on the selected topic. (HAND WRITTEN ONLY)

*First page must carry the information like – project name, subject name, session, Subject teacher's name.

*Starting from first page to concluding page, every related information should be presented in order.

*Investigatory project must be supported with relevant diagrams of the experiments performed (wherever required)

*Bibliography to be included.

Title of project

1. Common food adulterants in fat, butter, oil, turmeric powder, pepper, chili powder, sugar, etc.

2.Measuring solubility of saturated solutions.

3.Measure the amount of acetic acid in vinegar.

4.Determination of contents in cold drinks.

5.Study of diffusion of solids in liquids.

6.Sterilization of water using bleaching powder.

7.Analysis of fertilizer

8.Chemistry in black and white photography

9.Presence of oxalate ions in guava fruit and different stages of ripening.

10.Compare the rate of evaporation of water.

11.Acidity In Tea.

12. Soap preparation.

13.Study the effects of metal coupling on the rate of corrosion.

14.Variation of emf and concentration.

15.Variation of conductance with temperature in electrolytes.

16.Measurement of the diffusion coefficient in liquids.

17.Determining caffeine in tea samples.

18.To calculate the percentage of lactose in powdered milk and whole milk.

19.Presence of pesticides and insecticides in fruits and vegetables.

20. Preparation of soya bean milk

21.Invisible Ink: Modelling A Molecular Switch.

22.Effect of potassium bisulphite as a preservative.

23.Rate of Evaporation of Different Liquids

24.Lemon Ices

25. Chocolate analysis.

26.Effect of heat on vitamin C in tomatoes

27.Removal of natural pigments by the interaction of oxygen and UV lights

28.Uses of exothermic reactions.

30.Electrochemical Cell

31. Digestion of starch by salivary amylase

32. The Neutralizing Ability of Antacid Tablets

33. Quantity of casein in different samples of milk.

34.To check the ions present in toothpaste.

35.DNA Secret Code.

B) To write Experiments in the chemistry file in the provided format mentioning - Aim, Apparatus and Chemicals, Theory/ Reaction, Calculation (titration), reactions, results, Precautions as per guidance of your subject Incharge.

SUBJECT:- PHYSICS

1) Complete a file of Investigatory Project. (7-8 pages).
Suggested topics are:
1. To Study various factors on which the internal resistance /EMF of cell depends
2. To study the variations in current flowing in a circuit containing an LDR because of a variation in A) The power of the incandescent lamp, used to illuminate the LDR (keeping all the lamps at a fixed distance).
B) The distance of a incandescent lamp (of fixed power) used to illuminate the LDR.
3. To find refractive indices of (a) water (b) oil (transparent) using a plane mirror, an equi- convex lens (made from a glass of known refractive index) and an adjustable object needle.

4. To investigate relation between the ratio of (I) output and input voltage and (ii) number of turns in the secondary coil and primary coil of a self- designed transformer.
5. To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids.
6. To estimate the charge induced on each one of the two identical styrofoam or pith balls suspended in a vertical plane by making use of coulomb law.
7. To study the factor on which self inductance of a coil depends by observing the effect of this coil, when put in series with a resistor/ bulb in a circuit fed up by an AC source of adjustable frequency.
8. To study the earth's magnetic field using a compass needle - bar magnet by plotting magnetic field lines and tangent galvanometer circuit

Note :- Following points may be covered in the project file

a) Acknowledgement
b) Certificate
c) Introduction of project
d) Components required
e) Brief introduction of components
f) Working of circuit
g) Related neat and clean pictures and diagrams
h) Applications and diagrams.

Solve the following questions on a separate notebook.

ELECTROSTATICS

Q1. If force between two charges in water is F. What is the change in the force if the temperature of water is increased or decreased?.
Q 2. Dielectric constant of a medium is unity. What will be its permittivity.?
Q 3. An attractive force of 5N is acting between two charges of 2μC and -2μC placed at some distance. If the charges are mutually touched and placed again at the same distance, what will be the new force between them.
Q4. Similar charges repel each other. Can they attract each other also?
Q5. Force of attraction between two charges at a distance d is F. What distance part should they kept in the medium so that force between them is F/3. Q 6. The force between two point charges kept at a distance d apart in air is F. If these charges are kept at same distance in water, how does the force between them is affected?
Q7. A metal sphere is held fixed on a smooth horizontal insulated plate and another metal sphere is placed at some distance away. If the fixed sphere is given a charge, how will the other sphere react?
Q8. Two point charges q_1 and q_2 are 3 m apart and their combined charge is 20 μC. If one repels the other with a force of 0.075 N, what are two charges?
Q9. A charge P repels charge Q but it attracts charge R. If R repels positively charged Body S, then find nature of charge on Q.
Q 10. Two similar conducting spheres of radii R carry charges + Q and -Q respectively If the distance between their centers is r, then why cannot the relation for Coulombs force give exact value of the force?
Q11. The force of attraction between two-point charges placed at distance d apart in a medium is F. What should be the distance apart in the same medium so that the force of attraction between them becomes F/4?
Q 12. In a medium, the force of attraction between two-point electric charges, distance 'd' apart, is F. What distance apart should these be kept in the same medium so that the force between them becomes 3F?
Q 13. Two-point charges, q = $8x10^{-8}$ C and Q = $-2x10^{-8}$ C are separated by a distance of 10 cm in air. What is the net electric field at the mid- point between the charges?
Q 14. A polythene piece rubbed with wool is found to have a negative charge of 3.6×10^{-7} C.
(i) Estimate the number of electrons transferred.
(ii) Is there a transfer of mass from wool to polythene?
Q 15. If 10^{20} electrons move out of a body to another body every second, how much time is required to get a total charge of 1 C on the body?
Q 16. Calculate the force of attraction between a proton and a electron kept 8×10^{-14} m apart.
Q 17. Two identical positive charges of magnitude Q are separated by a distance 'd'. Another charge q is placed midway on the line joining the two. Identify the magnitude and nature of the charge q so that the system is in equilibrium.
Q 18. A charge Q is split into two parts q and Q - q and placed at some distance apart. Find the magnitude of q so that the force of interaction between the two parts is maximum.
Q 19. Two positive charges particles each of mass 1.7×10^{-27}Kg and carrying a charge equals to charge on electron are placed at r distance apart. If each charge experiences a force equal to its weight find the distance between charges.

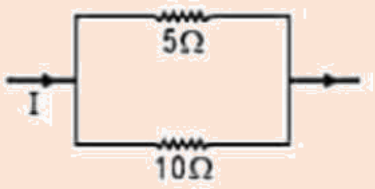
CURRENT ELECTRICITY

1. A cell in a deaf aid supplies a current of 25.0 mA through a resistance of 400 Ω. When the wearer turn up the volume, the resistance is changed to 100 Ω. and the current rises to 60 mA. What is the emf and internal resistance of the cell?

2. Electrics bulb have following specification (i) 100 W at 220 V (ii) 1000 W at 220 V which bulb will have higher resistance. What is the ratio of their resistances?

3. When a cell is connected directly across a high resistance voltmeter the reading is 1.50 V. When the cell is shorted through
a low resistance ammeter the current is 2.5 A. What is the emf and internal resistance of the cell?

4. In the arrangement of resistors shown, what fraction of current I will pass through 5 Ω resistor?



5. The storage battery of a car has an emf of 12 V, if the internal resistance of the battery is 0.4 ohm. What is the maximum current that can be drawn from the battery?

6. Resistance of an electric iron 50 Ω 4.2A Current flows through the resistance. Find the voltage between two points.

7. Given the resistance of l ohm, 2 ohm, 3ohm, how will you combine them to get the equivalent resistance
(i) 11/3 ohm (ii) 11/5 ohm.

8. Calculate the temperature at which the resistance of a conductor becomes 20 % more than its resistance at 27°C.

9. A resistor is connected across a 50 V source. What is the current in the resistor if the color code is red, orange, orange, silver?

10. A potentiometer wire of length of 1 m has a resistance of 15 ohm. It is connected to 5V battery in series with a resistance
of 5 ohm. Determine the emf of primary cell which gives a balance point at 60 cm.

11. 9V battery has an internal resistance of 12.0 Ω.
(a) What is the potential difference across its terminals when it is supplying a current of 50.0 mA?
(b) What is the maximum current this battery could supply?

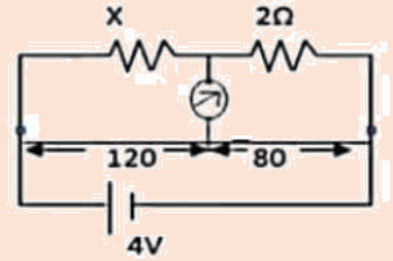
12. You are supplied with 6 identical dry cells, each of emf 1.5 V and internal resistance 0.3 Ω. What are the overall emf and internal resistance when: -
(a) the cells are connected in parallel?
(b) the cells are connected in series?
(c) they are connected in three groups, each of two cells in series, and these groups are connected in parallel with one another?

13.A 3000-km long cable consists of seven copper wires, each of diameter 0.73 mm, bundled together and surrounded by an
insulating sheath. Calculate the resistance of the cable. Use 3x 10-6 Ω cm for the resistivity of the copper.

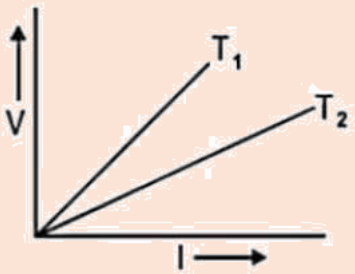
14. The resistivity of seawater is about 25 Ω cm. The charge carriers are chiefly Na and Cl ions, and of each there are about $3x10^{20}$ cm^3 . If we fill a plastic tube 2 meters long with seawater and connect a 12-volt battery to the electrodes at each end, what is the resulting average drift velocity of the ions, in cm/s?

15. Identical resistors are arranged and form a cube shown below.

16. Find the value of the unknown resistance X and the current drawn by the circuit from the battery if no current flows through the galvanometer. Assume the resistance per unit length of the wire is 0.01 Ω cm^{-1}.

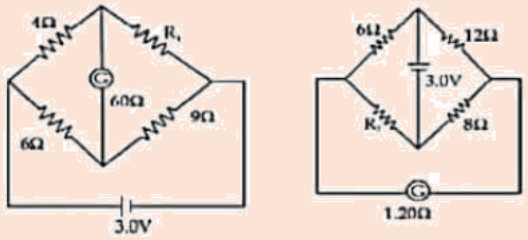


17. V -I graph for a metallic wire at two different temperatures T_1 and T_2, is as shown in the figure. Which of the two temperatures is higher and why?



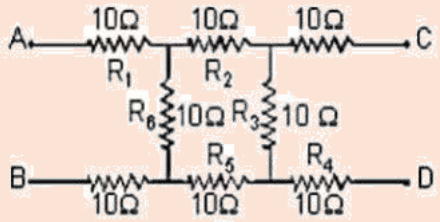
18. Estimate the average drift speed of conduction electrons in a copper wire of crosssection area 2.5 X $10^{-7}m^2$ carrying a current of 2.7A. Assume the density of conduction electrons to be 9 x 10^{28} m^3 .

19. What will be the equivalent resistance between the two points A and D of figure?



20. Figure shows two circuits each having a galvanometer and a battery of 3V. When the galvanometer in each arrangement do not show any deflection , obtain the ratio $\frac{R1}{R2}$.

23. Find the value of unknown resistance X in the given circuit, if no current flows through the section AD. Also calculate the current drawn by the circuit from the battery of emf 6.0 V and negligible internal resistance.



26. A cell of c.m.f. 'E' and internal resistance 'r' is connected across a variable resistor 'R'. Plot a graph showing the variation of terminal potential 'V' with resistance 'R'. Predict from the graph the condition under which V' becomes equal to E'

SUBJECT:- BIOLOGY

To prepare practical files and projects. (As discussed with you in the class)

Complete the assignments from the pdf's already shared with you.

SUBJECT:-MATHEMATICS

1. Express the matrix $\begin{bmatrix} 2 & -2 & -4 \\ -1 & 3 & 4 \\ 1 & -2 & -3 \end{bmatrix}$ as the sum of symmetric and skew symmetric matrix.

2. If A = $\begin{bmatrix} \cos\alpha + \sin\alpha & \sqrt{2}\sin\alpha \\ -\sqrt{2}\sin\alpha & \cos\alpha - \sin\alpha \end{bmatrix}$ prove that
   $A^n = \begin{bmatrix} \cos n\alpha + \sin n\alpha & \sqrt{2}\sin n\alpha \\ -\sqrt{2}\sin n\alpha & \cos n\alpha - \sin n\alpha \end{bmatrix}$ $\forall\, n \in N$
3. Ishan wants to donate rectangular plot of land for a school in his village. When he was asked to give dimension of the plot , he told that if its length is decreased by 50 m and breadth is increased by 50 m , then its area will remain same, but length is decreased by 10m and breadth is decreased by 20m , then its area will decreased by 5300m^2. Using matix find the dimension of the plot.

4. A trust invested some money in two types of bonds. The first bond pays 10% interest and the second bond pays 20% interest . The trust received ₹ 2800As interest. However , if trust had interchanged money in bonds, they would have got ₹ 100 less as interest, using matrix method, find the amount invested by the trust.
5. The monthly income of Aryan and Babban are in ratio 3:4 and their monthly expenditures are in the ratio 5:7. If each saves ₹ 15000 per month , find their monthly incomes using matrix method.
6. 10 student were selected from a school on the basis of values for giving awards and were divided into three groups. The first group comprises hard workers , the second group has honest and law abiding students and the third group contains vigilant and obedient students.Double the number of students of the first group added to the number in the second group gives 13 , while combined strength of first and second group is four times that of the third group. Using matrix method find the number of students in each group.
7. Two cricket teams honored their players for three values, excellent batting, to the point bowling and unparallel fielding by giving ₹ x , ₹ y and ₹ z per players respectively. The first team paid respectively 2,2, and 1 player for the above values with a total prize money of ₹ 11 lakhs , while the second team paid respectively 1,2 and2 players for these values with a amounts to ₹ 9 lakhs . If the total award money for one person each for these values amount to ₹ 6 lakhs, then express the above situation as a matrix equation and find award money per person for each value.

8. The sum of three numbers is 6. If we multiply third number by 3 and add second number to it, we get 11. By adding first and third numbers, we get double of the second number. Represent it algebraically and find the numbers using matrix method.
9. For the matrix A = $\begin{bmatrix} 2 & -1 & 1 \\ -1 & 2 & -1 \\ 1 & -1 & 2 \end{bmatrix}$ show that $A^2 - 5A + 4I = o \; hence \; find \; A^{-1}$
10. Use the product A = $\begin{bmatrix} 1 & -1 & 2 \\ 0 & 2 & -3 \\ 3 & -2 & 4 \end{bmatrix}\begin{bmatrix} -2 & 0 & 1 \\ 9 & 2 & -3 \\ 6 & 1 & -2 \end{bmatrix}$ to solve the system of equations
x-y+2z = 1 , 2y -3z = 1 , 3x -2y +4z = 2.
11. If A = $\begin{bmatrix} 1 & -1 & 0 \\ 2 & 3 & 4 \\ 0 & 1 & 2 \end{bmatrix}$ $and \; B = \begin{bmatrix} 2 & 2 & -4 \\ -4 & 2 & -4 \\ 2 & -1 & 5 \end{bmatrix}$ find AB . use this to solve the following system of equations :
x-y =3 , 2x +3y + 4z = 17 , y+2z = 7
12. If A= $\begin{bmatrix} 1 & 2 & 0 \\ -2 & -1 & -2 \\ 0 & -1 & 1 \end{bmatrix}$ find A^{-1} .Using it solve the equations x-2y=10 ,2x-y - z = 8 , -2y+z = 7
13. Find dy/dx when y = $\sin^{-1}\left(\frac{3\,sinx+4\,cosx}{5}\right)$.
14. Find dy/dx when y= $\sin^{-1}\left(x\sqrt{1-x} - \sqrt{x}\ \sqrt{1-x^2}\right)$
15. if $\sqrt{1-x^2} + \sqrt{1-y^2}$ =a(x-y) Prove that $\frac{dy}{dx} = \sqrt{\frac{1-y^2}{1-x^2}}$
16. If y = $\sqrt{x}^{\sqrt{x}^{\sqrt{x}^{\sqrt{x}----\infty}}}$ show that $\frac{dy}{dx} = \frac{y}{2y-x}$
17. Differentiate $\tan^{-1}\left(\frac{\sqrt{1+x^2}-1}{x}\right)$ with respect to $\tan^{-1} x$.
18. If x $\varepsilon \left(\frac{1}{\sqrt{2}}, 1\right)$ differentiate $\tan^{-1}\left(\frac{\sqrt{1-x^2}}{x}\right)$ with respect to $\cos^{-1} 2x\sqrt{1-x^2}$
19. . If $\sqrt{1-x^6}$ + $\sqrt{1-y^6}$ = a$(x^3 - y^3)$ prove that $\frac{dy}{dx} = \frac{x^2}{y^2}\sqrt{\frac{1-y^6}{1-x^6}}$ wher -1<x<1 and -1 ,y<1.
20. if y = log$\{x + \sqrt{x^2+a^2}\}$ prove that $(x^2+a^2)\frac{d^2y}{dx^2} + x\frac{dy}{dx} = 0$
21. If x = a cos$\theta + b\,sin\theta$ and y = $asin\theta - b\cos\theta$ prove that $y^2\frac{d^2y}{dx^2} - x\frac{dy}{dx} + y = 0$
22. If siny = x cos(a+y) then show that $\frac{dy}{dx} = \frac{cos^2(a+y)}{cosa}$
23. If y= $\sqrt{cosx + \sqrt{cosx + \sqrt{cosx + \ -------\infty}}}$ prove that (1-2y) $\frac{dy}{dx} = sinx$

24. differentiate $x^{\sin^{-1}x}$ *with respect to* $\sin^{-1}x$.

25. If y= (x+ $\sqrt{1 + x^2}$)^n then show that $(1+x^2)\frac{d^2y}{dx^2} + x\frac{dy}{dx} = n^2y = 0$

Activities :

- To demonstrate the function which is not one – one but is onto.
- To verify that the relation R in the set L of all lines in a plan, defined by R ={ (l,m) : l perpendicular to m} is symmetric but neither reflexive nor transitive.
- To Draw the graph of $\sin^{-1}x$ using graph of sinx and demonstrate the concept of mirror reflection.
- To find analytically the limit of a function f(x) at x = c and also to check the continuity of the function at that point.

SUBJECT:- MASS MEDIA

1. **Advertising Campaign:**
   Design a comprehensive advertising campaign for a product or service of your choice. This project should include creating print ads, designing a storyboard for a TV commercial, and developing a social media campaign. Present your campaign along with a detailed analysis of the target audience, marketing strategies, and persuasive techniques used. **(PRACTICAL -2)**

2. **Radio Show Production:**
   Produce a radio show segment on a current affair or a topic of interest. Plan the script; gather relevant information, and record interviews or discussions. Edit the audio to create a polished and engaging segment. Include music, sound effects, and transitions to enhance the overall experience. Write a reflection on the challenges faced and the effectiveness of radio as a medium for storytelling. **(PRACTICAL 4)**

3. **A3 chart/Poster making**
   Topics –

- Lab processing **(XII MED)**
- Functions of Advertising **(XII COM A)**
- What is Research and development department **(XII COM B)**
- Basics of Graphic designs **(XII COM C)**
- 7 Rules of photography **(XII ARTS A students under roll no. 1-25)**
- 7 basic camera movements and their importance. **(XII ARTS A roll no. 25 onwards)**
- Basic Elements of Radio Production **(XII ARTS B For students under roll no. 1-25)**
- Film making and its journey **(XII ARTS B roll no. 25 onwards**

4. **Submit 8 photos** (THEME BASED – TAKE IDEAS FROM PINTEREST) **(PRACTICAL 3)**
5. **COMIPLE YOUR PRACTICAL 1 (VIDEO AD), 2, 3 & 4 (mentioned in holidays homework) In a PowerPoint Presentation with your introduction.**
6. Revise all the completed chapters thoroughly.

Note – Mail your selected pictures at - anupreetsapra1@gmail.com

SUBJECT:- MUSIC

1. Definitions of the following÷
   - Khatka,Murki-kan, Gram & Meend.
2. Description of Ragas with 3 Tanas of each Rag.
3. Biographies of Pt Krishan Rao Shankar. Faiyaz khan & Ustad bade Gulam Ali khan.
4. contribution of Pt sharng dev & Ahobal in the Granth of Sangeet Ratnakar& Sangeet Parijat.
5. Historical Development inTime Theory of Ragas.

Note- Write and learn whole syllabus along with MCQs.
Do more singing Practice of Ragas through YouTube.

SUBJECT:- PAINTING

Practical

2 Landscapes
2 compositions
1 still life

Theory

- Do the assignment
- Prepare the chapters
- Miniature painting
- Rajasthani school of miniature painting
- Pahari school
- Mughal school of art
- Daccan school of art

SUBJECT:- LEGAL STUDIES

Project
Make project which includes three cases- civic, criminal and constitutional cases.

SUBJECT:- PSYCHOLOGY

1. Revise chapters 1, 3 4 and 5 and frame objective type questions from the same (minimum 25 questions from each chapter) and write in your notebook with their answers.

2. Answer all the questions given in the review exercise at the end of these chapters.

3. PROJECT WORK : Prepare a case profile of a person, who is suffering from a mental disorder or learning disability or who has excelled in areas like sports, academics, music etc.. Prepare the case profile as per the format given in the NCERT Textbook (page no. 199). Make a beautiful cover page for your file as per the theme of your case.

NOTE: This case file will carry 5 marks in your practical exam and you will be asked questions related to same in viva.

SUBJECT:-PHYSICAL EDUCATION

- Practical-1 Fitness test administration (SAI Khelo India Test) Age category 9 to 18 yrs
- Practical -2 Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease.
- Practical- 3 Game volleyball
- Labelled diagram of field & Equipment. Also mention its Rules, Terminologies & Skills.

NOTE – Complete the practical in neat and clean manner ,no Pasting allowed

SUBJECT:- HOME SCIENCE

- To prepare practical file and project work
- Topics are given individually and discussed

SUBJECT- CS & IP

1. What is a data type? Name some data types available in my SQL.
2. Is the Null value the same as zero?
3. While using SQL pattern matching ,what is the difference between underscore _ and percentage % wild card symbols?
4. Differentiate between CHAR and VARCHAR data types
5. Write MY SQL command to display the list of existing databases.
6. Compare to a file system, how does a database management system avoid redundancy in data through a database?
7. What are the limitations of the file system that can be overcome by a Relational Database?
8. Differentiate between

- Degree and cardinality of a relation
- Primary key and foreign key

9. An organisation wants to create a database Emp-dependent to maintain following details about its employees and their dependents.

EMPLOYEE(Adharnumber,Name,address,Department,Employee ID);

DEPENDENT (EmployeeID, DependentName,Relationship);

a) Name the attributes of employee which can be used as candidate keys.

b) The company wants to retrieve details of dependent of particular employee. Name the tables and the key which are required to retrieve this details.

c) What is the degree of employee and dependent relation?

10. Write the output of the queries (a) to (d) based on the table, Furniture given below:

Table: FURNITURE

FID	NAME	DATEOFPURCHASE	COST	DISCOUNT
B001	Double Bed	03-Jan-2018	45000	10
T010	Dining Table	10-Mar-2020	51000	5
B004	Single Bed	19-Jul-2021	22000	0
C003	Long Back Chair	30-Dec-2016	12000	3
T006	Console Table	17-Nov-2019	15000	12
B006	Bunk Bed	01-Jan-2021	28000	14

(a) select sum(discount) from furniture where cost>15000;

(b) select max(dateofpurchase)from furniture;

(c) select * from furniture where discount>5 and fid like "t%";

(d) select dateofpurchase from furniture where name in ("dining table", "consoletable");

11.Mr Mittal is using a table with the following columns **name, class, stream ID, stream name.** He needs to display name of students who have been assigned any stream or have been assigned stream name that ends with computers. He wrote the following command, which did not give the desired result.

Select name, class, dob students where streamname =null or streamname="computers

Help Mr. Mittal to run the query by removing the error and write correct query.

12.Sarthak, a student of class 12th created a table class. Grade is one of the columns of this table. To find the details of the students whose grade have not been ended, he wrote the following SQL query which did not give the desired result:

Select * from class where grade="null";

write the correct.

13. Can you add more than one column in a table by using ALTER TABLE command?

14.Define the use of INSERT INTO command in SQL with example.

15. Consider the table CUSTOMER

CCode	CarNAme	Make	Color	Capacity	Charges
501	A star	Suzuki	Red	3	14
503	Indigo	Tata	Silver	3	12
502	Innova	Toyota	White	7	15
509	SX4	Suzuki	Silver	4	14
510	C Class	Mercedes	red	4	35

write the sql commands for the following statements.

a. To display the names of all the sliver colored cars.

b. To display name of car, make and capacity of cars in descending order of the sitting capacity.

c. To display the highest charges at which a vehicle can be hired from carden.

d. SELECT CAR NAME FROM CARDEN WHERE CAPACITY=4;

16. Predict the output of the following queries:

i. select instr('exams@cbse.nic.in','.');

ii. select substr('exams@cbse.nic.in',7,4);

iii. select left('exams@cbse.nic.in',5);

17. Reena is working with functions of MySQL. Explain her following:

i. What is the purpose of now () function?
ii. How many parameters does it accept?
iii. What is the general format of its return type?

18. Carefully observe the following table named 'stock':

Table: stock

Pid	PName	Category	Qty	Price
1	Keyboard	IO	15	450
2	Mouse	IO	10	350
3	Wifi-router	NW	5	2600
4	Switch	NW	3	3000
5	Monitor	O	10	4500
6	Printer	O	4	17000

Write SQL queries for the following:

(a) To display the records in decreasing order of price.
(b) To display category and category wise total quantities of products.
(c) To display the category and its average price.
(d) To display category and category wise highest price of the products.

19. Ms.Saumya is working on a MySQL table named 'Hotel' having following structure:

Field	Type	Null	Key	Default	Extra
user_id	varchar(20)	YES		NULL	
name	varchar(20)	YES		NULL	
city	varchar(20)	YES		NULL	
mobile_no	varchar(11)	YES		NULL	

She need to perform following task on the table:

i. To fetch last 2 characters from the user_id column.
ii. To display the values of name column in lower case.
iii. To display 3 characters from 3rd place from the column city.

Suggest suitable SQL function for the same. Also write the query to achieve the desired task.

SUBJECT:-YOGA

Complete practical file and make project on Shatkarma , Asanas (Types) and Surya Namaskar