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BATCH :-   003

LMS ID :-   43600

SUBJECT :- General Science &
                Ability.

$\longleftrightarrow$
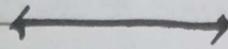
PART- II

SECTION- II

QUESTION:- 6

A). Zahid and Basit invest ... ?

GIVEN DATA:—

Zahid and Basit ratio = Z:B = 3:2

Charity amount = 5% of profit

Zahid's share = Rs. 8550

TO FIND:—

Total profit amount = ?

Solution :-

Total parts of share $= Z + B$

$= 3 + 2$

$= 5$ total shares

Where as share of Zahid $= 3$

share of Basit $= 2$

Zahid's share amount $=$ Rs. 8550

Each share $= \dfrac{\text{share amount of Zahid}}{\text{Total shares of Zahid}}$

$= \dfrac{8550}{3}$

$=$ Rs. 2850

Total profit distributed $=$ Total shares × Each share amount

$= 5 \times 2850$

$=$ Rs 14250

The equation of profit sharing amount =

Let Total amount of profit $= x$

So, the equation becomes :-

$x = 0.05\,x + 14250$

⟹ Total profit amount $=$ 5% of Profit to charity + total amount distributed between Zahid and Basit.

$$x - 0.05x = 14250$$

$$0.95x = 14250$$

$$x = \frac{14250}{0.95}$$

$$x = Rs\ 15000$$

The total profit is Rs. 15000.

B. If 20% of a = b, then b% of 20...?

GIVEN DATA

20% of a = b

b% of 20 = ~~of a?~~

To Find :-

Percent of a = ?

Let value of a = 100

then equation become

20% of 100 = 20 where b = 20

then b% of 20 = ?

20% of 20 = 4

Where b% of 20 is 4% of a.

c). Two numbers are in ratio of 2:3. --- ?

GIVEN DATA:—

Two numbers ratio = 2:3

Product of LCM & HCF of (a&b) = 294

To Find :—

Find numbers = ?

Solution :-

Let one number = x

second number = x

$x = 2x$ & $3x$

Product of two numbers = LCM × HCF

$2x \times 3x$ = 294

$6x^2 = 294$

$x^2 = 49$

$x = 7$

so, the numbers are 14 and 21.

Q

D. Find the Total cost of ... ?

GIVEN DATA :—

Price of one brick = Rs. 30

Dimension of brick = 25 cm × 11.25 cm × 6 cm

Dimension of wall = 8 m × 6 m × 22.5 cm

To Find :-
Total cost of building wall = ?

Solution :-

Area of brick = 25 cm × 11.25 cm × 6 cm

$= 2(lb + bh + lh)$

$= 2[(25 × 11.25) + (11.25)(6)$

$\qquad + (25 × 6)]$

$= 2[281.25 + 67.5 + 150]$

$= 2[494.75]$

$= 989.50 \, cm^2$

Area of wall $= 2[(8 × 6) + (6 × 0.225) + (8 × 0.225)]$

$= 2[48 + 1.350 + 1.8]$

$= 2[51.15]$

$= 102.30 \, m^2$

Number of bricks used. $\dfrac{\text{Area of wall}}{\text{Area of Brick}}$

$$= \dfrac{102.3 \ m^2}{989.5 \times 10^{-4} \ m^2}$$

$$= 0.1034 \times 10^4$$

$$= 1034$$

The amount used for Wall Making $= 1034 \times 30$

$$= Rs. \ 31020$$

The amount required to build a wall is Rs. 31020.

$\longleftrightarrow$

QUESTION – 7

A. A bus starts ... ?

Solution –

When Bus starts = Women number is
half of Men number

Let the number= of men = 30

Then the number of women = $\frac{30}{2}$

$= 15$

When Bus reaches at Rawalpindi.

Men Left Bus = 10

Men in bus = 30 – 10 = 20

Women Enter Bus = 5

Women in bus = 15 + 5 = 20

Number of Men at Rawalpindi =

Number of Women at Rawalpindi =

20 = 20

In Beginning, 30 men and 15
women entered the bus.

B. In a code language ... →

Solution :-

$\overset{11}{K}\ \overset{5}{E}\ \overset{14}{N}\ \overset{23}{W}\ \overset{15}{O}\ \overset{15}{O}\ \overset{4}{D}\ :\ \overset{18}{R}\ \overset{18}{R}\ \overset{7}{G}\ \overset{23}{W}\ \overset{9}{I}\ \overset{3}{C}\ \overset{12}{L}$

P A N A S O N I C =

$A_1 \quad B_2 \quad C_3 \quad D_4 \quad E_5 \quad F_6 \quad \quad G_7 \quad \quad H_8$
$I_9 \quad J_{10} \quad K_{11} \quad L_{12} \quad M_{13} \quad N_{14} \quad O_{15} \quad P_{16}$
$Q_{17} \quad R_{18} \quad S_{19} \quad T_{20} \quad U_{21} \quad V_{22} \quad W_{23} \quad X_{24}$
$\qquad\qquad Y_{25} \quad Z_{26}$

C. If 40% of a number ...?

Solution :-

40% of number = $\dfrac{2}{3}$ another number

Let one number = x

another is number = y

0.4 of $x = \dfrac{2}{3} y$

$$0.4 \; x \; = \; \frac{2}{3} \; y$$

$$\frac{x}{y} \; = \; \frac{2}{3 \times 0.4}$$

$$\frac{x}{y} \; = \; \frac{20}{12}$$

$$\frac{x}{y} \; = \; \frac{5}{3}$$

$$x : y \; = \; 5 : 3$$

$\longleftrightarrow$

D. A source of light ... ?

Solution

50 m

4m   6 m

C

B

50m building

A

7m x

Source of light   4 m   E   6m   D

By using triangle formula

$$\frac{\text{Base of } \triangle ABE}{\text{Perpendicular of } \triangle ABE} = \frac{\text{Base of } \triangle ACD}{\text{Height of } \triangle ACD}$$

$$\frac{4}{x} = \frac{10}{50}$$

$$\Rightarrow x = \frac{4 \times 50}{10}$$

$$x = 20$$

Height of tree is 20m

$\longleftrightarrow$
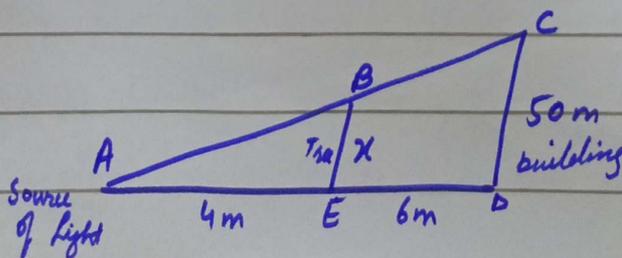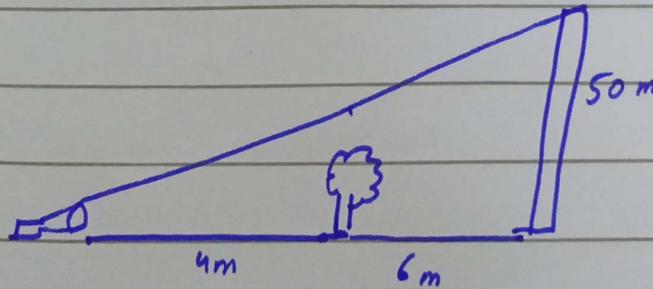
SECTION-I

QUESTION — 3

A. Explain Causes of Global Warming...?

Global Warming :-

The global warming occurs due to green house effect. This is caused due to depletion of ozone layer which protect the earth from ultraviolent radiations.

CAUSES OF GLOBAL WARMING

The causes of global warming are given below

1. Deforestation
2. Carbon emission from vehicles
3. Burning of residue of crops
4. Chemicals and smoke emitted from industries

5. Burning of coal in Energy sector
6. Forest fire
7. Nuclear emissions
8. Urbanization increased

Wayforwards to Overcome Global Warming —

1. Usage of electric cars
2. Planting Tree
3. Shift towards clean energy
4. Design policy related to industries for not emitting of smoke.
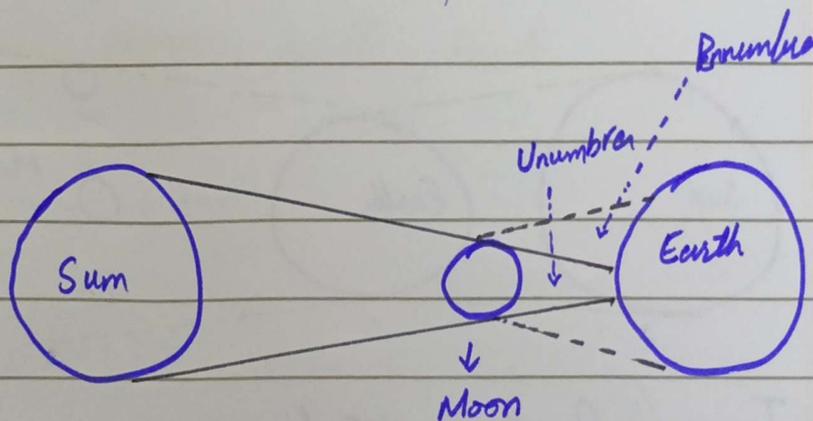5. Spread awareness among people.

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b. Explain the solar and lunar eclipse.

SOLAR Eclipse :—

It is defined as eclipse in which the light of sun is blocked by moon.

1. The moon comes between sun and earth.

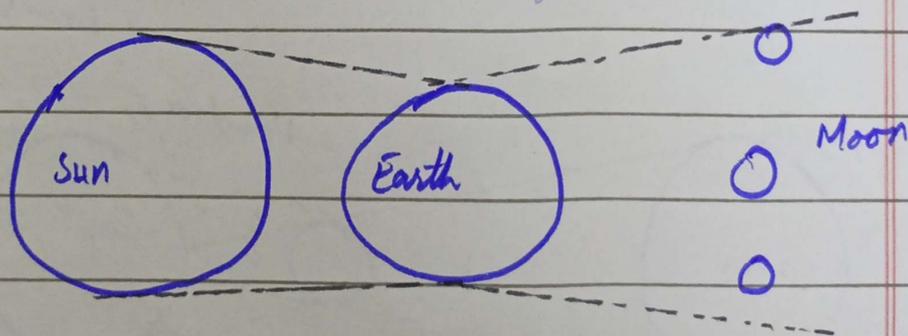2. It occurs once in 18 months.

3. It occurs at day time.

Penumbra

Unumbra

Sun

Earth

Moon

Types of Solar Eclipse —

1. Unumbra Eclipse
2. Penumbra Eclipse.

LUNAR ECLIPSE ——

It is eclipse in which earth cast its shadow on moon.

1. Earth comes between sun and moon.

2. It occurs twice in a year.

3. It occurs at night time.

Types of Lunar Eclipse

1. Penumbral Lunar Eclipse
2. Partial Lunar Eclipse
3. Total Lunar Eclipse

d). Describe the food pres...?

FOOD PRESERVATION METHODS —

The methods for preserving the food is given below —

(i). Refrigeration —

Food is kept at low temperature to slow the growth of bacteria.

e.g. ~~Bacteria~~, Milk, Fruits.

(ii). Freezing —

Food is preserved at very low temperature to stop microbial activity.

e.g. Meat, fish, ice cream.

(iii). Drying —

Removal of moisture from food which prevent bacteria growth.

e.g. dried chillies, dried fish.

4. **Salting**

Salt draws out moisture from food.

e.g. cured meat & salted fish.

5. **Canning**

Food is heated to kill micro organisms.

e.g. jams and soups.

QUESTION-5

a)- Trace the weakness --- ?

WEAKNESS IN Disaster Management in PAKISTAN

The weakness in disaster management in Pakistan is due to following

1- Lack in resources.
2- Unprofessional Administration
3- No proactive approach
4- Lack in technology
5- Lack in funds.

b). What is SWM? ...?

Solid Waste Management —

The solid waste management is defined as management which collect the waste and deposit that waste in desired place.

Importance of Solid Waste Management —

1. Make the environment clean.
2. Stop disease from spreading
3. Make energy from solid waste
4. Recycle the waste like plastic.
5. Produce Gases.

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