Dos 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.

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

(Handwritten work underneath:)

Answer to 7

Given condition:
Forty % of number $= \frac{2}{3}$ of another number.

Required:
Ratio of first number to 2nd number.

Solution:
to find Ratio of first number (x)
Second number (y)

Now
$$40\% \; x = \frac{2}{3} y$$
$$\frac{40}{100}\, x = \frac{2}{3} y$$

From Rearranging the equation
$$x = \frac{2}{3} \div y$$

Result:
$$\frac{x}{y} = \frac{3}{3}$$

Part B:

Given condition:

17 balls sold for 720

loss in balls = cost price of 5 balls

Required:

Cost price of a ball.

Solution:

According to condition

↳ $17(x) = 720 + 5(x)$

↳ It means the real cost price of 17 balls is $720 + 5(x)$

Now solving the equation to find x

↳ $17x - 5x = 720$

↳ $12x = 720$

↳ $x = 720/12 = 60$

Result:-

$$\boxed{\text{cost price of ball } (x) = 60}$$

Part c:

Given condition:
- ↪ Man is 24 years older than son
- ↪ After two years man age will be twice the age of son.

Required:
The present age of son

Solution:
According to the given conditions we are constructing the equation.

- ↪ Man = son + 24 → (i)
- ↪ Man + 2 = 2(son + 2) → (ii)

Now putting eq(i) in eq(ii)

- ↪ (son + 24) + 2 = 2son + 4
- ↪ son + 26 = 2son + 4

Re arranging the equation
- ↪ 26 - 4 = 2son - son
- ↪ 22 = son

Result:

present son age = 22

Part-D:-

Given condition:
↳ Rashid type 32 pages in 6 hours
↳ Kamran type 40 pages in 5 hours

Required:
In how much time both will type 110 pages.

Solution:
Finding the rate of Rashid and Kamran.

↳ Rate of Rashid = $\frac{32}{6}$ = 5.3

↳ Rate of Kamran = $\frac{40}{5}$ = 8

Adding rate of Rashid & Kamran

↳ Rashid + Kamran = 5.3 + 8 = 13.3

Now according to the required condition of the question we are constructing the equation.

↳ (Rashid rate + Kamran rate) x = 110.

↳ putting values.

↳ (13.3) x = 110

$x = \frac{110}{13.3}$ = 8.27

Result:-
Rashid and Kamran will take 8.27 hours to type 110 pages.

Answer : 8

Part A:

Given condition:
⤷ Five different houses in a row
Naming from A to E
1 ⤷ A is to the right of B
2 ⤷ E is to the left of C & right of A
3 ⤷ B is to the right of D.
4⤷ .

Required:
        Which of the houses is in middle?
Solution:
        According to the given
conditions.
1- A is to the right of B.
        = B A
2- E is to the left of C and
        right to A.
        = BA EC
3- B is to the right of D.
        = D B [A] E C
        Hence the middle house is A.
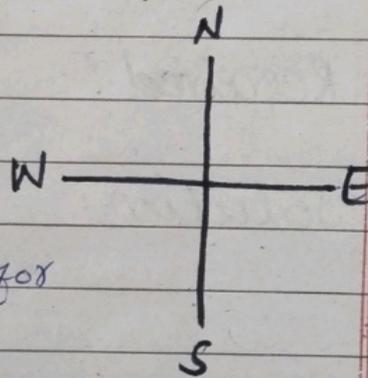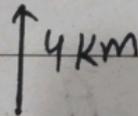Result:
        Middle house = A .

Part B:

Given Conditions:

↳ Running towards North = 4 km.
↳ Left turn and run for 5 km
↳ Again turn left and run for 5 km.
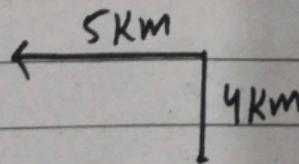↳ Again turn left and run for 6 km.
↳ Again left and run for 1 km

Constructing a Run Map:

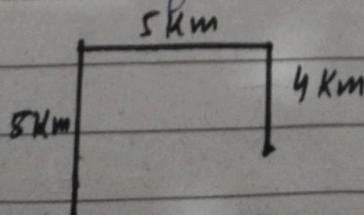According to the given
conditions we will
construct a run map.

i- Running towars nort for
4 km.
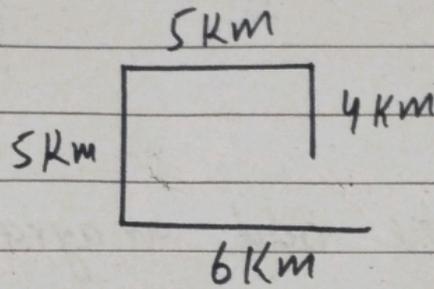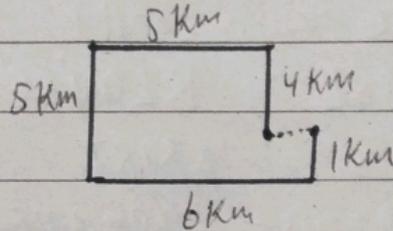
ii- Left turn and run for 5 km.

iii- Again turn left and run for 5 km.

iv- Again turn left and run for
6 km.   P-T-O ⟶

5km

5km | 4km
6km

v- Left turn and run for 1km.

5km

5km | 4km
| 1km
6km

Answers of the Required questions

i- 1 km away from the starting point.

ii- while finishing, I will be running in the North direction.

iii- After taking the second turn I will be running in south direction.

iv- To move from ~~start~~ finishing points towards the starting point I will have to go in the West direction.

Part C:

Finding the odd anagrams:
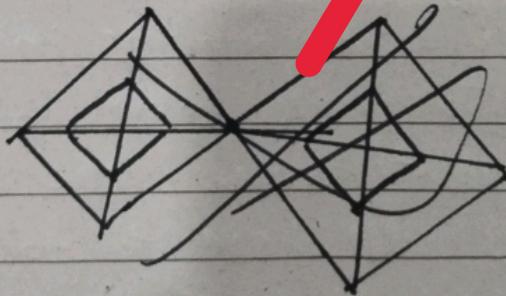
A = THREI = SHIRT
B = AOTC = OAT
C = EOUBSL = BLOUSE
d = KTRIS = SKIRT
e = RETAEWS = SWEATER

Odd anagram: ~~NONE~~ None of the anagram is odd because all are the garments.
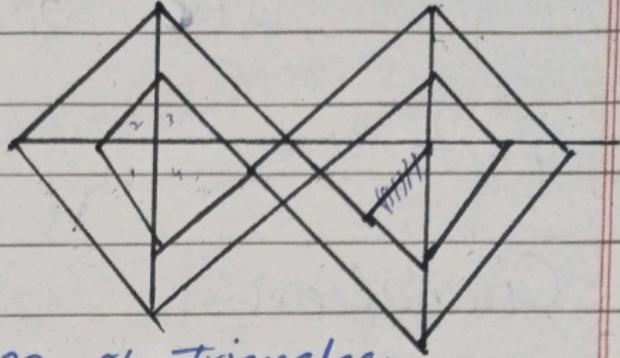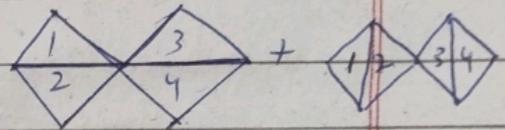
Part D:
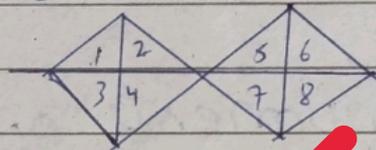
Figure

Part-D

Figure:

Counting the no of Triangles:

i. The larger triangles = 8

ii. Smaller Triangles = 8

iii. the same structure is present in the middle and will have the same No of triangles.

No of triangles = 16

iv. two Triangles are present in middle over lapping = 2
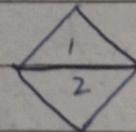
Total triangles = 8 + 8 + 16 + 2
= 30

Answer = 34 Triangles.

34 Triangles.

Q.No 4

Circulation:-

It is the movement or circulation of the blood in blood vessels (veins+artsies) inside the body of animal to ensure the efficient exchange of essential gases and nutrients.

Components of circulatory System.

The common and important components of the circulatory system are -

→ Heart
→ Blood vessels
→ Blood
→ cappillaries

The circulation process is performed by the interaction junction of these components.

Role of Heart in circulation:

Aorta
left Auricle
Right auricle
pulmonary Artery
Tricuspid valve
pulmonary vein
Semilunar valve
Left Ventricle
Right ventricle
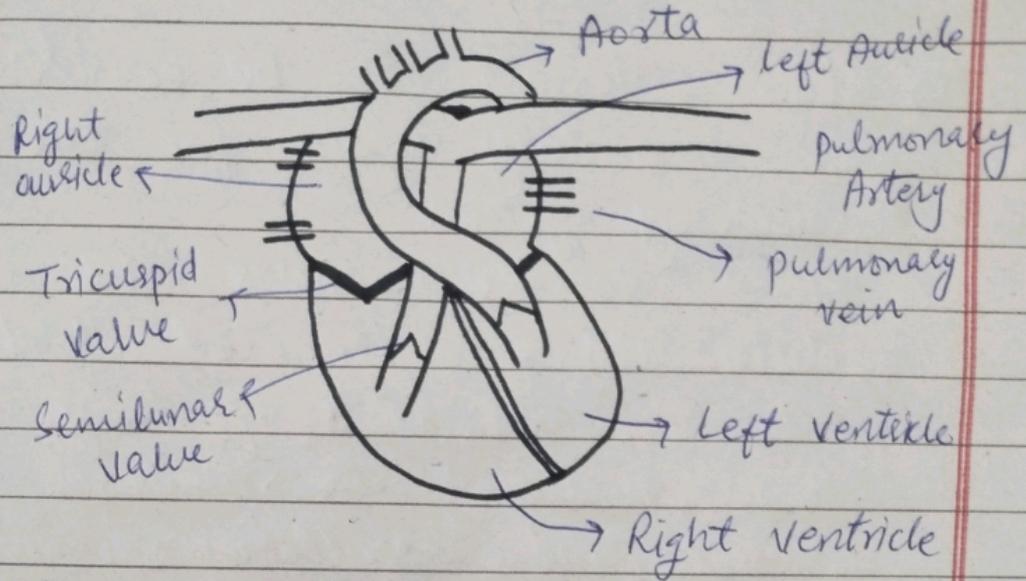
⤷ Heart is The primary circulatory organ.

⤷ Heart is the pumping organ

⤷ It pumps the blood all over the body.

⤷ Heart also collects the blood through superior & inferior vaneaua

⤷ Heart pumps the blood to the lungs for oxygenation.

⤷ Heart ensures the blood supply to the brain through carotid artery.

⤷ Heart ensures the oxygen and nutrient avaliability to all the tissues of the body through pumping of blood.

neot

Role of Blood vessels:-

↳ Blood vessels can be considered as secondary organs for the circulatory system.

↳ Blood vessels ensures the distribution of oxygenated blood into the all parts of body through division into smaller vessels and capallaries.

↳ Blood vessels (veins) also collect the deoxygenated blood from the body and bring it back to heart for oxygenation.

↳ capallaries ensures the actual exchange of nutrients and wastes between the blood and tissue.

Part B.

Cyclone:-
           System of rotating
wind around the low pressure
area/core due to pressure
gradient and coriollis effect
is called cyclone -

Formation of cyclone

    Cyclone is formed by the
pressure gradient and coriollis
         effect.

Pressure gradient:-

↳ Sun act on the surface of
    oceans.
↳ Evaporation takes place due
   to gaining of sun energy by
   water molecules.
↳ At certain height the
   water vapours condense back
   into water by losing heat
   energy to air
↳ The heat energy gained by

the air molecules.

↳ The warmer air molecules moves upward leaving a vacant space

↳ The vacant space is filled by the air around that area with certain pressure.

↳ That vacant area and surrounding has certain pressure gradient

sun

cold air → ↓↓↗ warm air

condensation ↑ ← cold air

↑↑

↗↑↑

pressure gradient.

evaporation

ocean
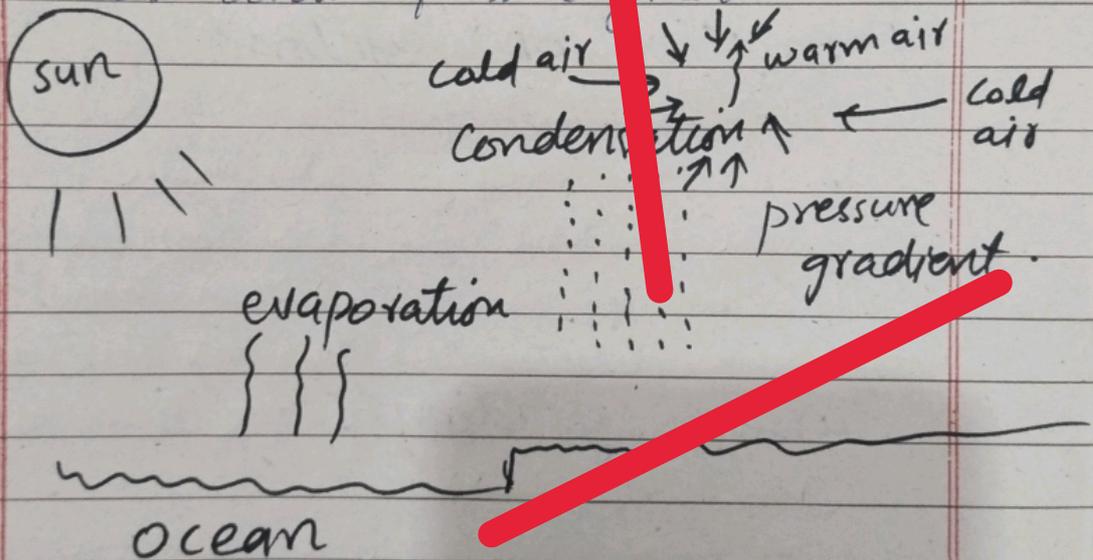
Cariollus effect:-

The force which tends to move an object towards the right in northern hemisphere and towards left in southern hemisphere is called cariollus force and the effect is called cariollus effect.

Part - C :

Enlist the function of the following:

1. **Carbohydrates :-**

   ↳ Primary source of energy
   ↳ Building block of plant cell wall.
   ↳ Important for the storage of energy (Glycogen)
   ↳ Important for the cell membrane in which glycoprotein and glycolipids function as ~~receptors~~.
   ↳ Building ~~block~~ of the muscles Glycogen. (~~scribbled~~)
   ↳ Important for the storage of food in plants (starch)

2. **Proteins :-**

   ↳ As a building block of horns, hairs and nails (keratin protein)
   ↳ Many harmones are made up of protein which ensure efficient communication
   ↳ Important for protection like horns in animals.

↳ as a source of energy

↳ building block of muscle myoglobin.

↳ Enzymes are made up of proteins.

Fats:-

↳ As efficient source of energy and produces more energy as compared to others.

↳ Used for the lubrication of joints and mucus membranes.

↳ Building block of cell membrane (lipid bilayer)

↳ Important for preservation of water loss from body surface.

↳ most of harmones are made of lipids i.e cortisol etc.

Calcium:-

↳ Important for bones strength.

↳ Important for nervous system communication.

↳ Important in message transformation in the synaptic cleft.

↳ Important for normal functioning of muscles.

↳ Important for the electrolyte balance.

Iron:
- Important for the blood.
- Constituation of the haemoglobin.
- Prevents anemia
- Important mineral
- Important for skin and hairs

Part D!-

Remote sensing:-
Science Together information related to certain area through the use of special sensors and satellites. Such process of information collection is called remote sensing.

How remote sensing can be employed for environmental purpose:
Remote sensing can be employed for environmental purpose.
- It is important for data collection of the area.
- It collects data related to the green belt of the area.

↳ It warns the disasters risks.
↳ It tells us about the population growth of the area.
↳ it tells us about the use of fossil fuels in the area.
↳ It estimates the environmental pollution and monitors it.
↳ It warns the deforestation
↳ It monitors air quality of the area.
↳ It tells the weather condition of the area.
↳ Through the use of satellite it efficiently monitor all the aspects of the a

Impliation:-
　　　　Through the use of This information the environmental aspects can be monitered and prevented.
↳ The future disasters awarness can be achieved.
↳ It helps in disaster management system.

Answer No 05:-

Part A:-

Disaster Risk Management:-

It is the process through which the early managements are done to control the future incoming disasters which are expected on the basis of data collected.

Process of Disaster Risk Management:-

The process includes.

Data collection:-

Data collection of the area through the use of tools like Remote sensing and GIS.

- ↪ population
- ↪ air quality.
- ↪ Forests
- ↪ water logging
- ↪ Humidity
- ↪ urbanization etc.

Preperation of volunteers:-

Volunteers should be prepared which can effectively manage the situation i.e NGOs, 1122 etc.

Disaster Risk assessment:-

It is the assessment of the disaster risk through the data collected and condition of the area.

Importance:
- → It warns before the disasters.
- → It rey prevents the disasters
- → It starts the people preperation of the disaster.
- → It tells us the type of disaster expected in future
- → It estimates the expected strength of the disaster.
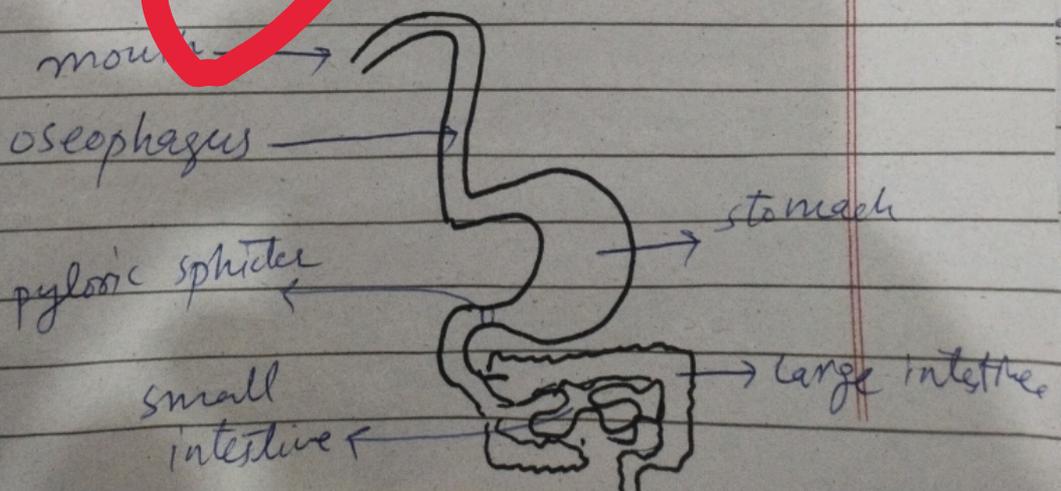- → It motivates the early preperation for disaster etc.

Part - C

Digestive system:-

It is the process through which the large food molecules are broken down into smaller particles for the release of energy.

Parts of Digestive system:-

⤷ Oral cavity
⤷ phyrnx
⤷ ~~tyn~~ Oseophagus
⤷ ~~frete~~ stomach
⤷ pyloric sphicter
⤷ Duodenum
⤷ Jejunum
⤷ illeum
⤷ Large intestine
⤷ Anus

mou__ →
oseophagus ──
pyloric sphicter ←
small intestine ←
stomach →
large intestine →

Role of stomach:-

↳ Food enter into stomach through cardiac sphincter.

↳ Both mechanical and chemical digestion takes place in stomach.

↳ The acidic condition of stomach kill all the pathogens

↳ Digestion of protein starts in stomach with pepsin.

→ Food is converted into chyme.

↳ Chyme is pushed toward intestine through the pyloric sphicter.

Role of small intestine:-

↳ Process of digestion completes in the small intestine.

→ chemical digestion takes place in small intestine

↳ protein, fats, carbohydrates are completely digested in small intestine

↳ Absorption of nutrients takes place in small intestine.

→ Remaining wastes are pushed into large intestine for removal.

Part - B :-

Biofuels:-

These are the alternatives source of energy which are derived from the biomass and biological wastes and are environmental friendly.

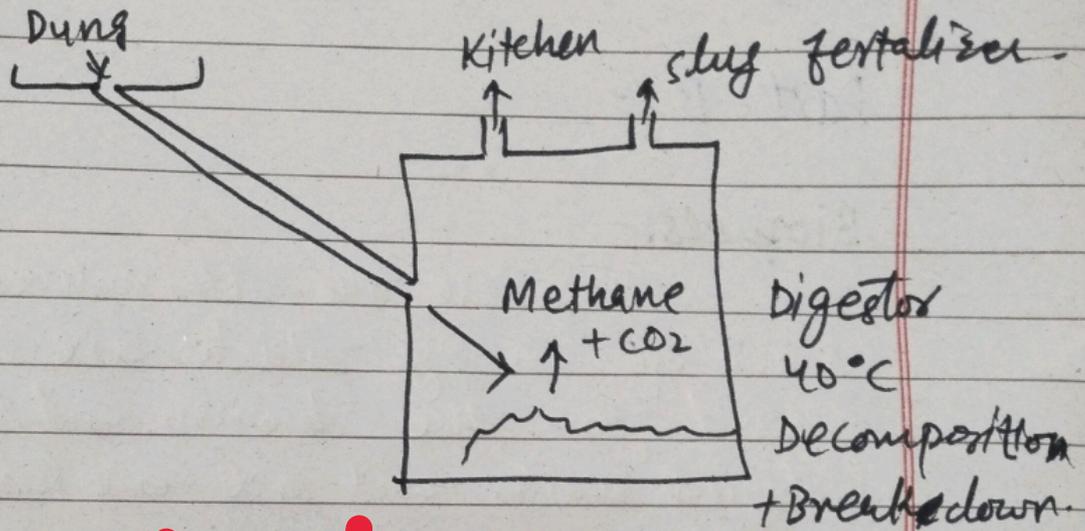### Raw materials for Biofuels:-

Animal waste (dung)
Plant wastes (leaves)
oily plants.
sugar rich plants

Production of Biogas:

The biogas is produce in a plant from the animal dung with a biproduct of fertalizers.

↳ The animal dung is placed in the digester of the plant.

methane and CO_2 is produced
which is used in kitchen.

Dung

Kitchen   slug fertalizer.

Methane | Digestor
$\uparrow + CO_2$ | 40°C
| Decomposition
| + Breakdown.

Production of Bio Diesel :-

Biodiesel is produced from
the oily plant products and
wastes.

↳ the raw materials are
chemically treated in
different chambers and
in the last chamber the
bio diesel is produced.

Importance :-

↳ Biofuels are environment
friendly.

↳ Do not cause air pollution

↳ effective way of solid waste
management.

Part - D

plastics:-

The synthetic or semi-synthetic polymer material that can be drawn into different shapes.

Properties:-

light weigh
low cost
durable
corrosion resistant
non decomposer
good insulator
flexible shape.

Applications:-

used for
⤷ packing
⤷ medical equipment
⤷ household goods
⤷ construction

- insulation
- Toys formation
- Ball point

Environmental Risk:-
- non-biodegradable
- Land pollution
- water pollution
- drainage problems
- Eutrophication of water
- Aquatic life loss.
- burning of plastic releases toxic gases.