

Question no 7

b)

Solution:

side "n" for pentagon = 5cm

Sum of interior angles of polygon with n sides =

$$(n-2) \times 180^\circ$$

For pentagon, $n=5$

Each interior angle = $\frac{(n-2) \times 180^\circ}{n}$

$$= \frac{(5-2) \times 180^\circ}{5} = \frac{3 \times 180^\circ}{5} = \frac{540^\circ}{5} = 108^\circ \text{ Ans}$$

c)

Solution:

$$I.Q. = \frac{\text{Mental age} \times 100}{\text{Actual age}}$$

$$I.Q. = \frac{11}{9} \times 100 = 122.22 \text{ Ans}$$

Question no 6

a):

Solution

$$\text{Total number of votes} = 15000 + 10000 + 8000$$
$$= 33000$$

The winning candidate received 15000 votes -

% of total votes received by winning candidate = $\frac{15000}{33000} \times 100 = \frac{15}{33} \times 100 = 45\%$

b): Solution,

Sum of ratios in triangle = $3+4+5=12$

Sum of angles in triangle = 180°

Each angle is:

$$\text{Angle 1} = \frac{3}{12} \times 180^\circ = 45^\circ$$

$$\text{Angle 2} = \frac{4}{12} \times 180^\circ = 60^\circ$$

$$\text{Angle 3} = \frac{5}{12} \times 180^\circ = 75^\circ$$

Question 8

8

a) Solution:

Let the 3 consecutive odd numbers are

$x, x+2, x+4$. Then:

$$x + (x+2) + (x+4) = 273$$

$$x + x + 2 + x + 4 = 273$$

$$3x + 6 = 273$$

$$3x = 273 - 6$$

$$3x = 267$$

$$x = \frac{267}{3} = 89$$

$$x = 89$$

The three consecutive odd numbers are

89, 91, and 93.

d): Solution,

Let us consider savings is "S"

$$S+3 + 6(S+3) + 2(S+3) = 72$$

$$S+3 + 6S+18 + 2S+6 = 72$$

$$95 + 27 = 122$$

$$95 = 45$$

$$S = 5 \text{ Ans}$$

Saba age is 5 years old, Ali age is

$2 + 5 = 10$ years old and their mother is

$6 \times 5 = 30$ years old.

PART II

Question 3

a)

Ans:

The impacts of global warming pose significant hurdles for developing countries particularly in context of COP-28. These hurdles are following.

1) Extreme weather events:

Developing countries are more vulnerable to extreme weather events such as droughts, floods, cyclones etc and heat waves which are exacerbated by global warming. Top ^{Among} five risks

identified by the Executive opinion survey, World Economic Forum 2024 for Pakistan include extreme weather events also involved.

2) Health Effects:

Global warming has adverse effects on human health, with developing countries are the most vulnerable to it. These effects include heat-related illnesses, loss of agricultural productivity and spread of infectious diseases.

3) Agricultural Dependence:

Many developing countries depend critically on agriculture, which is highly sensitive to climate conditions. Global warming can lead to loss of agricultural productivity, affecting food security and livelihoods.

4) Financial Support for Adaptation:

Poor and vulnerable countries need financial support for adaptation to the climate change. They face greater impacts of climate change and need assistance to address them.

In context of COP28, there is greater need to address these climate change challenges by providing financial assistance to developing countries, ^{for} enhancing the adaptation efforts and integrating

climate action with sustainable goals. By recognizing the specific vulnerabilities of developing countries, the international community can work towards the mitigating impacts of global warming on these nations.

b)

Ans:-

RAM

ROM

- | | |
|---|---|
| 1) It is volatile memory that temporarily stores data being actively used by processor. | Non volatile memory that permanently stores essential system data such as firmware. |
| 2) It allows quick ^{access} speed and expensive. | Slower access speed and lower storage capacity. |
| 3) It has larger storage capacity. | compared to RAM. |
| 4) Data is lost when power is turned off. | It retains data and even ^{when} the power is turned off. |
| 5) Data can be modified. | Data can only be read and not easily modified. |