

(Q: NOS) (A Part)

Ans: Alhson's Mother.

(B PART)

12km/hr =  $2 \times 1000 / 60$

Distance covered in 8 mins

$200 \times 8 = 1600$

$D = 2(L + B)$

$D = 2(L + B)$

$2(L + B) = 1600$

$(L + B) = 800$

$2x + 2x = 800$

$5x = 800$

$x = 160$  Ans:-

50

Length =  $3 \times 160 = 480$

Breadth =  $2 \times 160 = 320$

Area =  $L \times B = 480 \times 320$

Good luck for CSS 2026 — you're going to ace it, in sha Allah! ✨

Pos and Don'ts for the General Science & Ability Paper  
Hi there — you've prepared well! Remember, knowing the content is one thing, but presenting it in the paper exactly as required is another. Here are a few key points to keep in mind:

1. For a 5 mark part, aim to write at least 2 and at most 3 sides of the answer sheet. Often a question has two or three parts, and the marks are divided accordingly — so address each part fairly.

2. Manage your time wisely — you have about 35 minutes per full question, which comes down to around 8 minutes for each 5-mark part. Stick to this to avoid rushing later.

3. Make your answers look scientific, not just theoretical. Use flowcharts and diagrams wherever they add clarity.

4. Neatness matters — keep your handwriting clean, avoid cutting or overwriting.

5. Mind your spelling and grammar — while GSA doesn't deduct marks for these, your expression leaves an impression.

6. In the ability portion, explain analytical ability questions in words. For a 5-mark part, show all steps and provide clear explanations.

$$10(11x+2)(x+1) = 72$$

$$10x + (x+2) = 11x+2 \quad (\text{So the number})$$

$$x + (x+2) = 2x+2 \quad (\text{Sum of digits})$$

$$(11x+2)(2x+2) = 144 \quad (\text{According to the question})$$

$$(11x+2)(x+1) = 72$$

$$\text{For } x = 2$$

$$(11 \times 2 + 2)(2 + 1)$$

$$= 24 \times 3 = 72$$

$$\text{Ten's digit} = 2$$

$$\text{Unit's digit} = 4$$

The required number is 24 Ans.

(PART D)

$$\text{LCM}(2x, 3x) = 6x$$

$$6x = 48$$

$$x = 8$$

$$2x = 16 \text{ and } 3x = 24$$

$$16 + 24 = 40$$

(Q:7) (PART A)

$$40\% \text{ of } x = \frac{2}{3} \text{ of } y$$

$$\frac{40}{100} x = \frac{2}{3} y$$

$$\frac{2x}{5} = \frac{2}{3} y$$

$$\frac{1}{5} = \frac{1}{3}$$

$$3x = 5y$$

$$5 : 3 \text{ Ans.}$$

## PART B

$$\text{C.P of 17 balls} = 17x$$

$$\text{Selling Price SP of 17 balls} = \text{Rs } 720$$

$$\text{Loss} = \text{CP of 5 balls} = 5x$$

$$\text{Loss} = \text{CP} - \text{SP}$$

$$17x - 720 = 5x$$

$$17x - 5x = 720$$

$$12x = 720$$

$$x = \frac{720}{12} = 60 \text{ Ans.:-}$$

## (PART C)

$$\text{Son's age} = x + 2$$

$$\text{Father's age} = x + 2 + 2 = x + 26$$

$$x + 26 = 2(x + 2)$$

$$x + 26 = 2x + 4$$

$$26 - 4 = 2x - x$$

$$22 = x$$

$$\text{Father's age} = 22 + 24 = 46 \text{ years.}$$

(PART D)

$$\frac{32}{6} = \frac{16}{3} \text{ pages/hour}$$

Rashid: 32 pages in 6 hours - rate =

Kamran: 40 pages in 5 hours  $\rightarrow$  rate

$$\frac{40}{5} = 8 \text{ pages/hour}$$

$$\text{Combined rate} = \frac{16}{3} + 8 = \frac{16}{3} + \frac{24}{3} = \frac{40}{3} \text{ pages/hour}$$

Step 3: Time to type 110 pages

$$\text{Time} = \frac{\text{Total pages}}{\text{Combined rate}} = \frac{110}{\frac{40}{3}}$$

$$\frac{110 \times 3}{40} = \frac{330}{40} = \boxed{8.25 \text{ hours}} \text{ Ans.}$$

# Q:8 A

Step 1: List the clues:-

1. A is to the right of B  $\rightarrow$  B...A
2. E is left of C and right of A (A...E...C)
3. B is to the right of D  $\rightarrow$  (D...B)

Clue 3: D...B

So B is not first. D is left of B

Clue 1: B...A

So sequence so far D...B...A

Clue 2: A...E...C

So sequence becomes: D...B...A...E...C

Middle house (3rd position) = A.

Step 1: Start from the origin

Start point O

Step 1: Run 4 km north  $\rightarrow$  Point A

Step 2: Turn left and run 5 km  
Facing north, turning left  $\rightarrow$  facing west  
Run 5 km  $\rightarrow$  Point B

Position 4 km north, 5 km west of O

~~Step 3: Turn left and run 5 km  
Facing west, turn turning left  $\rightarrow$  facing west  
Run 5 km~~

Step 3: Turn left and run 5km  
Facing west, turning left  $\rightarrow$  facing south.  
Run 5km  $\rightarrow$  Point C

Position  $(4-5) = -1$ km north (i.e., 1 km south),  
5 km west.

So 1 km south, 5 km west of O

Step: 4 Turn left and run 6km  
Facing south, turning left  $\rightarrow$  Facing east  
Run 6km - Point D

Position:

East movement: 6km from 5km west  $\rightarrow$  net 1km  
east  $(6-5) = 1$

North / South: still 1 km south.

1 km south, 1 km east of O

Step: 5 Turn left and run 1 km  
Facing east, turning left - facing north  
Run 1 km - Point E

Position:

North movement 1 km south + 1 km north = 0 km

On same horizontal line as O

Finishing point: 1 km east of starting point O

1. Shirt

2. Coat

3. Blouse

4. Skirt

5. Sweater

(PART D)

• The figure contains 16 triangles

Smallest triangles 8 (individual small triangles)

• Larger triangles (formed by combining 2

Small triangles): 4

• Even larger triangles (formed by combining 4

Small triangles): 4:

Global Warming can be reversed through a combination of environmental, technological, and behavioral measures:-

1. Reducing Greenhouse Gas Emissions:  
Shift to ~~renew~~ renewable energy sources like solar, wind, and hydro, and promote energy efficiency in industries, transport, and households.
2. Afforestation and Reforestation: Planting trees and restoring degraded forests to absorb carbon dioxide from the atmosphere.
3. Sustainable Agriculture and Waste Management  
Promote organic farming, reduce methane emissions from livestock, and manage waste to minimize landfill gases.
4. Carbon Capture Technologies: Use modern technologies to capture and store CO<sub>2</sub> from power plants and industrial sources.

5. Global Cooperation and Policy Measures:  
Enforce international agreements like Paris Agreements  
Accord and promote green practices at individual  
Community, and government levels.

Conclusion: Reversing global warming requires  
Collective action combining policy, technology, and  
responsible human behavior.

## (PART B)

Ceramics are inorganic non-metallic materials  
made by the action of heat and subsequent  
cooling. They are usually hard, brittle, and  
resistant to heat and chemical attack. Common  
examples include clay, porcelain, glass, and  
bricks.

## Properties of Ceramics:

1. Hard and brittle break easily under stress.
2. High melting point can withstand very high temperatures.
3. Poor conductors electrical and thermal insulators.
4. Chemical stability resistant to corrosion and chemical reaction.
5. Low ductility cannot be easily stretched or deformed.

## Applications of Ceramics

1. Construction: brick, tiles, and cement.
2. Household items - Porcelain cups, plates, and glassware.
3. Industrial uses: insulators, refractory materials, and cutting tools.
4. Ceramics Capacitors and substrates.
5. Medical field: Dental implants and prosthetics.

# 1. Optical fibers

## Working:

Optical fibers are thin strands of glass or plastic that transmit light signals over long distances using Total internal reflection.

A light signal enters one end of the fiber and reflects repeatedly off the inner walls without escaping, carrying data in the form of pulses of light.

They are used for high-speed communication internet, and cable T.V because they have low signal loss and high bandwidth.

## Applications

Internet and telephone communication

Medical endoscopy

Military and aerospace communication.

## 2. Mobile Phone

### Working:

A mobile phone converts sound into electrical signals using a microphone, which are then converted into radio waves and transmitted via a cell tower.

The tower relays the signal to the recipient's phone, where it is converted back into sound by the speaker.

Modern phones use digital signals and rely on cellular network, satellites, and base stations for communication.

### Applications:

Voice calls and messaging  
internet browsing and social media  
GPS navigation and online banking.