SANSKAR CITY INTERNATIONAL SCHOOL RAJNANDGAON

SUMMER VACATION HOMEWORK

ENGLISH

ASSIGNMENT 1:

Write an 'Article' on "INDIA AS A POPULAR CHOICE OF FOREIGN VISITORS.

HINTS:

Importance:-

➤ The new influx generates jobs for local people

➤ Local culture, food and handicrafts promoted

➤ Medical, religious and ecosystem bring India

on the world map.

What needs to be done:-

➤ Strengthening the efforts of the authorities

➤ Media's role in creating awareness

➤ Information centres to be created for all tourists

Students are required to make a 'hard copy' in their English text copy. **Thereafter, they are required to make a Presentation in the form of video / PPT and send it.**

ASSIGNMENT 2:

Students should find at least **3 new WORDS each day**, (Monday to Friday); their meanings and usage with examples. On every Saturday, they are required to click the words written and post to the subject teacher, without fail, WHATSAPP NO: 9993680780: M.BARLA

Note: *ATTRACTIVE PRIZE WAITS FOR THE BEST WORK!*

PHYSICS

Name of Investigator/student	Topic of investigation
1. Alok Padam 2. Anil Mandavi 3. Anshumaan Singh	Study the various factors on which the internal resistance/EMF of a cell depends
1. Arman Patel 2. Aryan Baghel 3. Avantika Mistri	Study the variation in current flowing in a circuit containing an LDR due to variation in the power of an incandescent lamp.
1. Bhumika Baghel 2. Dushyant Sinha 3. Ekalavya Sinde	Investigate the relation between the ratio of (i) output and input voltage and (ii) no of turns in the secondary coil and primary coil of a self-designed transformer.
1. Isha Smriti 2. Ishwar Poyam 3. Konika Kanwar	Investigate the dependance of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluid.
1. Nagesh Dhruw 2. Pratibha Bhagat 3. Pratyush Bandhe 4. Yukti Daga	Study the factors on which the self-inductance of a coil depends by observing the effect of this coil, when put in series with a resistor in a circuit fed upn by an A.C. source of adjustable frequency.
1. Priyank Nag 2. Raghavendra Singh 3. Ritesh Burka	Study the earth's magnetic field using a compass needle and a bar magnet by plotting magnetic field lines with a tangent galvanometer.
1. Ritu Nareti 2. Sakshi Joshi 3. Shivansh Kakem 4. Vaibhav tirkey	Find the refractive index of(i) water and (ii)oil using a plane mirror, an equiconvex lens and an adjustable object needle.

BIOLOGY

Sl.NO	NAME OF THE STUDENT.	TOPIC
1.	ANIL MANDAVI	Drug addiction

2.	ANSHUMAN SINGH	DNA fingerprinting
3.	ARMAAN PATEL	Human genome project
4.	ARYAN BAGHEL	Recombination DNA technology
5.	AVANTIKA MISTRI.	Immunity
6.	BHUMIKA BAGHEL.	Sewage treatment plant
7.	DUSHYANT SINHA.	Contraceptive method
8.	ISHA SMRITI LAKRA.	Pregnancy and embryo development
9.	ISHWAR POYAM	AIDS
10.	JEET KUMAR.	DNA Replication
11.	KONIKA KANWAR.	Biogas
12.	NAGESH DHRUW.	Biotechnology
13.	PRATIBHA BHAGAT.	Human evolution
14.	PRATYUSH BANDHE.	Biodiversity conservation
15.	PRIYANK NAG.	Law of inheritance
16.	RAGHVENDRA SINGH.	Flower and pollination
17.	RITU NARETI.	Menstruation
18.	VAIBHAW TIRKEY.	Ecosystem
19.	YUKTI DAGA.	Sexually transmitted diseases

NOTE- 1. Assignment should be submitted on 18/06/24 2. It should be included necessary diagrams and printouts. 3.project should be on stick file and project pages should be used

MATHEMATICS

Relations & Functions

Q.1)   Show that the number of equivalence relation in the set {1,2,3} containing (1 , 2) and (2 , 1) is two.

Sol.1)   A = {1, 2, 3}
The maximum possible relation (i.e. universal relation) isR = {(1,1), (2,2), (3,3), (1,2), (1,3), (2,1), (2,3), (3,1), (3,2)}
The smallest equivalence relation R_1 containing (1 , 2) and (2 , 1) isR_1 = {(1,1), (2,2), (3,3), (1,2), (2,1)}

we are left with four pairs (from universal relation) i.e. (2,3), (3,2), (1,3) and (3,1)

If we add (2,3) to R_1 , then for symmetric by we must add (3,2) and now for transitivity we are forcedto add (1,3) and (3,1)

Thus the only relation bigger than R_1 is universal relation i.e R

$\therefore$ The no. of equivalence relations containing (1,2) and (2,1) is two.   ans.

Q.2) If $R = \{(x ,y) : x^2 + y^2 \le 4 ; x ,y \in z \}$ is a relation on z . Write the domain of R.

Sol.2) R = {(0,1), (0,-1), (0,2), (0,-2), (1,1), (1,-1), (-1,0), (-1,1), (-1,-1), (2,0), (-2,0)}

$\therefore$ Domain of R = {0 , 1 , -1 , 2 , -2}   ans.

(i.e the first domain of each ordered pairs)

Q.3) Let R = $\{(x ,y) : |x^2 - y^2| < 1\}$ be a relation on set A = {1,2,3,4,5}. Write R as a set of ordered pairs.

Sol.3) A = {1,2,3,4,5}

for $|x^2 - y^2| < 1 : x$ should be equal to y

$\therefore$ R = {(1,1), (2,2), (3,3), (4,4), (5,5)}   ans.

Q.4) R is a relation in Z defined as $(a ,b) \in R \leftrightarrow a^2 + b^2 = 25$. Find the range.

Sol.4) We have, $a^2 + b^2 = 25$ and $a ,b \in z$

$\therefore$ R = {(0,5), (0,-5), (3,4), (3,-4), (-3,4), (-3,-4), (4,3), (4,-3), (-4,3), (-4,-3), (5,0), (-5,0)}

$\therefore$ Range = {-5 , 5 , 4 , -4 , 4 , 3 , -3 , 0}

(i.e. second elements of each order pairs)   ans.

Topic : Binary Operations

Q.5) $* : R \times R \rightarrow R$

(1) a * b = a + b   (2) a * b = a − b   (3) a * b = abFind identity element and inverse in both cases.

Sol.5) (1) a * b = a + b

Identity element

$a * e = a$ | $e * a = a$
$\Rightarrow a + e = a$ | $e + a = a$
$\Rightarrow e = 0 \in R$ | $e = 0 \in R$

$\therefore$ 0 is the identity elementInverse

$a * b = e$
$\Rightarrow a + b = 0$
$\Rightarrow b = -a \in R$ $\{a \in R ...-a\ a l s o \in R\}$
$\therefore$ −a is the inverse of a i.e a^{-1} = −a

(2) $a * b = a - b$

Identity element

$a * e = a$ $e * a = a$
$a - e = a$ | $e - a = a$
$-e = 0$ | $e = 2a$
$e = 0 \in R$ | but 'e' cannot be a variable as when a changes e also change but should be samefor all $a \in R$

$\therefore$ Identity element does not existhence inverse does not exist

Edit with WPS Office

(3) $a * b = a b$

Identity element

$a * e = a$		$e * a = a$
$a\, e = a$		$e\, a = a$
$e = 1 \in R$		$e = 1 \in R$

$\therefore$ 1 is the identity element Inverse

$a * b = e$

$a\, b = 1$

$b = \dfrac{1}{a} \in R \; ; a \neq 0$

$\therefore$ all elements of R are invertible except '0' and $a^{-1} = \dfrac{1}{a} \; ; a \neq 0$

$\dfrac{1}{a}$ ns

Q.6) Let * be a binary operation on R (real no's)
$$*: R \times R \to R$$

$a * b = a + b + a b$
(.) Check whether * is binary operation or not (.) Check the commutativity and Associativity (.) Find identity element and inverse.

Sol.6) We have,
$a * b = a + b + a b$
since * carries each pair (a , b) in $R \times R$ to a unique element $a + b + a b$ in R
∴ * is a binary operation on R
Alternate : since $(a , b) \in R \times R$ and addition and multiplication of real no.s is also a real no.
$a + b + a b \in R$
∴ * is a binary operation on
RCommutative :
let $a , b \in R$
$a * b = a + b + a b$
$b * a = b + a + b a$
$= a + b + a b$ ....{∵ addition and multiplication are itself commutative}
$= a * b$
∴ $b * a = a * b$ for all $a , b \in R$
∴ * is commutative on
RAssociative:

let $a , b , c \in R$
$(a * b) * c = (a + b + a b) * c$
$\qquad = a + b + a b + c (a + b + a b)c$
$\qquad = a + b + a b + c + a c + b c + a b c$
$\qquad = a + b + c + a b + b c + a c + a b c$
Now $a * (b * c) = a * (b + c + b c)$
$\qquad\qquad = a + b + c + b c + a (b + c + b c)$
$\qquad\qquad = a + b + c + b c + a b + a c + a b c$
$= a + b + c + a b + b c + a c + a b c$
clearly $(a * b) * c = a * (b * c)$ for all $a , b , c \in R$

∴ * is Associative on R.
Identity element :
let e be the identity element in R
$a * e = a$ and $e * a = a$ for all $a \in R$
$\Rightarrow a + e + a e = a$ | $e + a + e a = a$
$\Rightarrow e (1 + a) = 0$ | $e (1 + a) = 0$
$\Rightarrow e = 0 \in R$ | $e = 0 \in R$
∴ 0 is the identity
elementInverse :
$a * b = e$
$a + b + a b = 0$
$b (1 + a) = -a$

$b = \frac{-a}{1+a} \in R$ {except a = −1}

∴ −1 is not the invertible element
(.) all elements of R are invertible
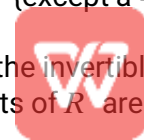
except $-1(.)$ and $a^{-1} = \dfrac{-a}{1+a}$ $; a \neq -1$

Q.7)   Let * be a binary operation on Z (integers) $a * b = a + a b$
Check the commutative, Associativity, identify element and inverse (if it exists).

Sol.7)   We have
$a * b = a + a b$ where $a, b \in z$
Commutative :
let $a, b \in z$, then
$a * b = a + a b$
$b * a = b + b a$
$\quad = b + a b$
$b * a \neq a * b$
e.g. $(1 * 2) = 1 + (1)(2) = 1 + 2 = 3$
$(2 * 1) = 2 + 2(1) = 2 + 2 = 4$
clearly $1 * 2 \neq 2 * 1$
$\therefore$ * is not commutative on Z
Associative :
let $a, b, c \in Z$ then
$(a * b) * c = (a + a b) * c$

$\quad = a + a b + (a + a b) c$
$\quad = a + a b + a c + a b c$
$a * (b * c) = a * (b + b c)$
$\quad\quad\quad = a + a (b + b c)$
$\quad\quad\quad = a + a b + a b c$
$\quad\quad\quad \neq (a * b) * c$
e.g. $(1 * 2) * 3 = (1 + 2) * 3$
$\quad\quad\quad\quad = 3 * 3$
$\quad\quad\quad\quad = 3 + 3(3) = 12$
$1 * (2 * 3) = 1 * (2 + 6) = 1 * 8$
$\quad\quad\quad\quad = 1 + 1(8) = 9$
Clearly * is not Associative on Z
Identity element:
let e be the identity element $\in z$, then
$a * e = a \quad | \quad e * a = a$
$a + a e = a e | + e a = a$
$a e = 0 \quad | \quad e(1 + a) = a$
$e = 0 \in z \quad | \quad e = \dfrac{a}{1+a}$

as a changes e also changes, but e must be constant for all value of a
$\therefore$ identity element does not exist and hence inverse not possible not possible. ans.

Q.8)   Let * be a binary operation on N given by a * b = LCM of a & b
(1) Find $5 * 7, 20 * 16$
(2) Is * commutative ?
(3) If * Associative ?
(4) Find the identity element in N.
(5) which elements of N are invertible ?

Sol.8)   We have
$a * b$ = LCM of a & b ; $a, b \in N$
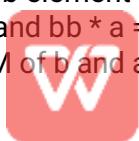(1) 5 * 7 = LCM of 5 and 7 = 35
$\quad$ 20 * 16 = LCM of 20 and 16 = 80
(2) Commutative b element of A
$a * b$ = LCM of a and b $b * a$ =
$\quad\quad\quad$ LCM of b and a

$$= \text{LCM of a and b}$$
$$= a * b$$
$$\therefore b * a = a * b \text{ for all } a, b \in N$$
$\therefore$ * is commutative on N

(2) Associative :

let $a, b, c \in N$
$$(a * b) * c = (LCM \text{ of } a \text{ and } b) * c$$
$$= LCM \text{ of } [(LCM \text{ of } a \text{ and } b) \text{ and } c]$$
$$= LCM \text{ of } a, b \text{ and } c$$
$$a * (b * c) = a * (LCM \text{ of } b \text{ and } c)$$
$$= \text{LCM of } [a \text{ and } (LCM \text{ of } b \text{ and } c)]$$
$$= \text{LCM of } a, b \text{ and } c$$

clearly $(a * b) * c = a * (b * c)$ for all $a, b, c \in N$
$\therefore$ * is Associative on N

(3) Identity element

let e be an identity element $\in N$
$$a * e = a$$
$\Rightarrow$ LCM of a and $e = a \qquad e * a = a$
$\Rightarrow$ LCM of a & 1 $= a \qquad\qquad$ LCM of e and $a = a$
$\quad\Rightarrow e = 1 \in N \qquad\qquad$ LCM of 1 and $a = a$
$$\Rightarrow e = 1 \in N$$
$\therefore$ 1 is the identity element for all $a \in N$

Inverse
$$a * b = e$$
$\Rightarrow$ LCM of a and $b = 1$
this is possible only when $a = 1$ & $b \neq 1$
$\therefore$ 1 is the only invertible element and 1 is its inverse $\qquad$ ans.

Q.9) Let R be a of real no.s and $A = R \times R$ is a binary operation on A given by $(a, b) * (c, d) = (ac, bd)$
for all $(a, b) (c, d) \in A$
(1) Show that * is Commutative
(2) Show that * is Associative
(3) Find the identity element
(4) Find invertible elements and their inverse.

Sol.9) We have,
$$(a, b) * (c, d) = (ac, bd)$$
Commutative :
let (a, b) & $(c, d) \in A$, then
$(a, b) * (c, d) = (ac, bd)$
$(c, d) * (a, b) = (ca, db)$
$$= (ac, bd)$$
$$= (a, b) * (c, d)$$
$\therefore$ * is commutative on A

Associative :
let $(a, b), (c, d)$ & $(e, f) \in A$
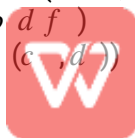$[(a, b) (c, d)] * (e, f)$
$$= (ac, bd)(e, f)$$
$$= (ace, bdf)$$
$(a, b) * [(c, d) * (e, f)]$
$$= (a, b) * (ce, df)$$
$$= (ace, bdf)$$
clearly $((a, b) * (c, d)) * (e, f) = (a, b) * ((c, d) * (e, f))$

$\therefore$ * is Associative on A

Identity element

let (x, y) be the identity element

$(a, b) * (x, y) = (a, b)$ $\qquad$ $(x, y) * (a, b) = (a, b)$

$\Rightarrow (ax, by) = (a, b)$ $\qquad$ $(xa, yb) = (a, b)$

$\Rightarrow ax = a$ & $by = b$ $\qquad$ $xa = a$ & $yb = b$

$\Rightarrow x = 1$ and $y = 1$ $\qquad$ $x = 1$ & $y = 1$

$\therefore (1, 1)$ is the identity element

Inverse

$(a, b) * (c, d) = (x, y)$

$\Rightarrow (ac, bd) = (1, 1)$

$\Rightarrow ac = 1$ and $bd = 1$

$\Rightarrow c = \dfrac{1}{a}$ and $d = \dfrac{1}{b}$

$\therefore (c, d) = (\dfrac{1}{a}, \dfrac{1}{b}) \in R$ except $(0, b) = (0, 0)$

(.) all elements of A are invertible except $(0, 0)$

(.) inverse of $(0, b)$ is $(\dfrac{1}{a}, \dfrac{1}{b})$; $(a, b) \neq (0, 0)$ ans.

Q.10) X is a non-empty set and * is a binary operation $*: p(x) * P(x) \rightarrow P(x)$ given by $A \times B = A \cap B$

(.) Show * is Commutative(.)

Show * is Associative

(.) Find the Identity element

(.) Find the Invertible elements in $P(x)$ and their inverse.

Sol.10) We have, $A \times B = A \cap B$

Commutative :

let $A, B \in P(x)$

$A * B = A \cap B$

$B * A = B \cap A$

$\qquad = A \cap B$ ......$\{\because \cap$ is its of commutative$\}$

clearly $A * B = B * A$ for all $A, B \in P(x)$

$\therefore$ * is commutative on P(x)

Associative :

let $A, B, C \in P(x)$

$(A * B) * C = (A \cap B) * C$

$\qquad\qquad = (A \cap B) \cap C$

$A * (B * C) = A * (B \cap C)$

$= A \cap (B \cap C)$ $\{\cap$ is itself Associative$\}$

clearly $(A * B) * C = A * (B * C)$ for all $A, B, C \in P(x)$

$\therefore$ * is Associative on $P(x)$

Identity element

let E is an identity element then

$A * E = A$ $\qquad\qquad E * A = A$

$\Rightarrow A \cap E = A$ $\qquad \Rightarrow E \cap A = A$

$\Rightarrow E = X \in (Px)$ $\Rightarrow E = X \in P(x)$

$\{$reason : X is the largest subset in P(x)$\}$

$\therefore X$ is the identity element Inverse :

$A * B = E$

$\Rightarrow A \cap B = X$

this is possible only when $A = B = X$

since $X \cap X = A$

$\therefore X$ is only the invertible element in $P(x)$ and X is its inverse   ans.

1. Consider the following table named "Garment". Write command of SQL for (i) to (iv) and output for (v) to (vii)

Table: GARMENT

GCODE	GNAME	SIZE	COLOUR	PRICE
111	TShirt	XL	Red	1400
112	Jeans	L	Blue	1600
113	Skirt	M	Black	1100
114	Ladies Jacket	XL	Blue	4000
115	Trousers	L	Brown	1500
116	Ladies Top	L	Pink	1200

(i) To display names of those garments that are available in ' XL' size.
(ii) To change the colour of garment with code as 116 to "Orange".
(iii) To display codes and names of those garments that have their names starting with '
Ladies '.
(iv) To display codes and names of those garments that have price in the range 1000 to 1500.
(v) SELECT AVG(PRICE) FROM GARMENT ;
(vi) SELECT COUNT(DISTINCT (SIZE)) FROM GARMENT;
(vii) SELECT GNAME FROM GARMENT WHERE SIZE IN (' M ' , ' L ') AND PRICE >1500;

2. Write the output for SQL queries (i) to (iii) which are based on the table **ITEMS**.

Table: ITEMS

Code	IName	Qty	Price	TCode
1001	DIGITAL PAD 12i	120	XENITA	T01
1006	LED SCREEN 40	70	SANTORA	T02
1004	CAR GPS SYSTEM	50	GEOKNOW	T01
1003	DIGITAL CAMERA 12X	160	DIGICLICK	T02
1005	PEN DRIVE 32 GB	600	STOREHOME	T03

(i)   SELECT MAX(Price) , MIN(Price) FROM ITEMS.
(ii)   SELECT Price *Qty AS AMOUNT FROM ITEMS WHERE Code = 1004 ;
(iii)   SELECT MAX(Company) FROM ITEMS WHERE Price > 7000 ;

3. Write the output of the queries (i) to (iv) based on the table **FURNITURE** given below.

Table : FURNITURE

FID	NAME	DATEOFPURCHASE	COST	DISCOUNT
B001	Double Bed	03-JAN-2018	45000	10
T010	Dinning 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

(i)   SELECT SUM(DISCOUNT) FROM FURNITURE WHERE COST >15000;
(ii)   SELECT *FROM FURNITURE WHERE DISCOUNT > 5 AND FID LIKE " T% " ;
(iii)   SELECT DATEOFPURCHASE FROM FURNITURE WHERE NAME IN (" Dinning Table " , "Console Table ");

4. Consider the following table.

Table: SOFTDRINK

DRINK CODE	DName	PRICE	CALORIES
101	Lime and Lemon	20	120
102	Apple Drink	18	125
103	Nature Nectar	15	140
104	Green Mango	15	135
105	Aam Panna	18	120
106	Mango and Juice Bahaar	12	150

Write the SQL queries for the following.
(i)   To display names and drink codes of those drinks that have more than 120 calories.
(ii)   To display drink codes ,names and calories of all drinks in descending order of calories.
(iii)   To display names and price of drinks that have price in the range 12 to 18.
(iv)   Increase the price of all drinks in the given table by 10%

5. Consider the following table EXAM.

Table:EXAM

NO	Name	Stipend	Subject	Average	Division
1	Mohan	400	English	65	FIRST
2	Kamal	600	Mathematics	72	SECOND
3	Javed	200	Physics	80	FIRST
4	Ramesh	800	Chemistry	40	THIRD
5	Praveen	400	Accounts	35	SECOND

Write the SQL queries for the following.

(i) To display the name of those students, who have obtained Division as FIRST in the ascending order of NAME.

(ii) To display a report listing NAME, SUBJECT and Annual Stipend received assuming that the stipend column has monthly stipend.

(iii) To count the number of students, who have either Accounts or English as subject.

(iv) To insert a new row in the table EXAM:

6, "Karan", 500, "Informatics" ,45, "SECOND"

(v) To display the name and subject of those student whose average is greater than 60

SUBJECT: Physical education (Students opted)

- Students need to start working on the Physical Education Practical file.
- Choose a Sport of your choice and work on it according to the instructions already given to you in the class.
- Please be neat in your presentation and Don't forget to underline important Headings and Topics.
- This File will be evaluated for your board exam.

SUBJECT: Hindi (Students opted)

प्रश्न 1. अपने जीवन पर एक "पर्टफोलियों" बनाएँ।

प्रश्न 2. "भक्तिन" पाठ से संबंधित दिए गए 100 बहुविकल्पीय प्रश्न (डब्फ) के उत्तर छाँटकर लिखिए।

प्रश्न 3. "गद्य की विधाओं" में प्रत्येक विद्या को परिभाषित करके विस्तार पूर्वक लिखें।

प्रश्न 4. "पद्य की विधाओं" में से प्रत्येक विद्या को परिभाषित करके विस्तार पूर्वक लिखिए ।

प्रश्न 5. "जूझ" (वितान) पाठ को पढ़ें,समझे व उससे संबंधित कठिन शब्दों को ढूँढ कर लिखें ।

प्रश्न 6. "महादेवी वर्मा जी" का जीवन परिचय क्रमवार लिखें। (20 क्रम में) साथ ही साथ उनका साहित्यिक परिचय विस्तार पूर्वक लिखें।

प्रश्न 7. "तुलसीदास जी", "महादेवी वर्मा जी" अथवा "सूर्यकांत त्रिपाठी निराला जी" का सचित्र जीवन परिचय चार्ट पेपर

में बनाएँ।

SUBJECT: Odissi Dance (Students opted)

Q.1Prepare a video on Chaik Tribhang (Min.5step) and submit to Dance In charge.

Q.2 Prepare a biography report on Guru Shree Kelu Charan Mahapatra and his contribution to enrich the Odissi Dance Art.

Sub: Hindustani Vocal (Students opted)

Q.1 Prepare a report about the instruments used in Hindustani music with Pictures/Diagrams.

Q.2 Prepare a video which reflects the Indian music heritage with reference to Shastriya Ragas/Folk Music.

Sub: Artificial Intelligence (Students opted)

Activity-1

Draw your Dream home (includes AI devices)

Activity-2

Poster Making–Job Advertisement for 2029!

Here's what you have to do:

● SearchforcurrentandemergingtrendsinemploymenttomakeafutureJobAdvertisement.(Use A4 sheet for creation of **Job Advertisement)**
● The job description is for a job which will exist ten years from now, i.e. the current date.
● To help you, the job advertisement must include the following information.

Information about the hiring company	Required Skills- Vital, Essential And Desirable Skills
Is the company a startup?	Is the company a big Organization
Is this a community Project?	Share the reason why you choose this job or Jobs?

Analysis

List the kinds of futuristic job opportunities that would be available for you?
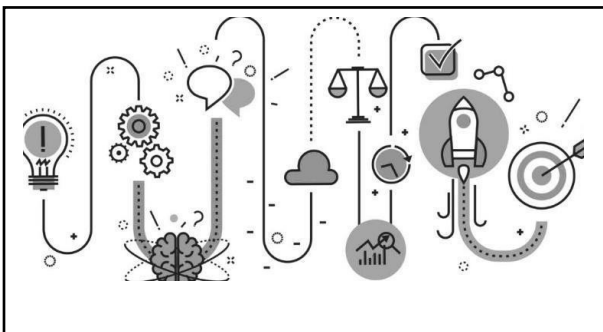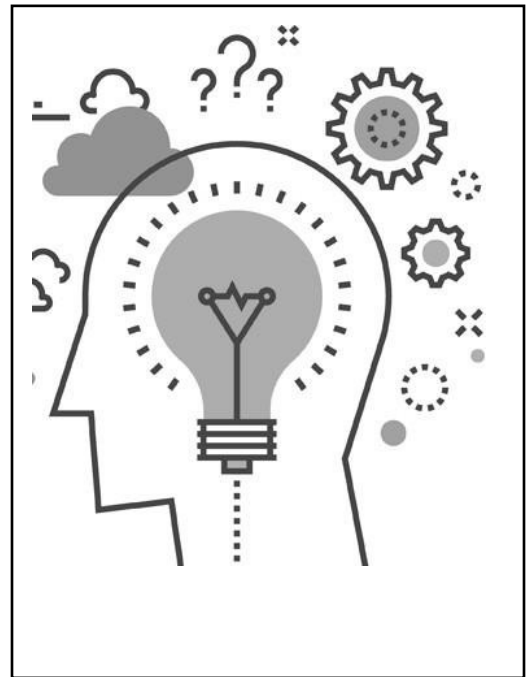
Write the skills you will require to do these jobs?

ACTIVITY-3

Problem: CBT is a technique used by most therapists to cure patients out of stress and depression. But it has been observed that people do not wish to seek the help of a psychiatrist willingly. They try to avoid such interactions as much as possible. Thus, there is a need to bridge the gap between a person who needs help and the psychiatrist.

PROBLEM STATEMENT TEMPLATE

OUR	STAKEHOLDERS	WHO
HAS/HAVEA PROBLEM THAT	ISSUE,PROBLEM,NEED	WHAT
WHEN/WHILE	CONTEXT SITUATION	WHERE
AN IDEAL SOLUTION WOULD	BENEFITS OF SOLUTION FOR THEM	WHY

ACTIVITY-4

Problem: People love to indulge in various kinds' food. This is a reason that you find restaurants everywhere. These restaurants serve food in many ways like A la-Carte and Buffets in-order to offer a variety to their customers. All kinds of Food Outlets prepare food in bulk, as they expect a lot of customers would come to enjoy the food every day. For most Food Outlets, at the end of the day, there is a lot of leftover food This food is a waste, as the Food Outlets don't intend to serve stale food to their customer's the nest day , to maintain their brand value. So, every day a specific quantity of food is prepared keeping in mind a probable number of
Expected Customers, which might be more than the actual number of customers who visit. This leads to a good quantity of food getting wasted, everyday wastage if accounted for the whole year.

PROBLEMSTATEMENTTEMPLATE

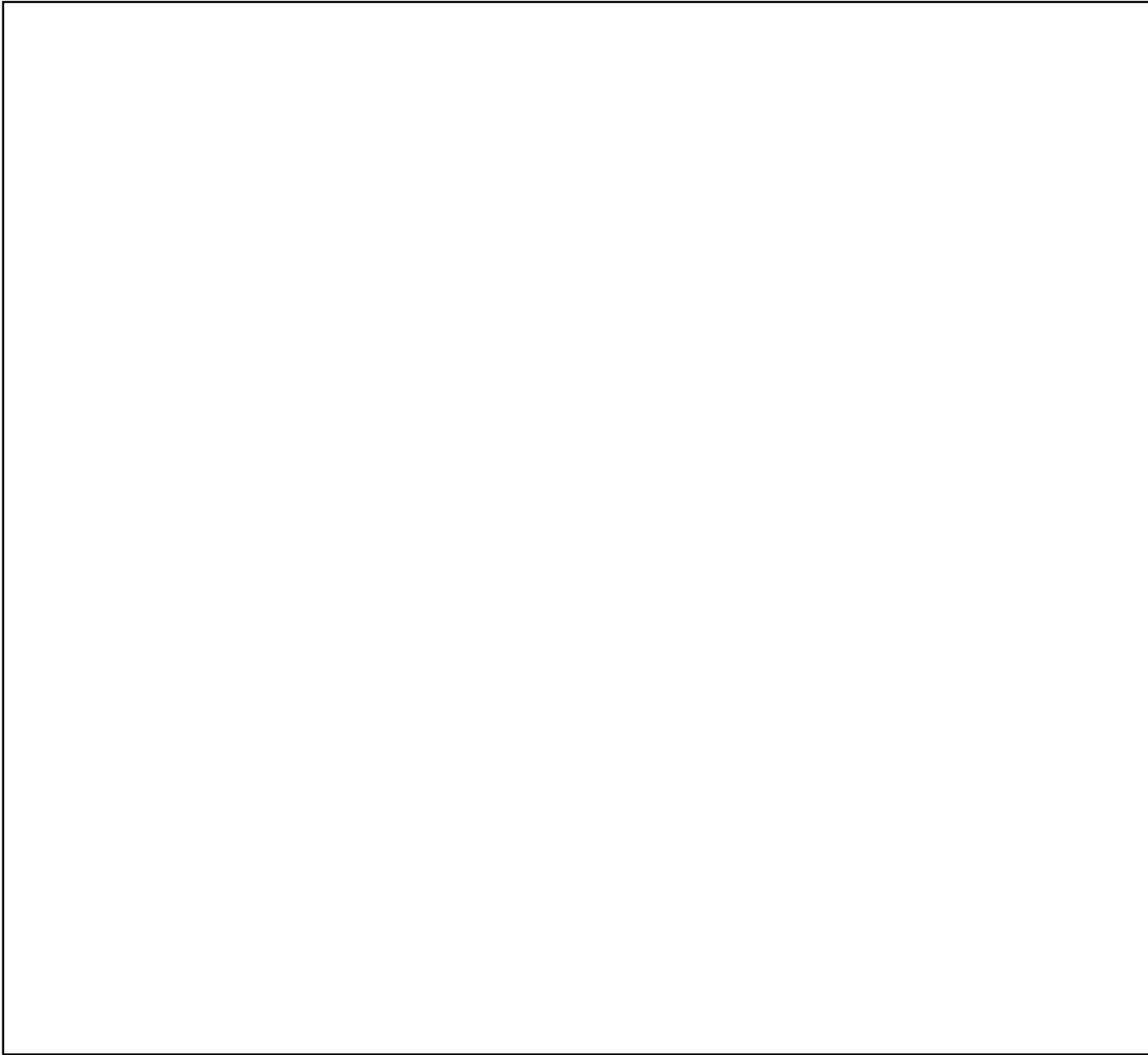| OUR	STAKEHOLDERS	WHO
HAS/HAVEA PROBLEM THAT	ISSUE, PROBLEM,NEED	WHAT
WHEN/WHILE	CONTEXTSITUATION	WHERE
AN IDEAL SOLUTION WOULD	BENEFITSOFSOLUTIONFORTHEM	WHY

ACTIVITY-5
<u>Letter of Future Self</u>

Write one letter to your future what you want see in the future or what you want remind to your future. Just imagine about the next 10 years and what you are thinking about your future (elate with AI). The following points can be included in letter/email:

1. Start with your interests, hobbies ,and skills
2. Now relate how AI can help you
3. Write about your future job or career you want to pursue and how AI will make an impact on that