

Date: / /
Do's and Don'ts for the General Science & Ability Paper

Hi there **Nisha Sikandar** – you've prepared well!

Batch: **405**

LMS: **40341**

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.

PART - II

SECTION - A

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.

QUESTION NO. 2
Structure and Function of cell Wall:

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.

• Structural support and shape to the plant cell

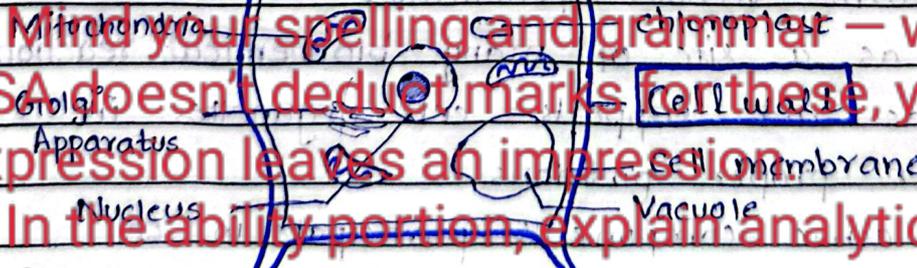
3. Make your answers look scientific, not just theoretical. Use flowcharts and diagrams wherever they add clarity.

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.

Fig: Structure of plant cell



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

MOUSAF PAPER

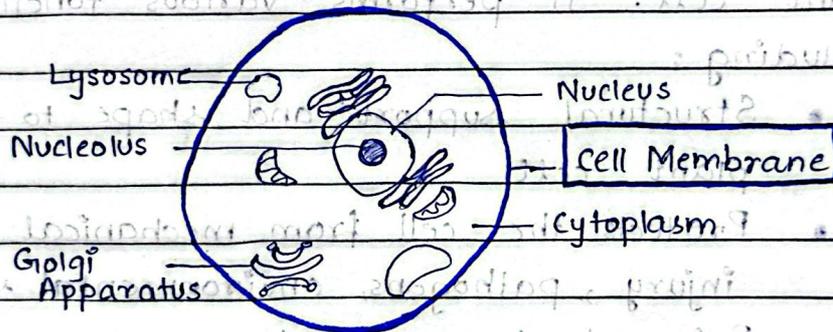
Structure and Function of Cell Membrane:

Cell Membrane is also called: plasma membrane and is present both in plant and animal cell.

(a) Functions of cell Membrane

- Provides **selective permeability**
- Regulates the flow of ions, minerals, nutrients etc.
- Helps in transport of materials
- Allows intake of large molecules i.e. **endocytosis** and secretion of substances

(b) Structure of cell Membrane

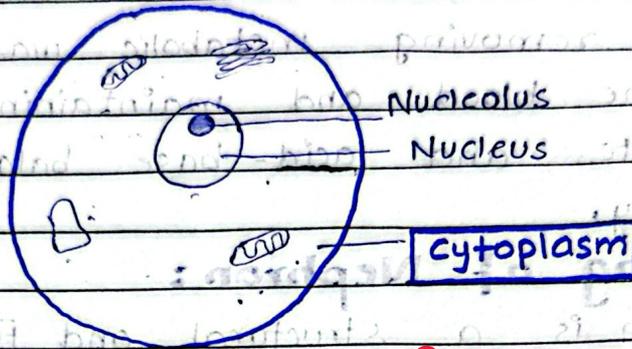


Structure and Function of Cytoplasm

Cytoplasm is a semi-fluid substance present within cell membrane and performs various functions:

- Acts as a site of many **biochemical reactions**
- Holds and supports cell organelles in their proper positions
- Cytoplasmic components participate in **cell Division**

- Facilitates transport of Genetic material
- Provides an aqueous environment necessary for Enzyme activities.



Structure and Function of Mitochondria:

Mitochondria is a cellular organelle which is also known as "Power House of cell," as it helps in:

- ATP production
Generates energy in the form of ATP through cellular respiration.
- Site of Aerobic respiration (Krebs cycle)
- Regulation of Metabolism

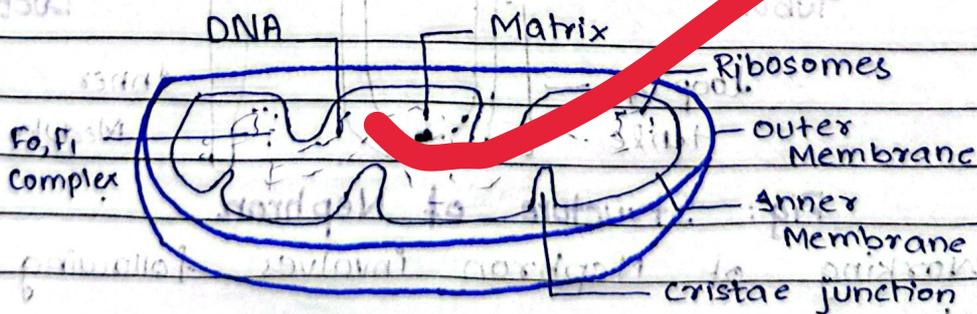


Fig. Structure of Mitochondria

(b)

Urinary System:

Urinary system is an organ system that produces, stores and excretes urine, thereby removing metabolic wastes from the blood and maintaining water, electrolyte, and acid-base balance in the body.

Working of Nephron:

Nephron is a structural and functional unit of kidney.

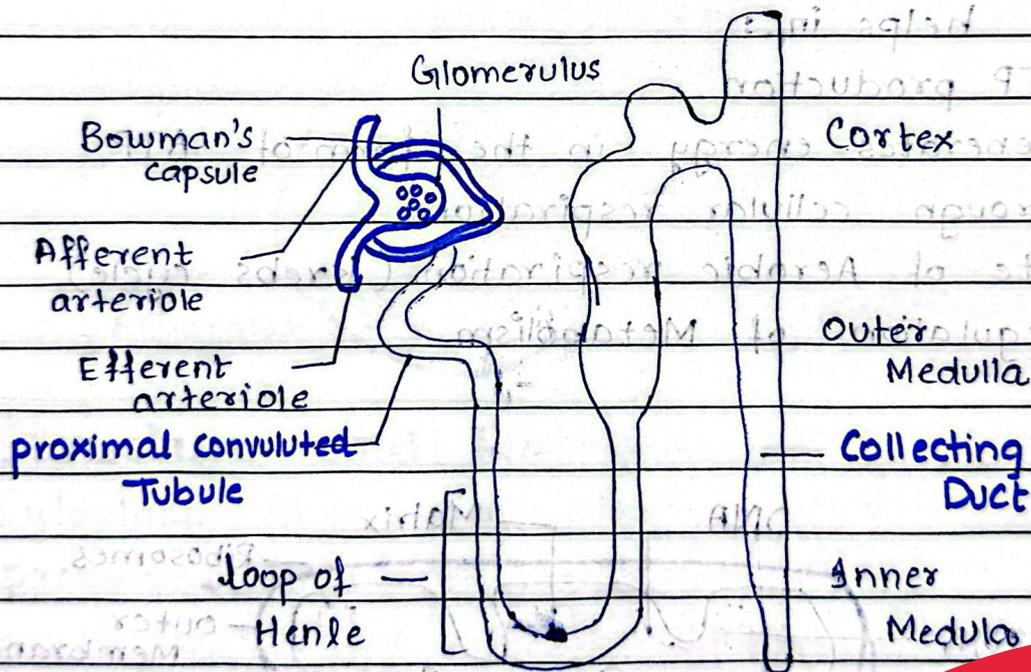


Fig: Structure of Nephron

Working of Nephron involves following steps:

- **Glomerular Filtration:**

Blood enters the nephron through the

afferent arteriole. Due to high blood pressure, water, salts, glucose, urea etc are filtered into Bowman's capsule, while blood cells and proteins remain in blood.

• **Reabsorption:**

In the proximal convoluted tubule, useful substances such as glucose, amino acids, salts, and most of the water are reabsorbed back into the blood.

• **Loop of Henle Function:**

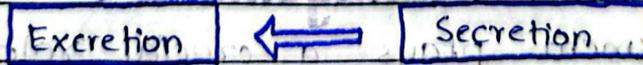
The descending limb of loop of Henle reabsorbs water, while the ascending limb reabsorbs salts. This helps in concentrating the urine.

• **Tubular Secretion:**

In the Distal convoluted tubule, extra ions and wastes are actively secreted into the tubule.

• **Collection of Urine:**

The collecting duct reabsorbs the water, forming concentrated urine, which is then passed to the renal pelvis.

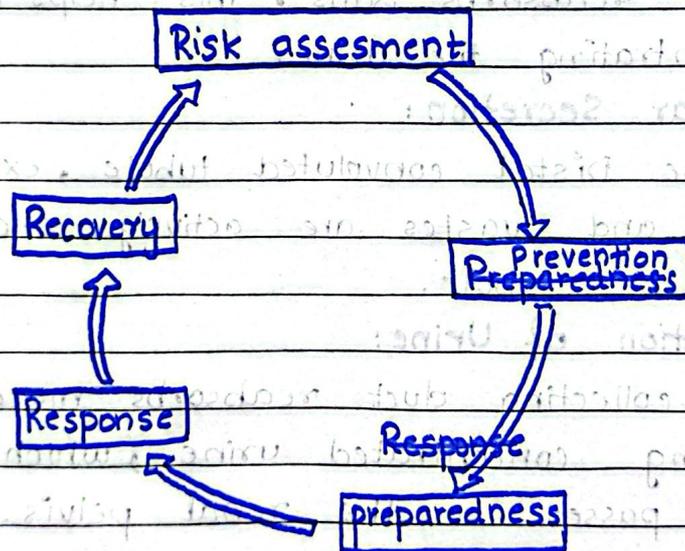


QUESTION NO. 5

(a)

Disaster Risk Management:

Disaster Risk management is the systematic process of identifying, assessing, reducing and controlling disaster risks through strategies and policies aimed at preventing or minimizing losses, protecting lives and property and ensuring effective preparedness, response, and recovery.

**Importance of Risk Assessment in Disaster Risk Management:**

Risk assessment plays a crucial role in Disaster Risk management.

- Identifies hazards

It helps recognize potential hazards

and identifies populations, infrastructure and areas which are at most risk.

• Improves preparedness and planning:

Risk assessment enables better contingency planning, early warning systems and evacuation plans etc.

• Guides mitigation and preventive measures:

It provides basis for designing effective mitigation strategies e.g. land use planning.

• Reduce loss of life and property

By identifying risks, timely actions can be taken to minimize casualties and economic damage.

• Supports evidence-based decision making:

Policy makers and disaster managers rely on risk data to prioritize investments.

• Efficient use of resources:

It ensures limited resources are directed toward high risk areas and vulnerable groups.

• Enhances Community Resilience:

Understanding risk helps communities adapt, strengthen coping capacities, and recover faster.

(C)

Digestive System:

The digestive system is the organ system responsible for breaking down food into simpler molecules, absorbing nutrients, and eliminating undigested wastes from the body.

⇒ Role of Stomach:

- Stomach temporarily stores ingested food and releases it gradually into small intestine.
- Allows mechanical digestion, its muscular contractions churn and mix food, breaking it into smaller pieces.
- Gastric glands secrete HCL and Pepsin to break down proteins into peptides.
- The acidic environment of stomach kills pathogens (Harmful Bacteria).
- Helps in formation of chyme. Food is converted into a semi-liquid mixture, ready for absorption in the small intestine.

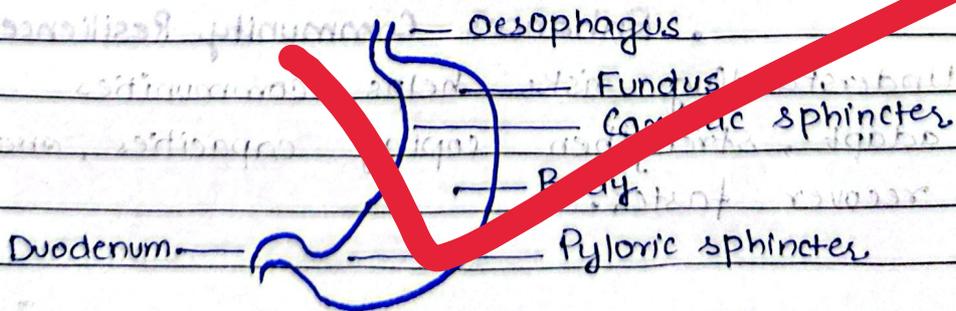


Fig. Structure of Stomach