

MCQs

- 1 (A) Holard
- 2 (B) Pressure of Air.
- 3 (B) Capacitance.
- 4 (D) Cylindrical Concave
- 5 (B) Mercury
- 6 (B) Carbon dioxide
- 7 (C) Disorder of the joints
- 8 (C) weakening of Retina
- 9 (C) Spleen
- 10 (A) Hailstorm
- 11 (D) Crocodile.
- 12 (A) Retinol
- 13 (D) Nitrogen
- 14 (A) Arsenous Oxide
- 15 (C) Yellow dwarf
- 16 (A) Slightly Acidic
- 17 (B) Epicenter.
- 18 (D) Communication
- 19 (D) 21%
- 20 (B) Electrical Signals.

PART-2

SECTION: B Ability:

Given data:

- Q 46:
- (a)
- Value of washing machine depreciates at 10% every year:
 - present value = 8748.
 - price of machine 3 years ago: ?

Solution

Present value = 8748.

depreciates 10% @ 1st year:

Year-1:

10% of Present Value:

8748

x 0.10

874.8

Year 1 Value = 8748

- 874.8

7873.2 = 1 year ago.

Year -2:

10% of Year-1 (current value).

~~8862.92~~ 7873.2

x 0.10

x 0.10

~~886.292~~

787.32

Year -2 Value = 7873.2

- 787.32

7085.88 → Year 2

Year-3:

10% of current value:

7085.88

$\times 0.10$

708.588 \rightarrow 10%

Year: 3 Value:

7085.88

$\times 0.10$

6377.29 \rightarrow 3 years ago



Q#6 Given data:

(b) 1. • Father age is four times of his daughter: \rightarrow current.

2. • After 5 years:

• Father age becomes: 3 times of his daughter:

3. • After further 5 years how much/may times he would be of his daughter. ?

Solution:

Present:

let daughter = x

age of father = $4x$

After 5 years:

age of daughter = $x+5$

age of father = $3(x+5)$

Age of father = age of daughter:

$$4(x+5) = (x+5) \cdot 3$$

Solution:

$$4x + 5 = 3x + 15$$

$$4x - 3x = 15 - 5$$

$$x = 10$$

• Present ages =

Age of daughter $x \Rightarrow 10$ years

Age of father = $4x = 4(10) \Rightarrow 40$ years

• After 5 years

• Age of daughter = $x+5 \Rightarrow 10+5 = 15$ years

• Age of father = $4x+5 \Rightarrow 4(10)+5 = 40+5 =$

45 years.

\therefore 3 times of his
daughter:

• After further 5 years:

Age of daughter = $x+5+5 = 10+5+5 = 20$ years

Age of father = $4x+5+5 = 4(10)+5+5 = 40+10$

= 50 years

How many times of his daughter.

$$x = \frac{\text{age of father}}{\text{age of daughter}} = \frac{50}{20} = 2.5$$

2.5 times of his daughter
age.

Q No

(a)

(7)

Given data:

- Average of 7 consecutive Nos = 20
- The largest no = ?

Solution:

Let the total No = 7

- average of 7 consecutive Nos = 20.

One No is = 20

Remaining Nos are = 6.

- Mean of 6:

$$\text{mean} = \frac{n}{2} = \frac{6}{2} = 3.$$

Finding the largest No considering
the 20 as mean no:

$$\text{Let } n = 20 + \text{mean of Remaining Nos}$$

$$n = 20 + 3 = 23.$$

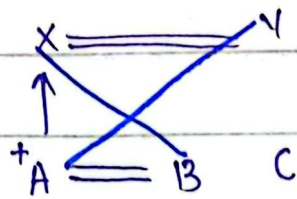
The consecutive nos are

17, 18, 19, 20, 21, 22, 23

The largest No = 23

Q#7 Given data:
(b)

- A told B that
 - C is his fathers nephew.
 - D is cousin of A but not brother of C.
- ⇒ Relationship between D and C.



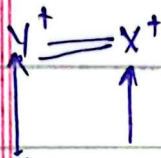
• Key.

(+) Male

(-) Female

(=) Peers

(↑) Father



$C^+ = D^- = A^+ = B$

- X is the father of A
- Y is the father of C and D
- X and Y are brothers.
- C is nephew of X (Father of A)

D is sister of C:

Note: Question statement

lacks the data,

However as per available data

the question solved.

#7 Find missing Nos:

(1) 4, 18, 48, 100, 180, 294, 448.

Solution:

$$1 \times 2^2 = 4$$

$$\therefore 2^2 = 4$$

$$2 \times (3)^2 = 18$$

$$\therefore 3^2 = 9$$

$$3 \times (4)^2 = 48$$

$$\therefore 4^2 = 16$$

$$4 \times (5)^2 = 100$$

$$\therefore 5^2 = 25$$

$$5 \times (6)^2 = 180$$

$$\therefore 6^2 = 36$$

$$6 \times (7)^2 = 294$$

$$\therefore 7^2 = 49$$

$$7 \times (8)^2 = 448$$

$$\therefore 8^2 = 64$$

(2) 1, 2, 10, 37, 101, —.

Solution:

1, 2, 10, 37, 101, 226

$$\begin{array}{cccccc} \diagdown & / & \diagdown & / & \diagdown & / \\ 1 & 8 & 27 & 64 & 125 & \\ \underline{1^3} & \underline{2^3} & \underline{3^3} & \underline{4^3} & \underline{5^3} & \end{array}$$

$$1^3 = 1$$

$$2^3 = 8$$

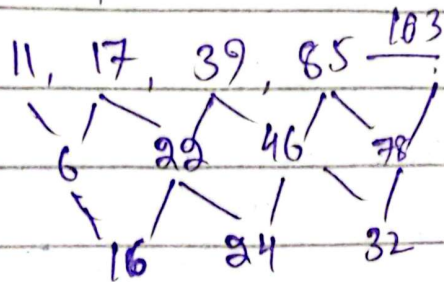
$$3^3 = 27$$

$$4^3 = 64$$

$$5^3 = 125$$

(iii) 11, 17, 39, 85, 163?

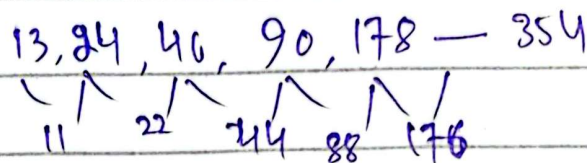
Solution:



163

(iv) 13, 24, 46, 90, 178, 354?

Solution



354

(v) 4, ³⁶144, 400, 900, 1764

Solution

~~2~~ $2 \times 2 = 4$

$6 \times 6 = 36$

$12 \times 12 = 144$

$20 \times 20 = 400$

$30 \times 30 = 900$

$42 \times 42 = 1764$

$\therefore \sqrt{4} = 2$

$\therefore \sqrt{36} = 6$

$\sqrt{144} = 12$

$\sqrt{400} = 20$

$\sqrt{900} = 30$

$\sqrt{1764} = 42$

PART-2

SECTION — A

Q No.:

(C) RAM AND ROM

RAM:

RAM, Random access memory, it is defined as the volatile memory that stores the temporary data, used for computer operating and software works:

ROM:

ROM, Read only memory, it is basically a non-volatile memory that stores permanent data, and it is used in firmware:

USB:

It is also a storage device use to store the data, USB stands for Universal Serial Bus.

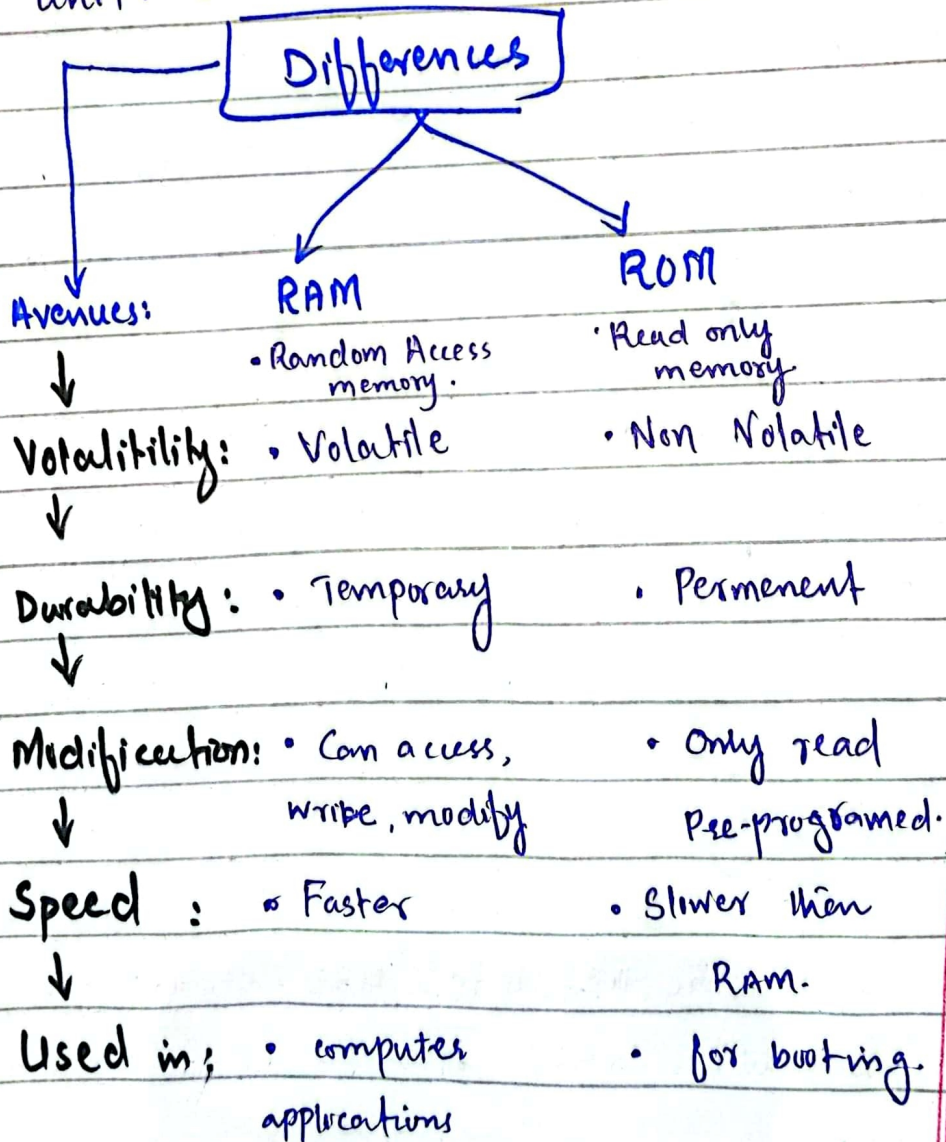
Motherboard:

Motherboard is a key component of computer hardware parts. It plays key role in computer operations.

Nibble:

Nibble is a data measuring

unit. &



#4:

COP-29

(d)

INTRODUCTION:

COP-29, basically 29th conference of parties on United Nations framework of convention of on climate change.

• held in Baku Azerbaijan.

It emphasized on the climate ^{impacts} mitigation and progress on Paris Accord 2015.

It focused on assistance to vulnerable countries, emphasized on climate fund by developed countries to compensate the losses faced by developing countries due to climate change.

OUTCOMES OF CONFERENCE:

CARBON MARKET:

The conference emphasized on guidelines for carbon market for future. The conference parties aimed to limit the temperature rise upto 1.5°C. Conference further highlighted the commitments of Paris Accord 2015 and rules for carbon market revised.

Climate Fund:

29th conference of parties on (COP29) focused primarily on climate fund. This was discussed to collect funds for vulnerable countries to adaptation and mitigation of the climate impacts. It was pledged to collect \$100 billion a year by 2035. However, the developing countries called this as "Pledge Sum". It was discussed to raise amount upto \$300' billions a year.

Transparency:

Conference further highlighted transparency mechanism to assist the affected. Almost 15 countries have submitted their biennial transparency reports.

Youth Participation:

The conference was attended by a huge number of attendees. Almost 55,000 participants across the world, it was first time in the history conference led by youth and attended by kids as well.