USama SOHaeld



TEST

Self Assessment Test (Unit-1)



50 Questions 40 min



Topics

SAT Unit (Cell Biology)

Start Test

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40 min 👔



Hint

Q: Cytoplasmic streaming movement causes flow of all except:

- Endoplasmic reticulum
- Mitochondria
- Lysosomes
- Glucose and salts









40 min 🚹 Hint



Q: Movement of Na⁺ across axon membrane via Na⁺-K⁺ pump is an example of:

- Active transport
- Passive transport
- Diffusion
- Osmosis











Hint

Q : Cells without nucleoli die because they do not possess:

- Centrioles, and are unable to undergo cell division
- B Lysosomes, and are unable to destroy worn out organelles
- Mitochondria, and are unable to obtain energy
- Ribosomes, and are unable to manufacture proteins











Hint

Q: The source of illumination in electron microscope is:

- Visible light
- Blue light
- Far-red light
- Beam of electrons







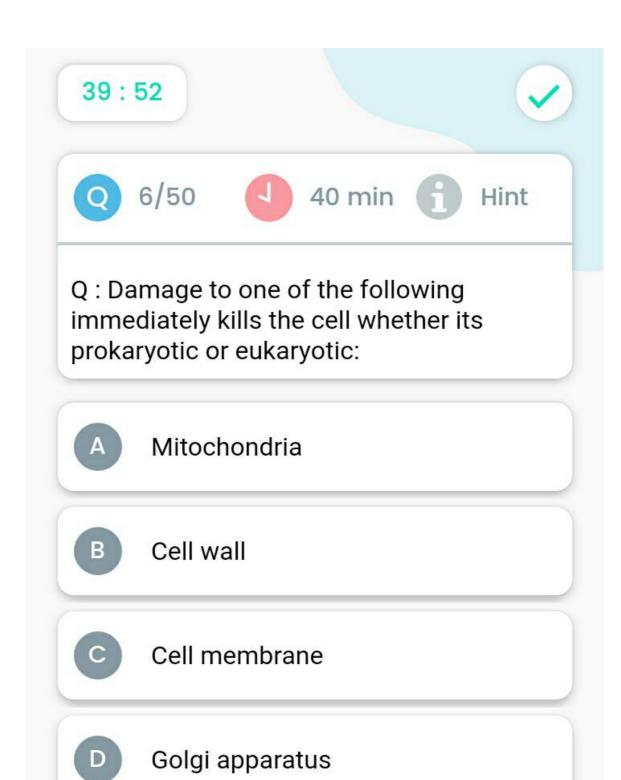




Hint

Q : These play vital role in defense activity of macrophages:

- Mitochondria
- Lysozymes
- Lysosomes
- Ribosomes



1 2 3 4 5 6 7





- 7/50
- 40 min 🚹 Hint

Q: Which of these is not a part of murein?

- Polysaccharides
- Amino acid chains
- Glycans
- **Proteins**









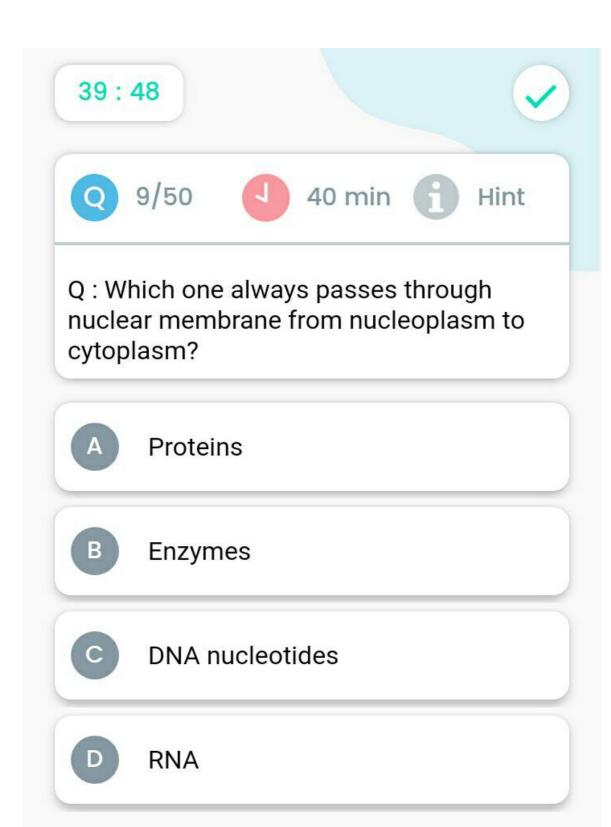
40 min 👔



Hint

Q: Fluid mosaic model of plasma membrane states that protein molecules float in a fluid like _____ layer.

- Galactose
- Phospholipids
- Glucose
- Carbohydrate



4 5







10/50



40 min



Hint

Q : Some cellular organelles are bounded by a single membrane, while others have two membranes around them. Which one of the following is correct?

- Single membrane Two membrane
 Vacuole Lysosome Nucleus Chlorop
- Single membrane Two membrar
 Chloroplast Lysosome Nucleus Vacua
- Single membrane Two membrane
 Nucleus Chloroplast Lysosome Vacue
- Single membrane Two membrane
 Nucleus Lysosome Chloroplast Vacu

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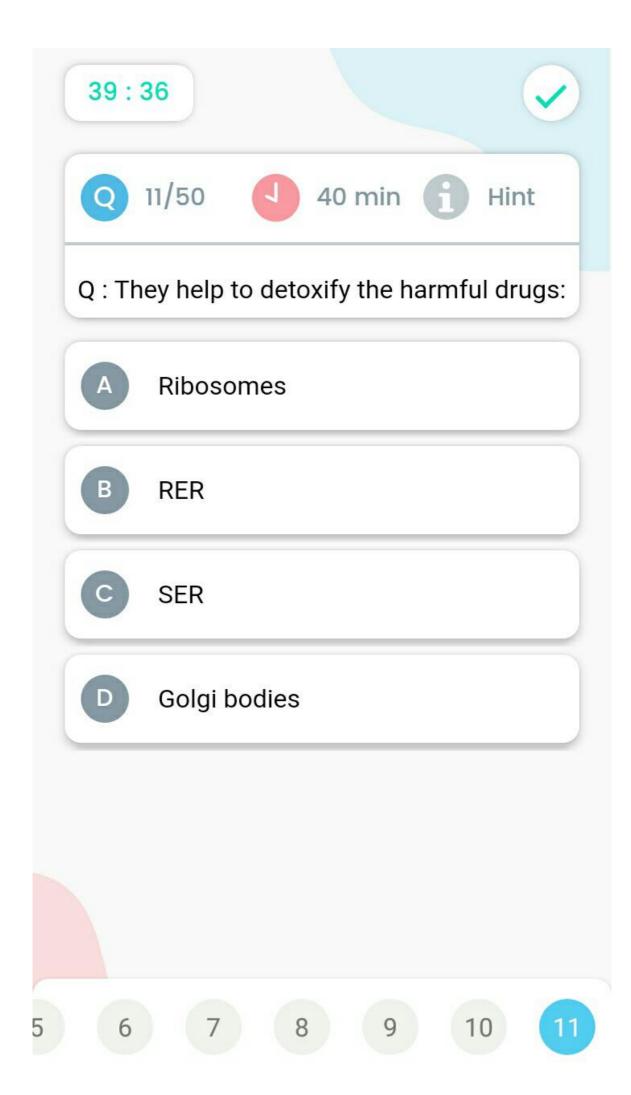
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40 min 👔



Hint

Q: In Golgi apparatus, cisternae are thought to be moving from ____ to _____ face.

- Inner, outer
- Medial, lateral
- Concave, convex
- Convex, concave









40 min 👔



Hint

Q: It is mismatched with reference to mitochondrial membrane:

- A Outer membrane- Smooth
- Outer membrane Chemiosmosis
- Inner membrane F₁ particles
- Inner membrane Increases surface area

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Hint

Q : In cross-section, each centriole consists of a cylindrical array of:

- A 3 microtubule triplets
- B 6 microtubule triplets
- 9 microtubule triplets
- 12 microtubule triplets

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Hint

Q : Cell secretions are actually produced at _____, then transported to outside through _____ and

- A Ribosomes, RER, SER
- B Ribosomes, Golgi apparatus, SER
- RER, Golgi apparatus, Lysosomes
- Ribosomes, ER, Golgi apparatus











Hint

Q: Types of ribosome present in the cytosol and organelles of the eukaryotic cell are respectively:

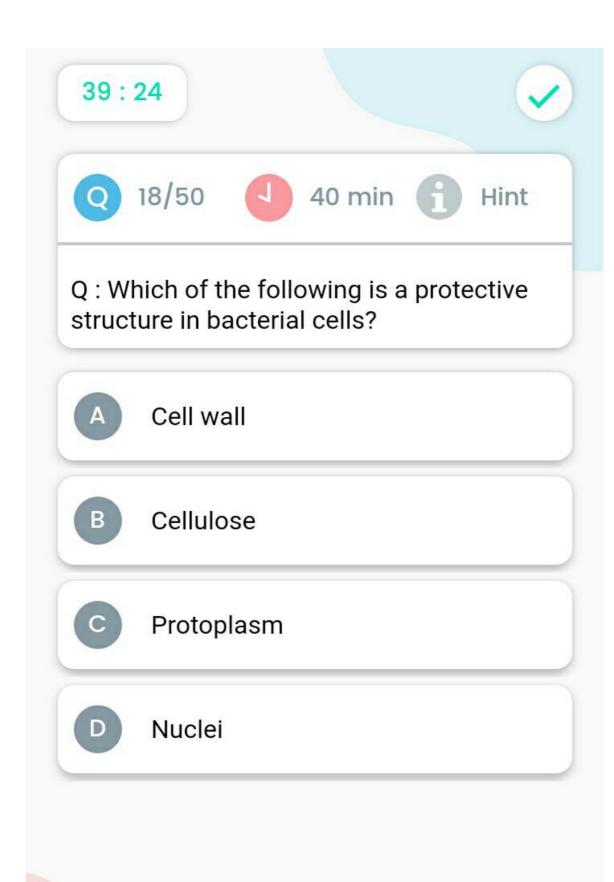
- 60S and 40S
- 70S and 80S
- 80S and 70S
- 80S and 80S



Q:

Which of the following cell types would you expect to be abundant with endoplasmic reticulum and Golgi bodies?

- 1. Plasma B cells (produce antibodies)
- 2. Adipose cells (store fats)
- 3. Islet of Langerhans cells (secrete insulin)
- 4. Red blood cells (transport oxygen)
- A I and II only
- B III and IV only
- I and III only
- II and III only



13 14 15 16 17 18 19







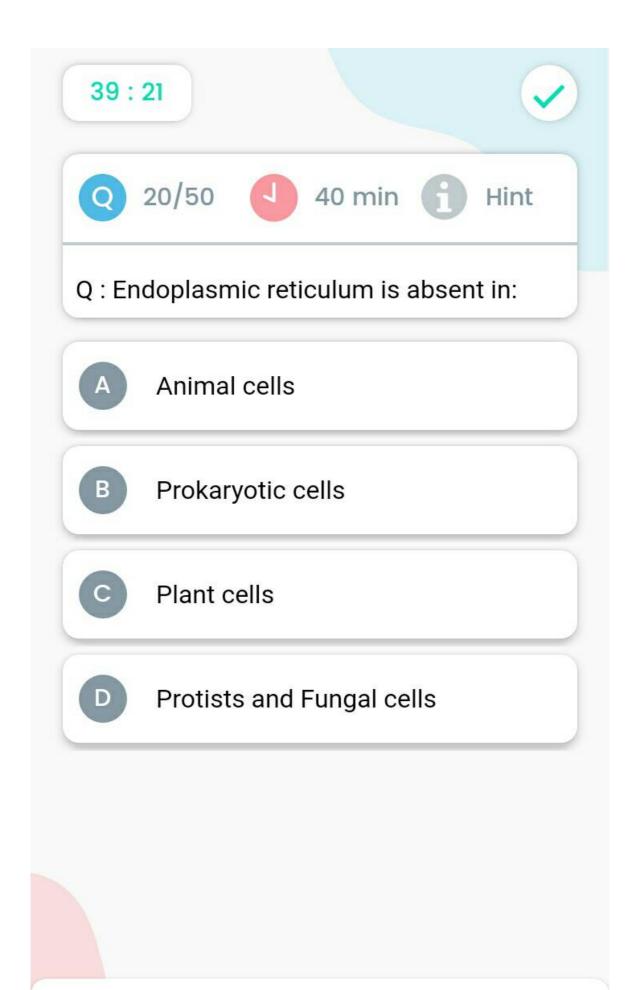


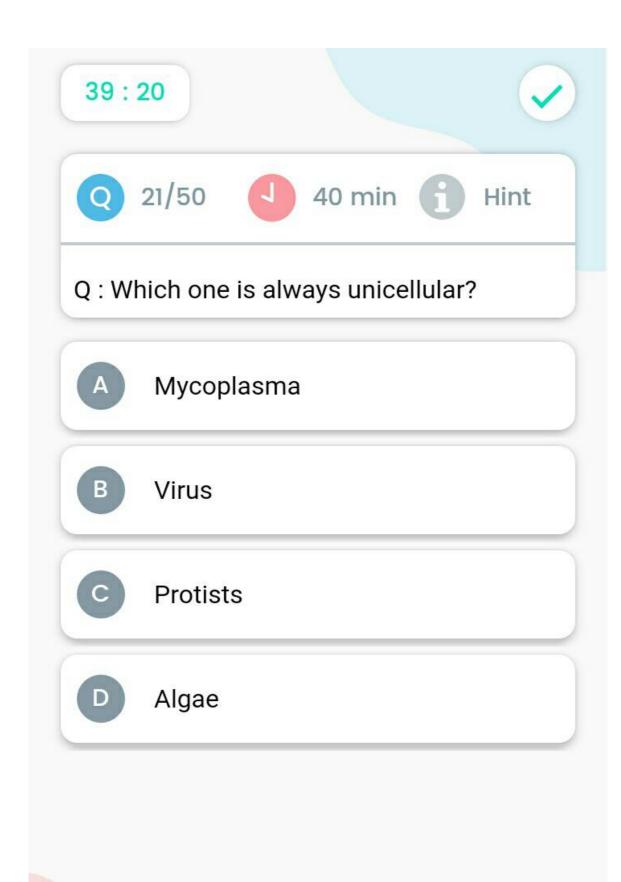


Hint

Q: Plant cells are distinguishable from animal cells in containing:

- Mitochondria
- Ribosomes
- Endoplasmic reticulum
- Cell wall















Hint

Q: If size of a particle is large or it has polarity, the suitable method of transportation will be:

- Osmosis
- Facilitated diffusion
- Diffusion
- Passive transport





- 23/50

40 min Hint



Q: Nucleolus contains:

- Ribosomal precursor
- Protein precursor
- Polysome
- Lipid precursor











Hint

Q: Transport of glucose into the cell with the help of insulin is an example of:

- Osmosis
- Active transport
- Facilitated diffusion
- Endocytosis





- Q 25/50
 - 40 min
- **Hint**

Q : The functional units of Golgi apparatus is:

- A Thylakoids
- B Oxysomes
- Cristae
- Cisternae

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- 26/50

40 min 👔

Hint

Q: Centrioles/centrosome takes part in:

- **Nucleolus formation**
- Start of cell division
- Cell plate formation
- Spindle formation







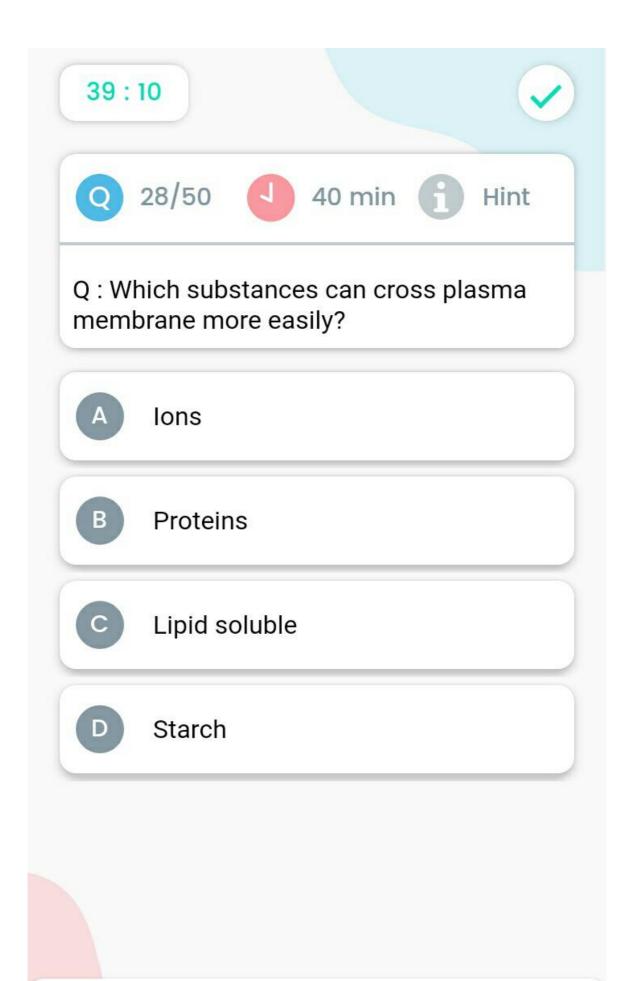


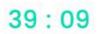


Hint

Q: Outer and inner membranes of mitochondria are:

- A Structurally and functionally similar
- Structurally and functionally different
- Structurally similar but functionally different
- Structurally different but functionally similar











40 min 👔



Hint

Q: Part of cell membrane which is in contact with external and internal environment is:

- Hydrophobic
- Hydrophilic
- Hydrophilic and hydrophobic
- Neutral









30/50 40 min 🚹 Hint



Q: The ratio of RNA and protein in a ribosome is:

1:1

2:3

4:7

D

3:1

26

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- 31/50

40 min 🚹 Hint



Q : Secretory granules bud off from:

- Golgi bodies
- **SER**
- Vacuoles
- **Nucleus**





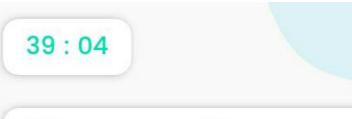
- 32/50

40 min 🕥

Hint

Q: What is a polysome?

- Group of mRNAs and one ribosome
- mRNA + rRNA + tRNA + ribosome
- Many ribosomes and many mRNAs
- One mRNA and many ribosomes







Q: The vesicles which diffuse to form stack of cisternae sacs are derived from:

- A Golgi Apparatus
- B RER
- C SER
- Lysosomes













Q: Which one is a self-replicating organelle?

- Ribosome
- Lysosome
- Centriole
- Mitochondrion





- 35/50
 - 40 min 🚹 Hint

Q: The exact replica of the chromosome is:

- Centromere
- Kinetochore
- Chromatid
- **Nucleosomes**











Hint

Q: Which of the following organelle is involved in autophagy?

- Lysosomes
- Peroxisomes
- Glyoxysomes
- Microsomes











Hint

Q: All of the following are single membranous organelles except:

- Mitochondria
- Lysosomes
- Glyoxysomes
- Peroxisomes

38:57



- 38/50
- 40 min

Hint

Q: Lysosomes are most abundant in:

- Plant cells having phagocytic activity
- Bacteria with additional DNA plasmids
- Protozoa
- Animal cells having phagocytic activity









40 min 🕥



Hint

Q : The absence of an enzyme that is involved in the catabolism of lipids results in:

- A Tay-Sach's disease
- B Glycogenosis type I
- Glycogenosis type II
- Phenylketonuria

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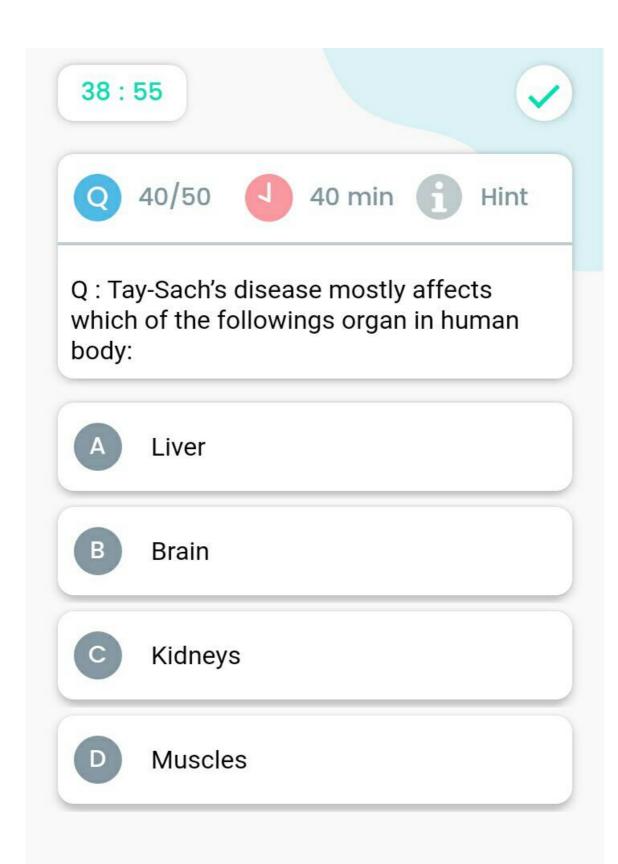
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35 36 37 38 39 40 41









40 min 🕤



Hint

Q: The lysosomes which eat parts of their own cells or cellular components during cellular starvation are called:

- A Primary lysosomes
- B Tertiary lysosomes
- Secondary lysosomes
- Autophagosomes







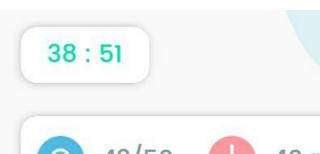




Hint

Q: Enzymes necessary for photosynthesis are present in:

- Chloroplast
- Chloroplast
- Cytoskeleton
- Lysosome







Q : Small and many vacuoles are generally found in:

- A Mycelium
- B Bacteria
- C Animal cell
- Plant cell

7 38

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41

42











Q : In a non-dividing cell, centrioles are_____ in number:

















40 min Hint



Q: The conversion of amino acids into proteins is the function of:

- Glyoxysomes
- Peroxisomes
- Lysosomes
- Ribosomes





- Q 46/50
- 40 min
- **Hint**

Q : The process of photosynthesis occurs at:

- A Plastids
- B Chlorophylls
- Chloroplasts
- Thylakoids

41

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43

44

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46











Hint

Q: The size and number of mitochondria in a cell depends upon which factor?

- Size and shape of the cell
- Physiological activities
- Genetic makeup
- **Evolutionary history**











Hint

Q: Which cell would have chloroplasts in abundance?

- Phloem cells
- **Epidermal cells**
- Meristem
- Mesophyll cells











Hint

Q : The type of cytoskeletal proteins that play important role in assembly and disassembly of spindle during mitosis:

- A Microtubules
- B Microfilaments
- Intermediate filaments
- Actin and tropomyosin

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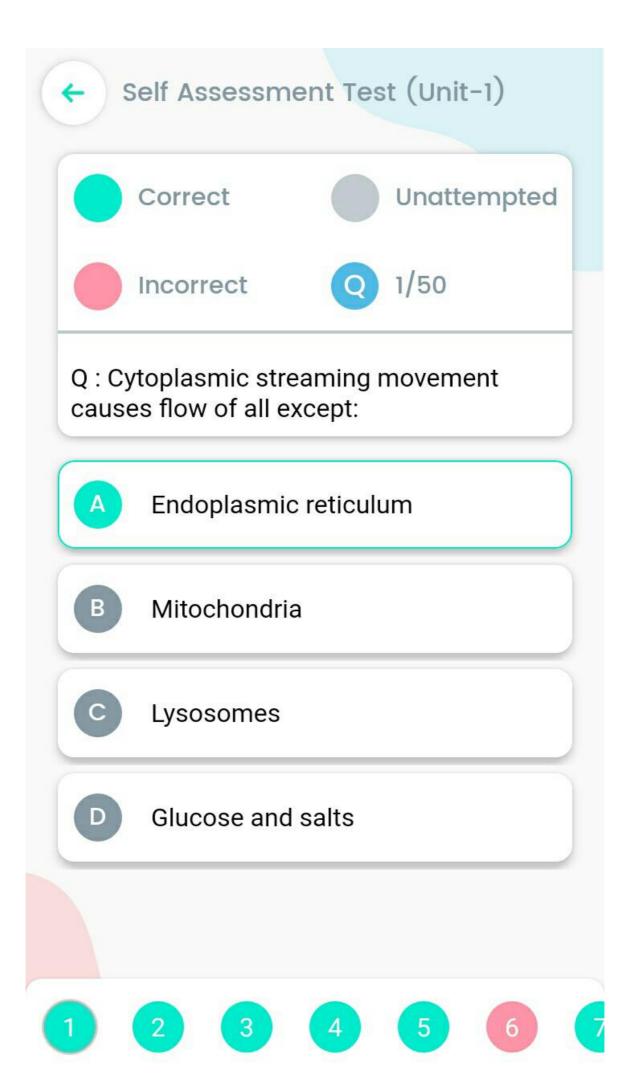


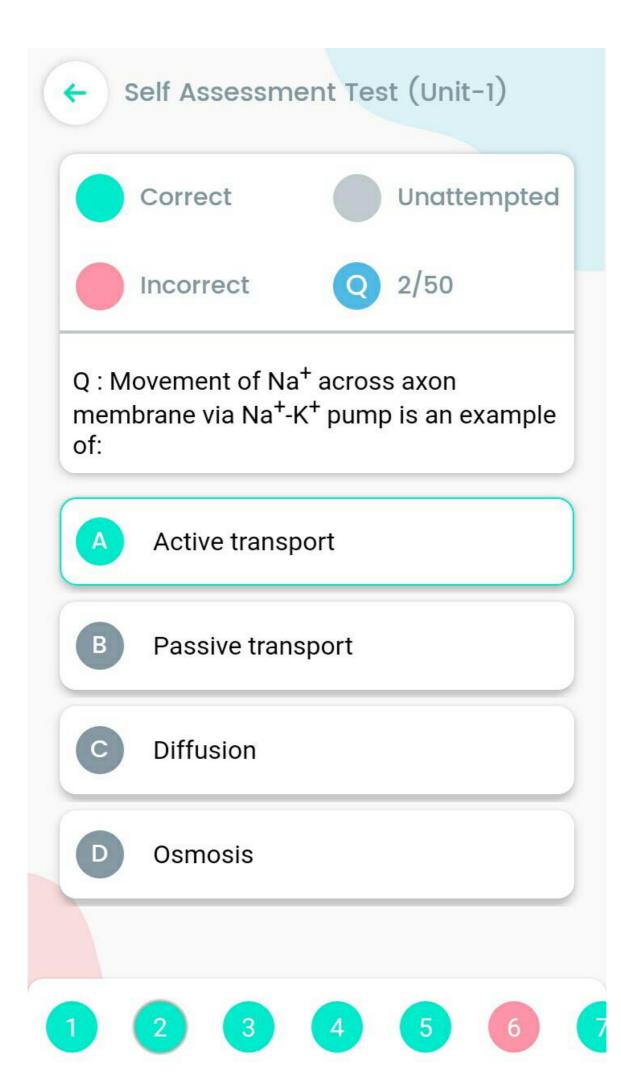


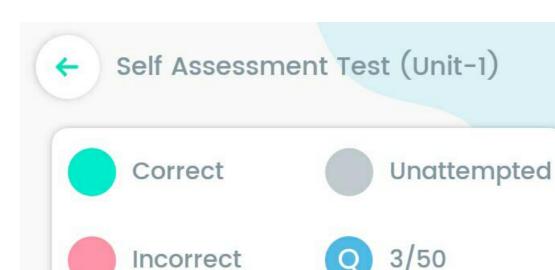
Hint

Q: Which of the following can maintain the shape of the cell?

- Microtubules
- Intermediate filaments
- Microfilaments
- All of these

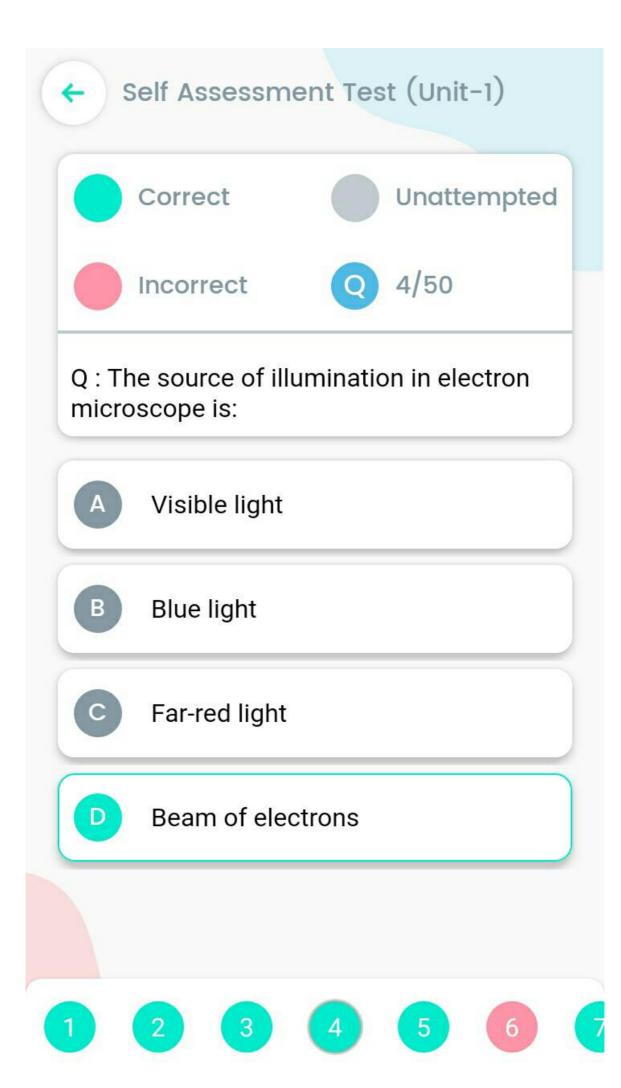


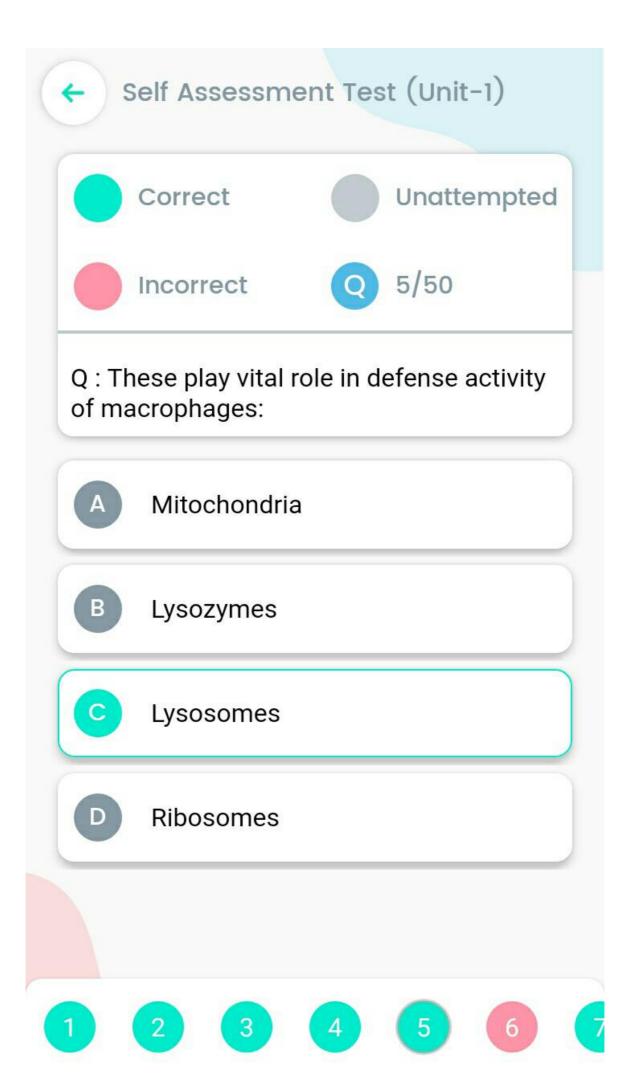


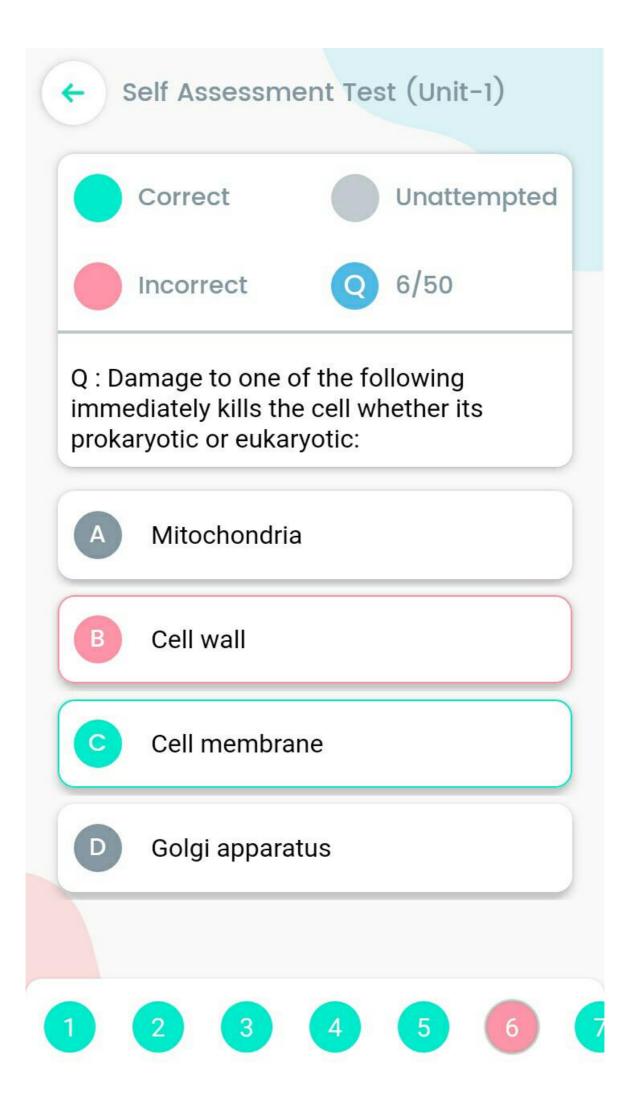


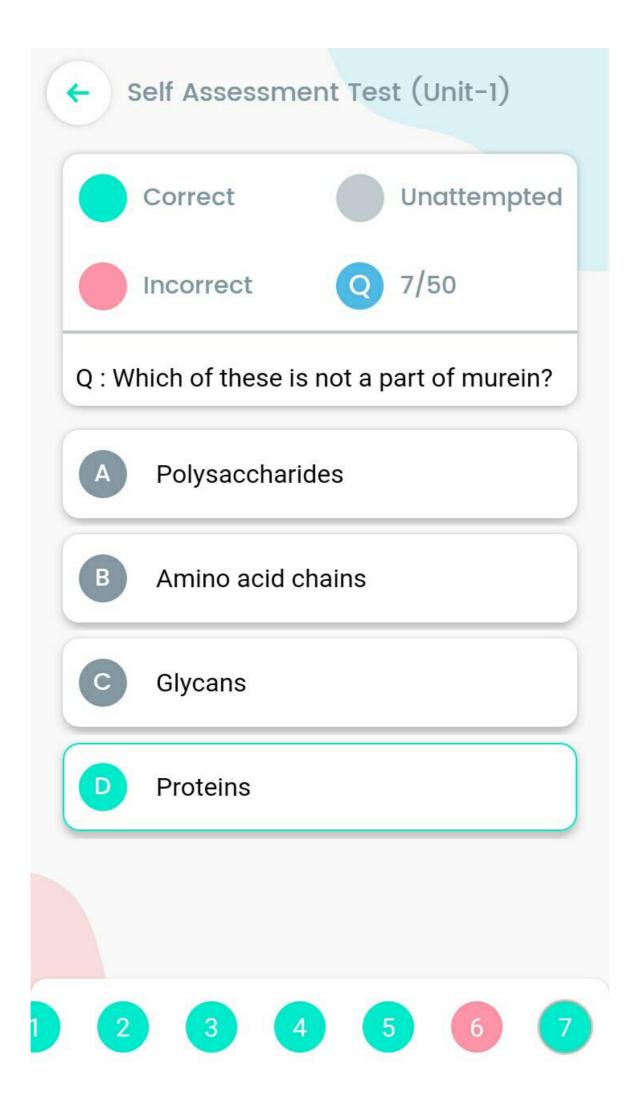
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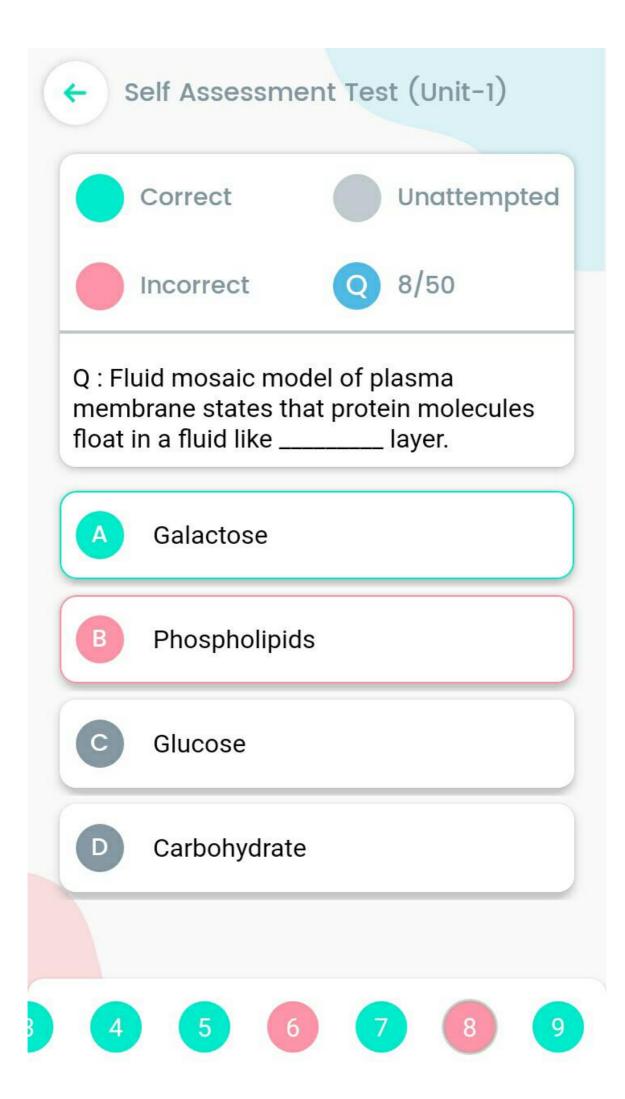
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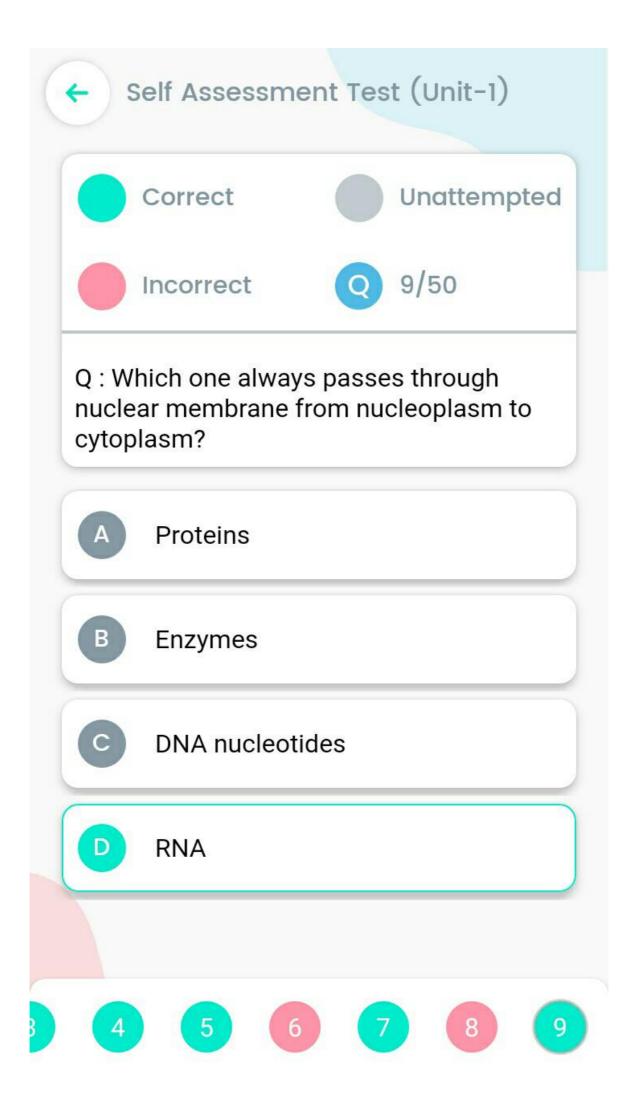


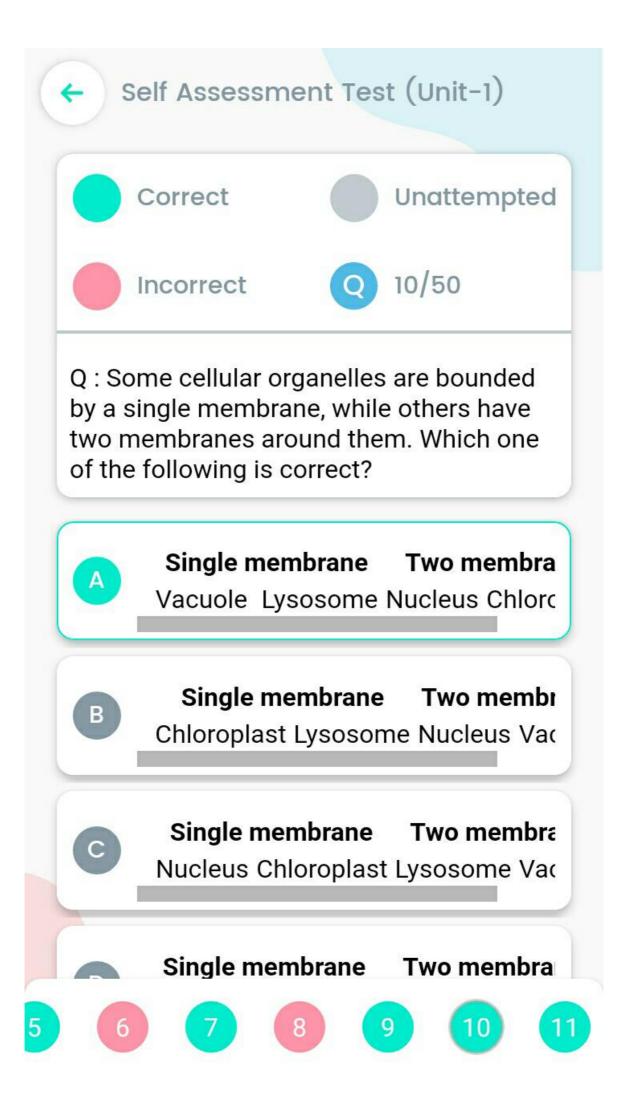


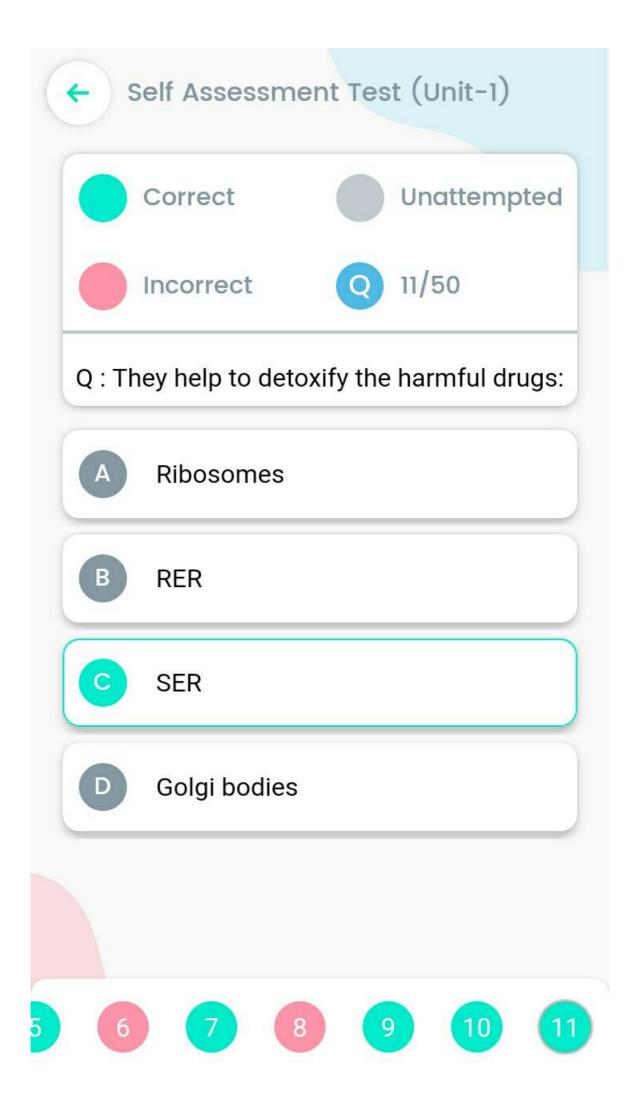


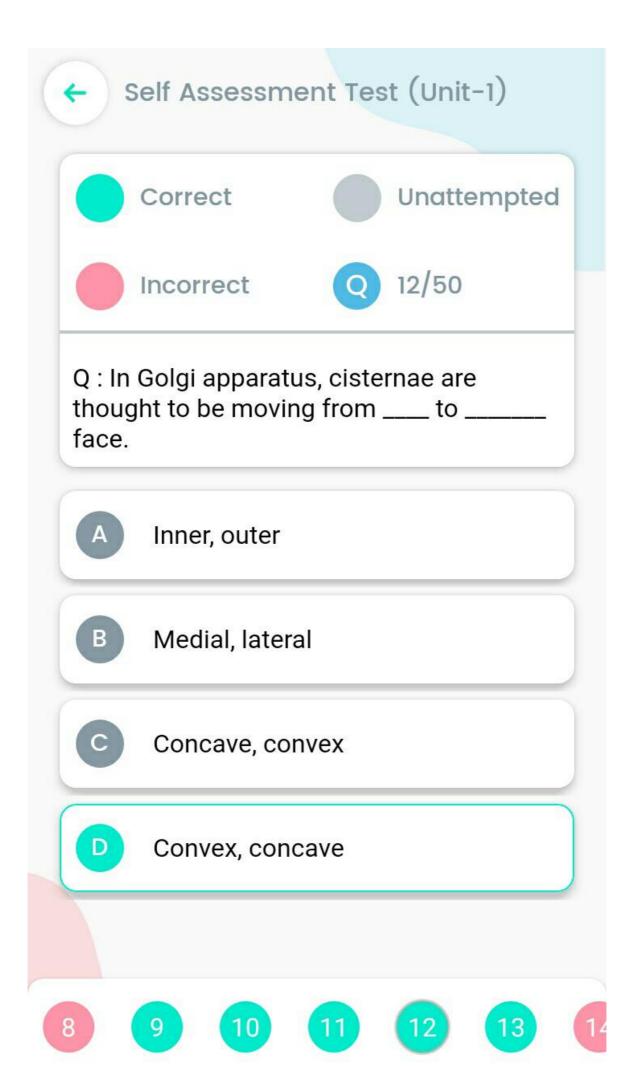


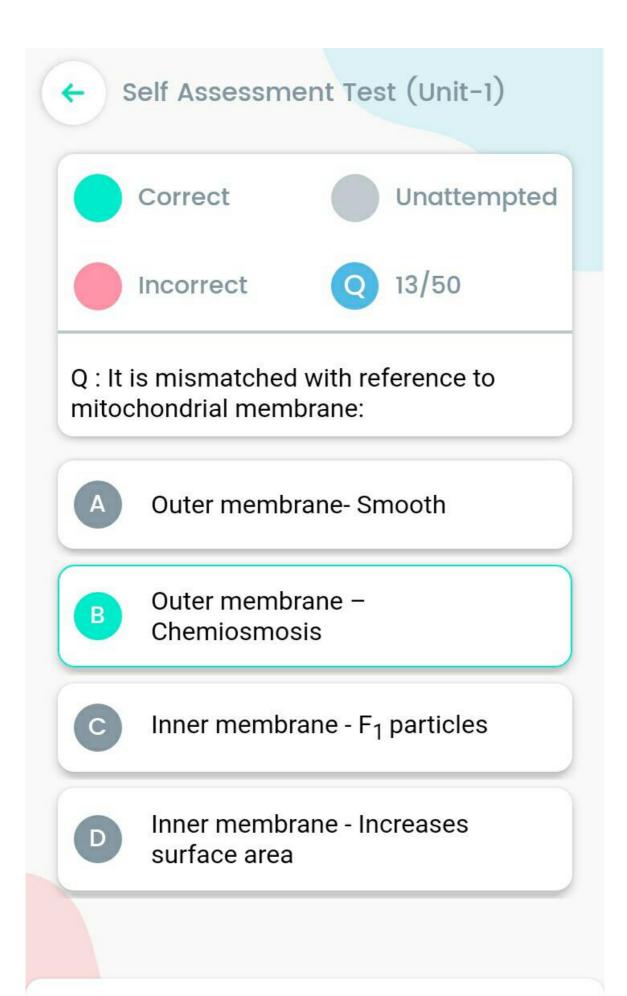














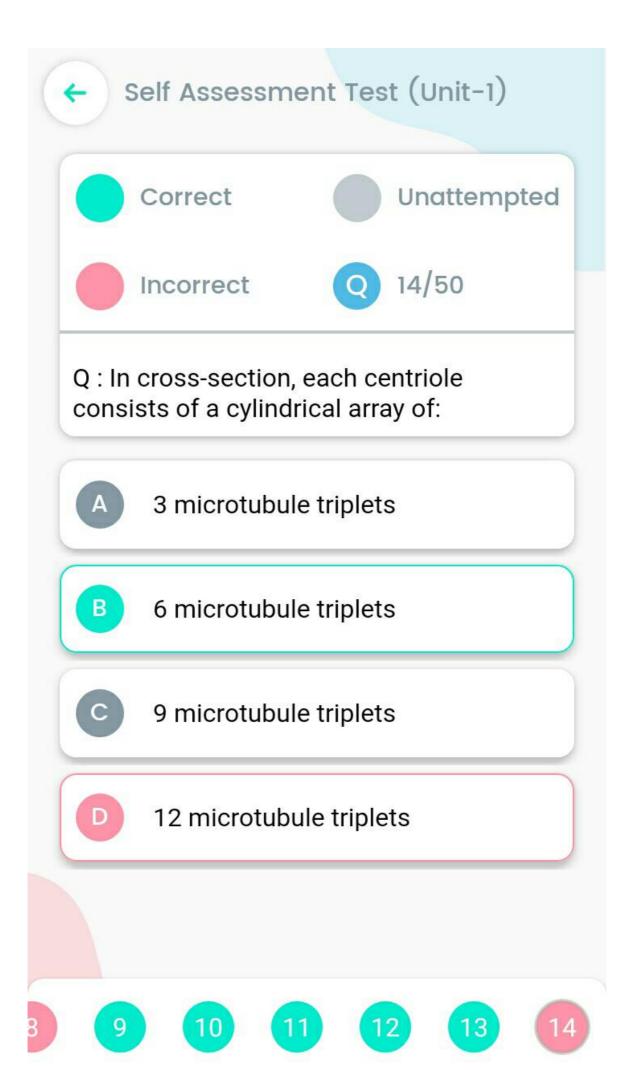


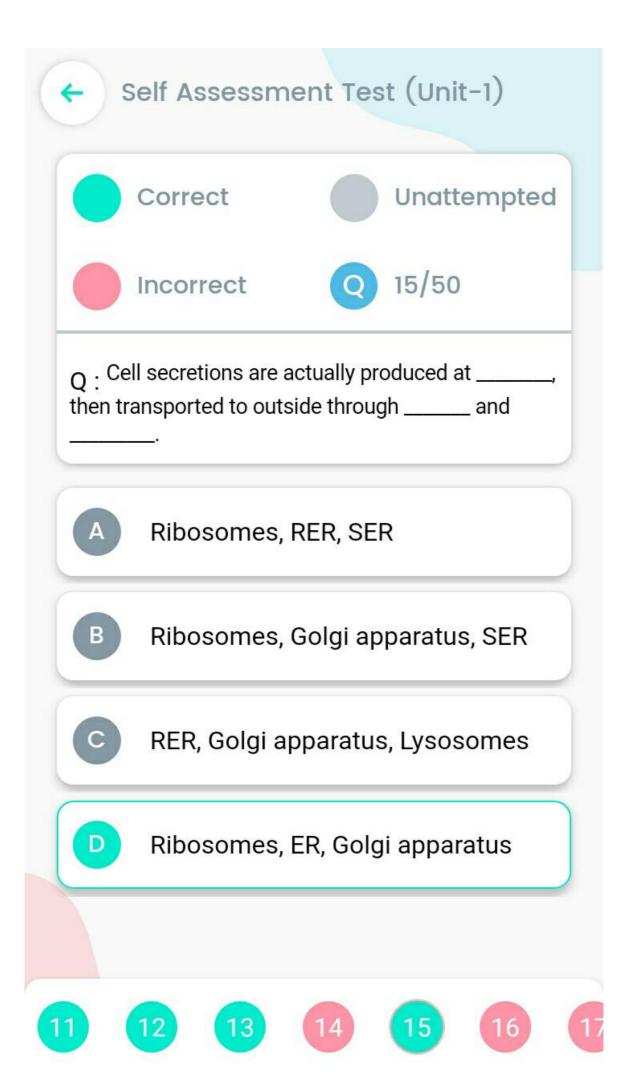


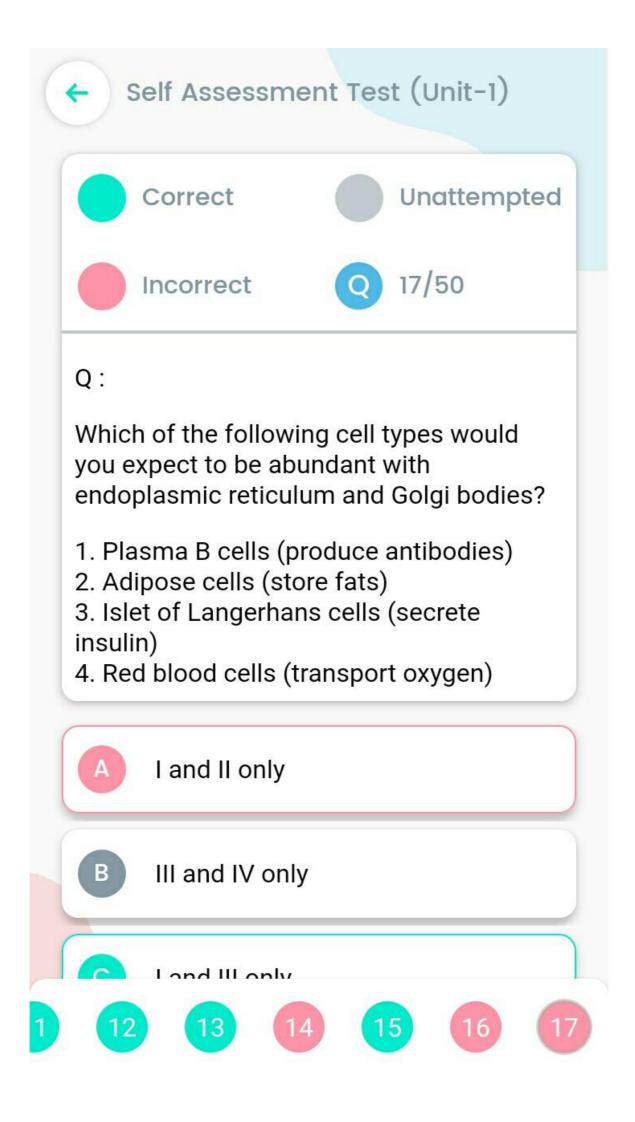


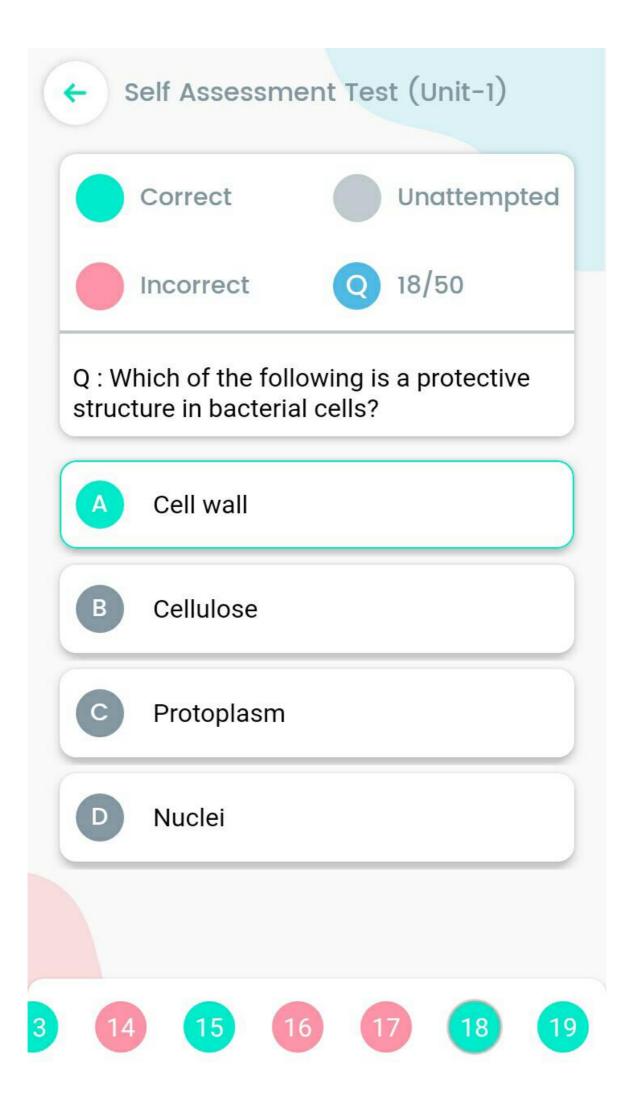


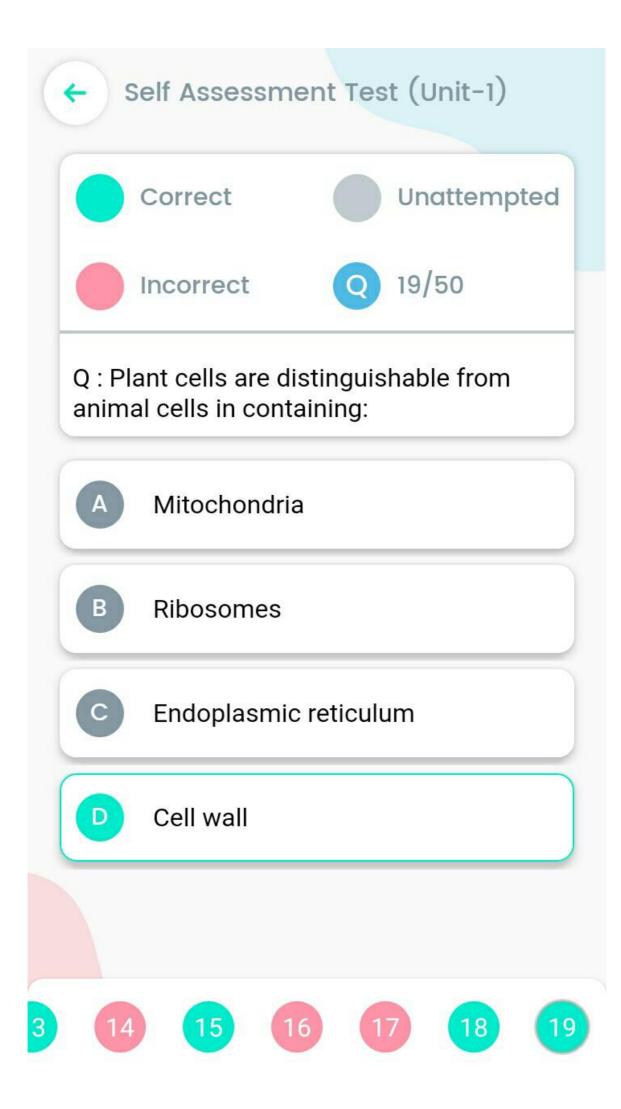


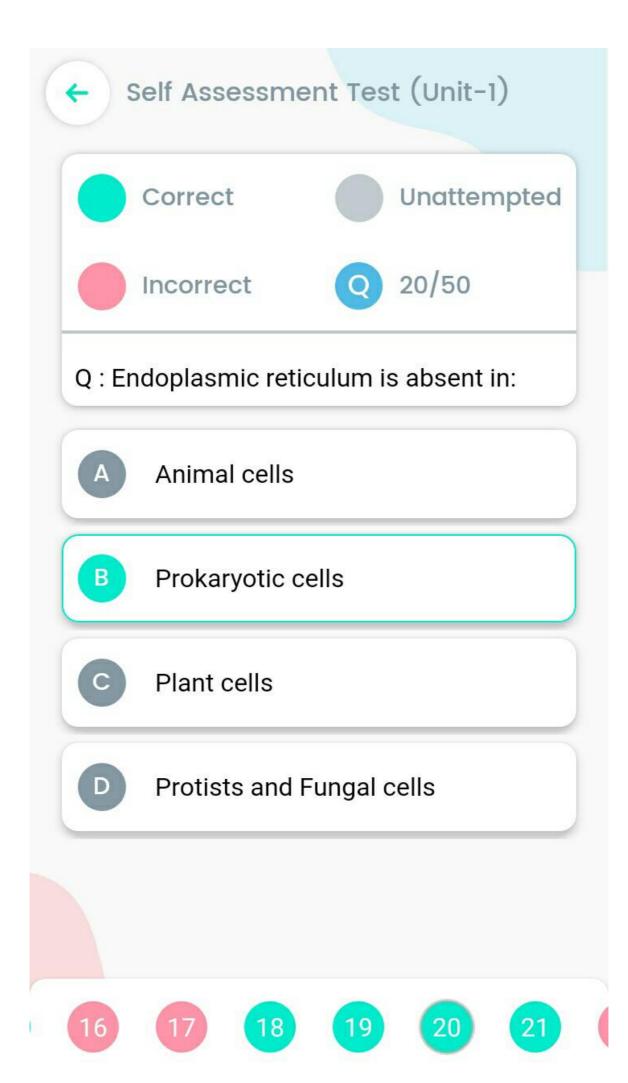


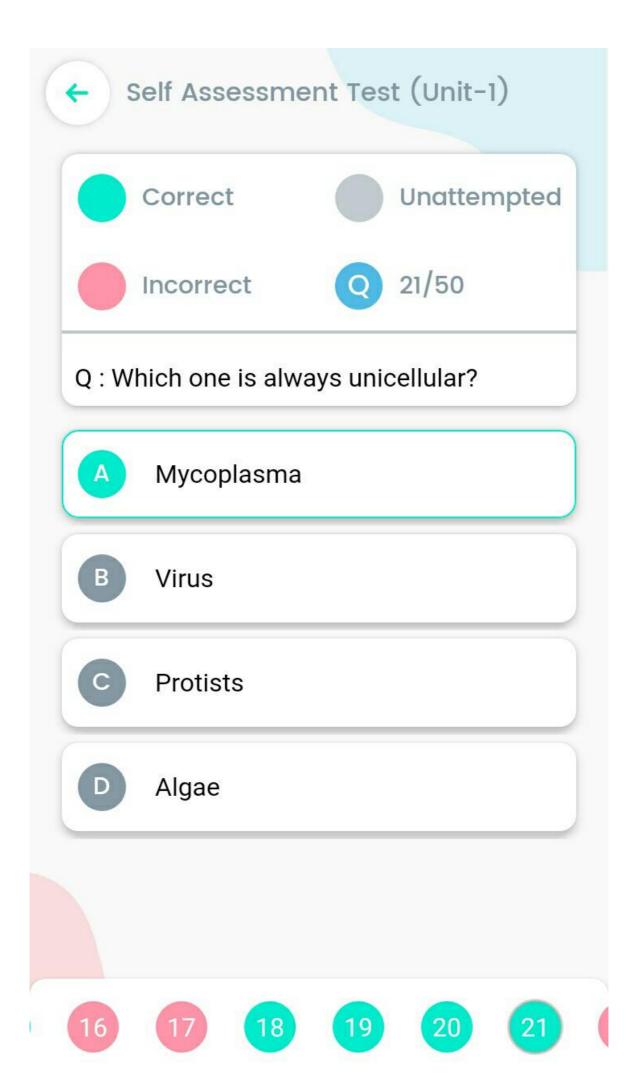


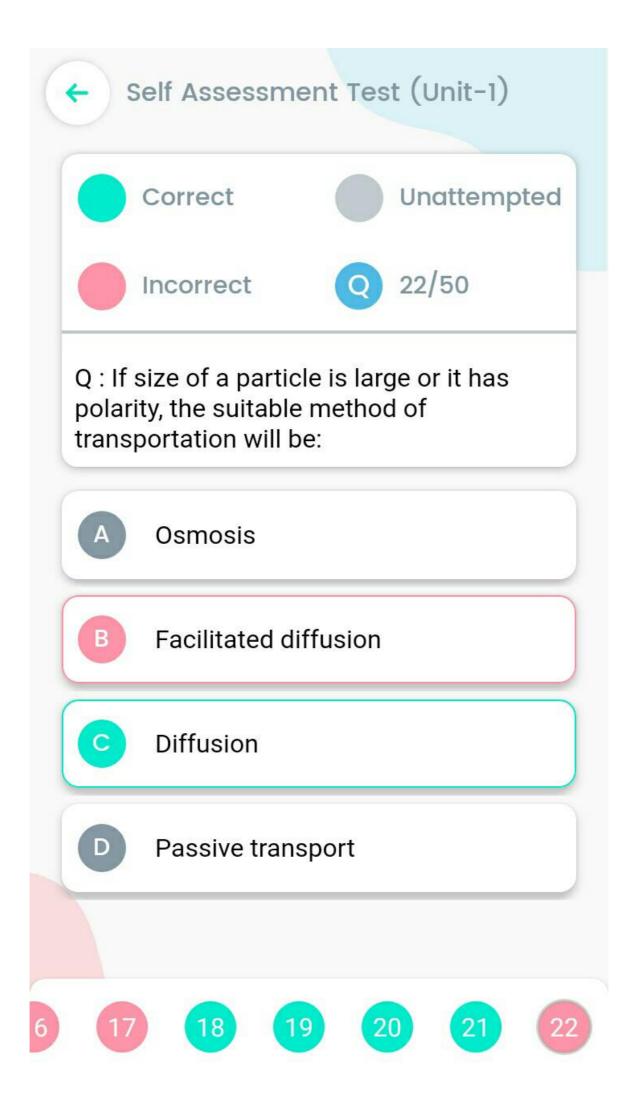


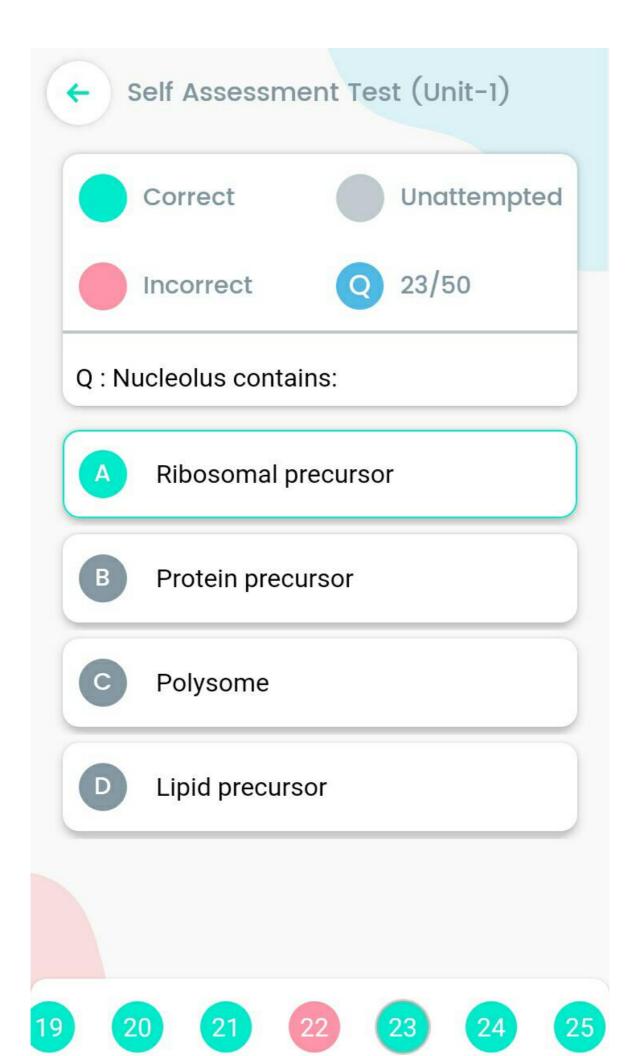


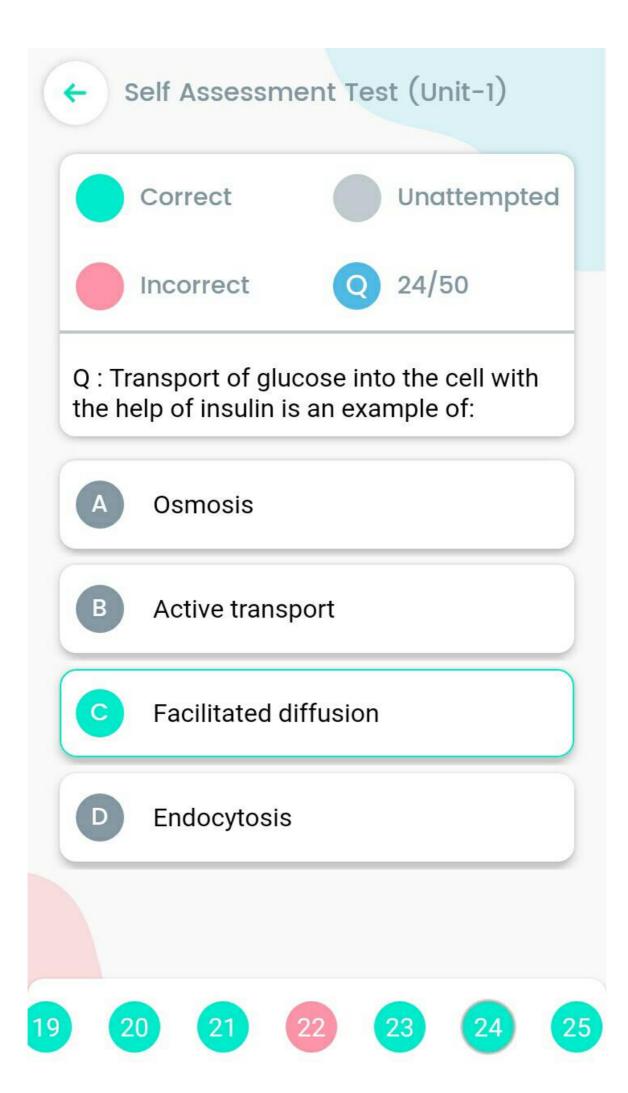


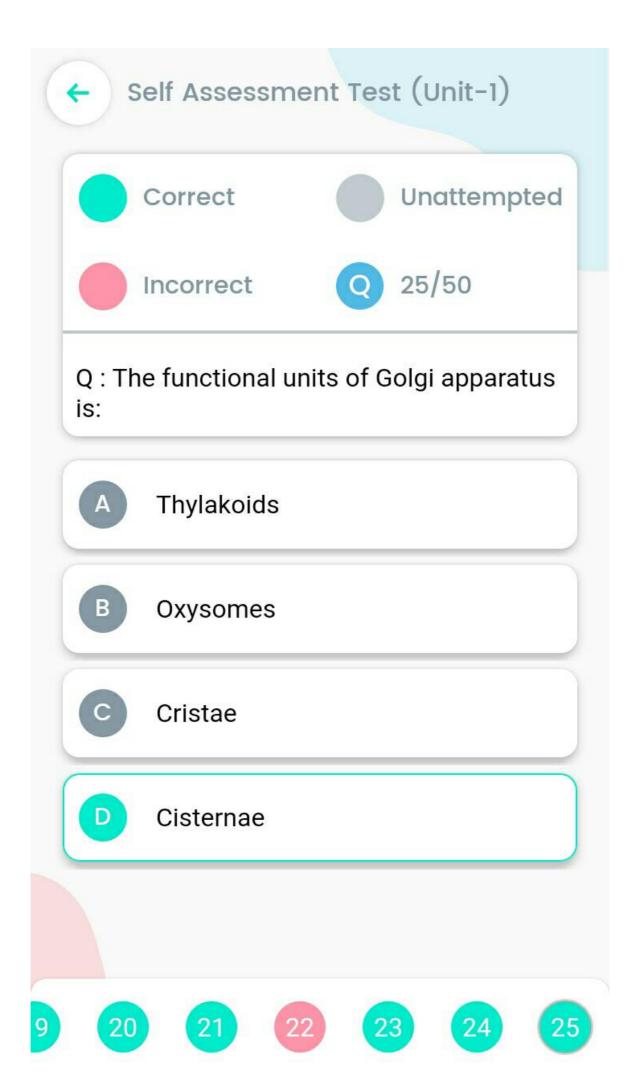


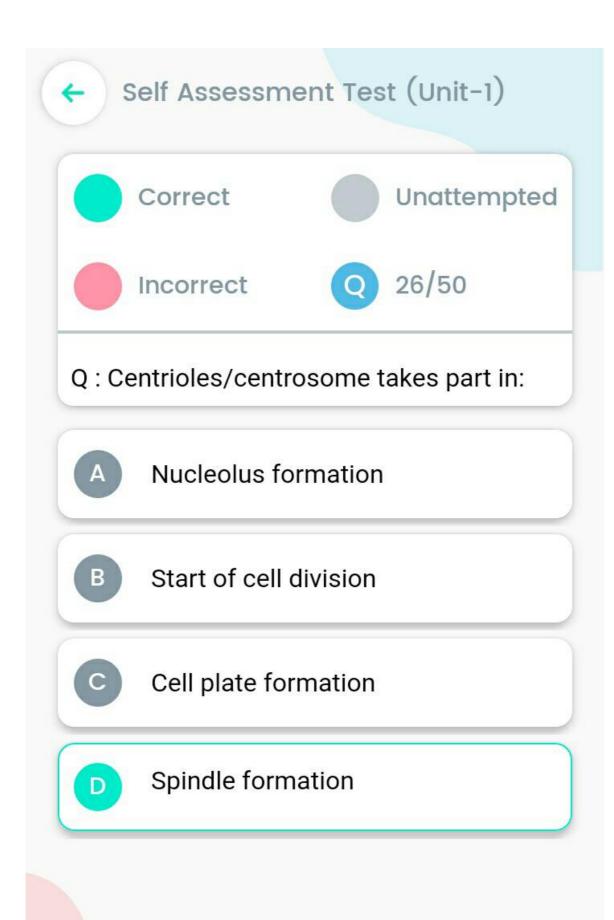






















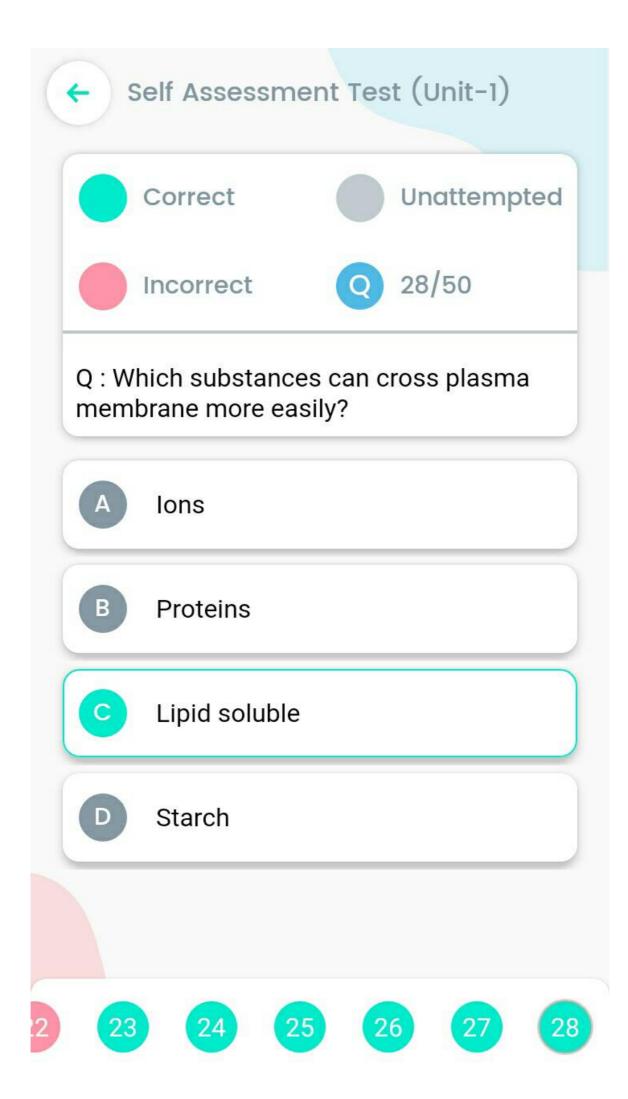


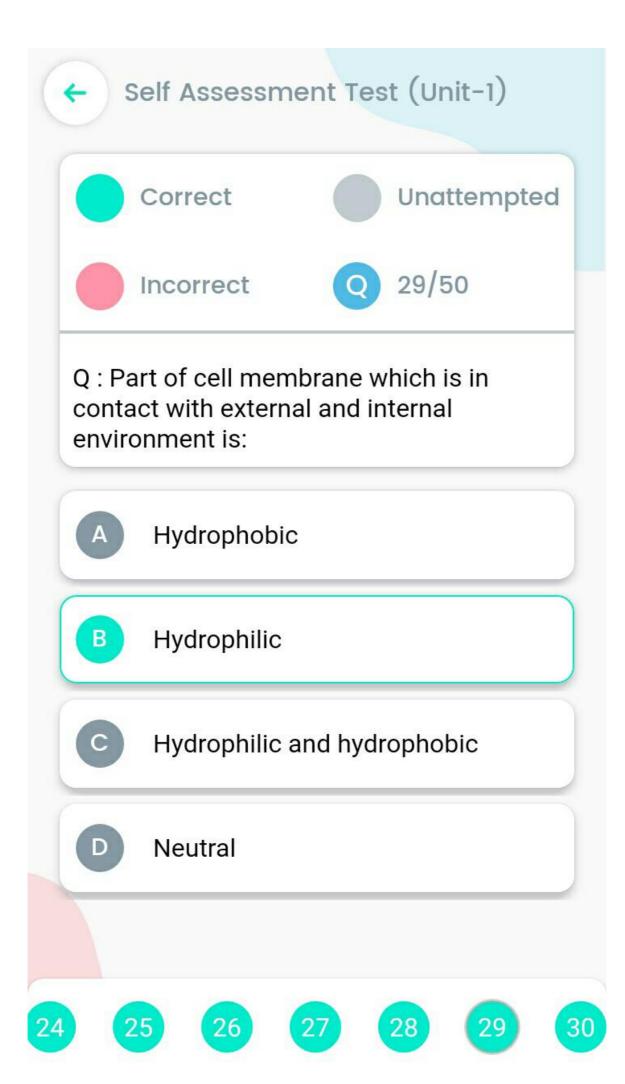


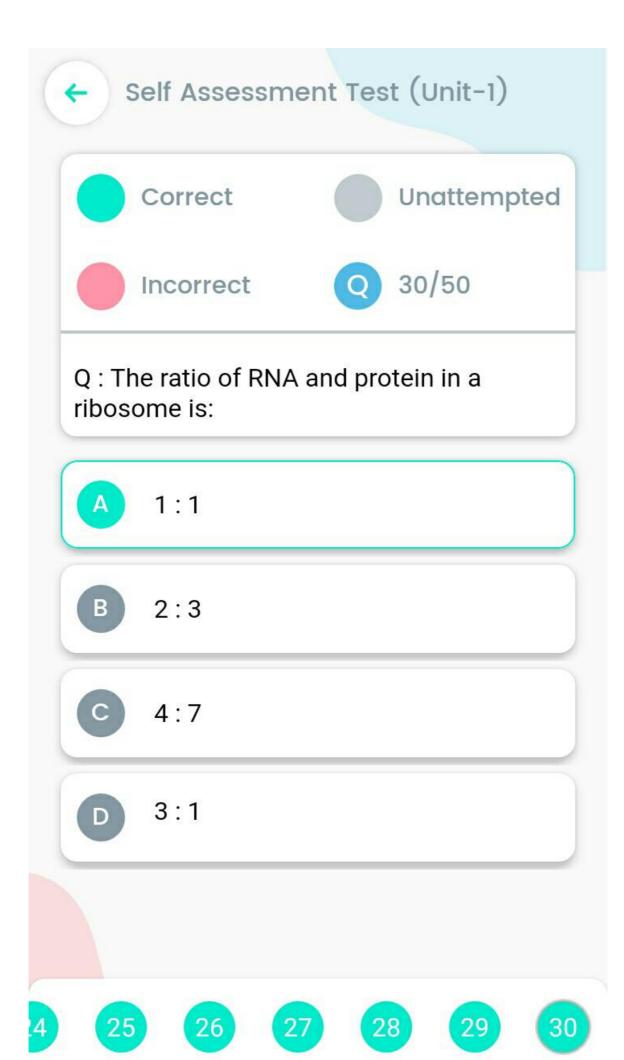
Incorrect Q 27/50

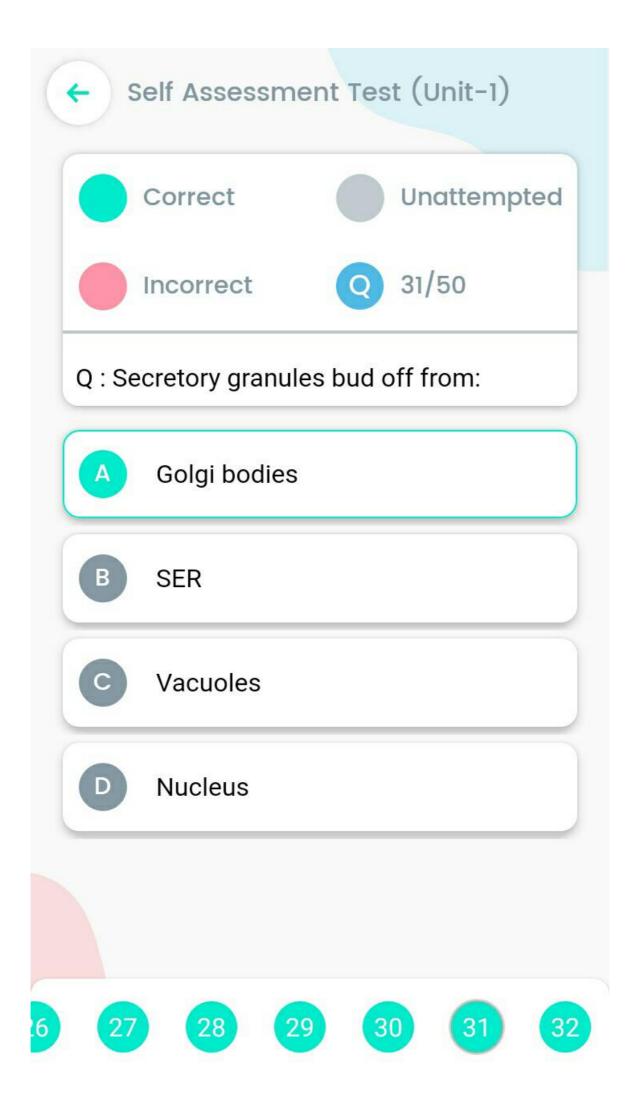
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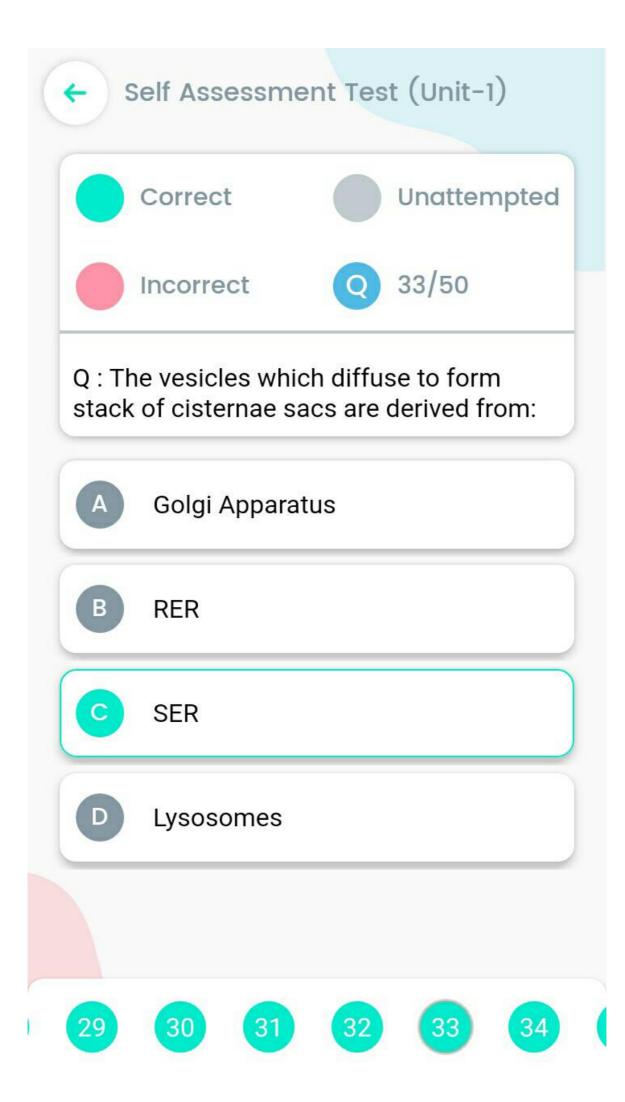


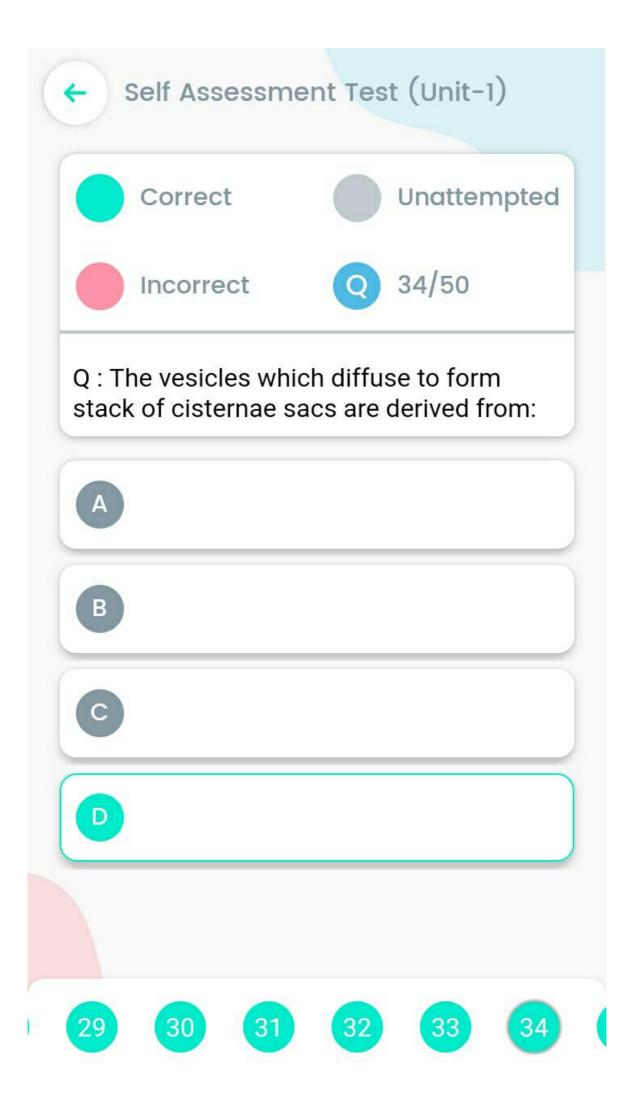


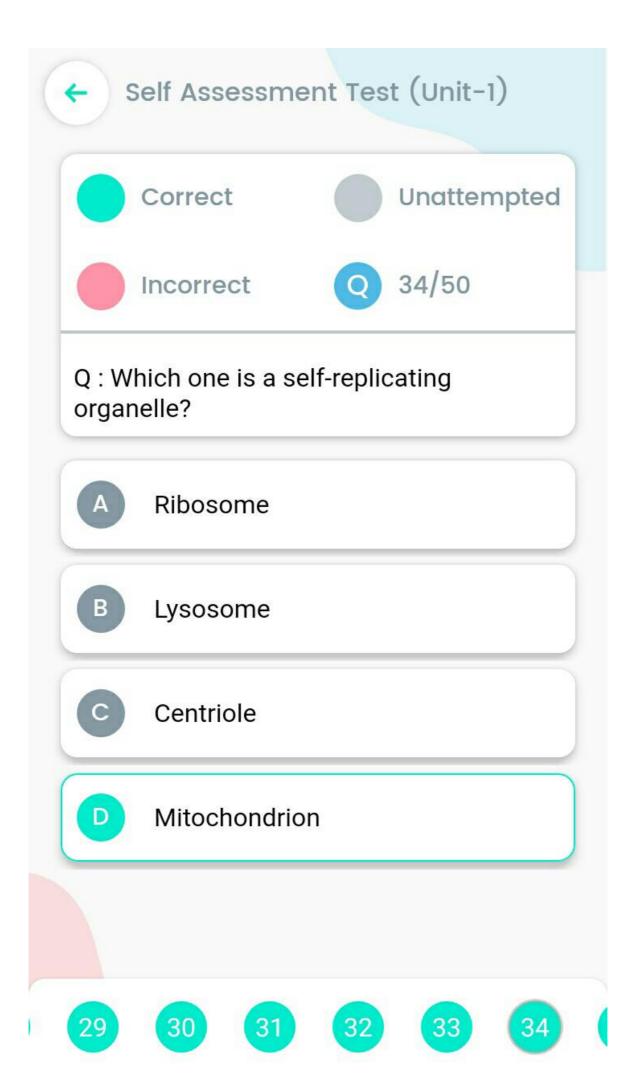
- Correct Unattempted
- Incorrect Q 32/50

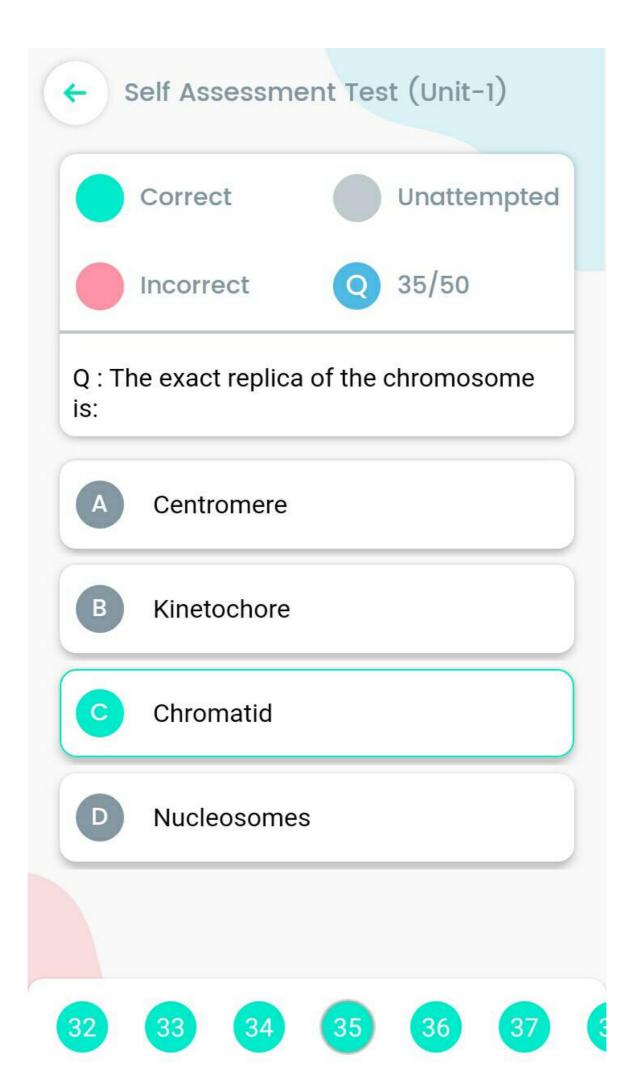
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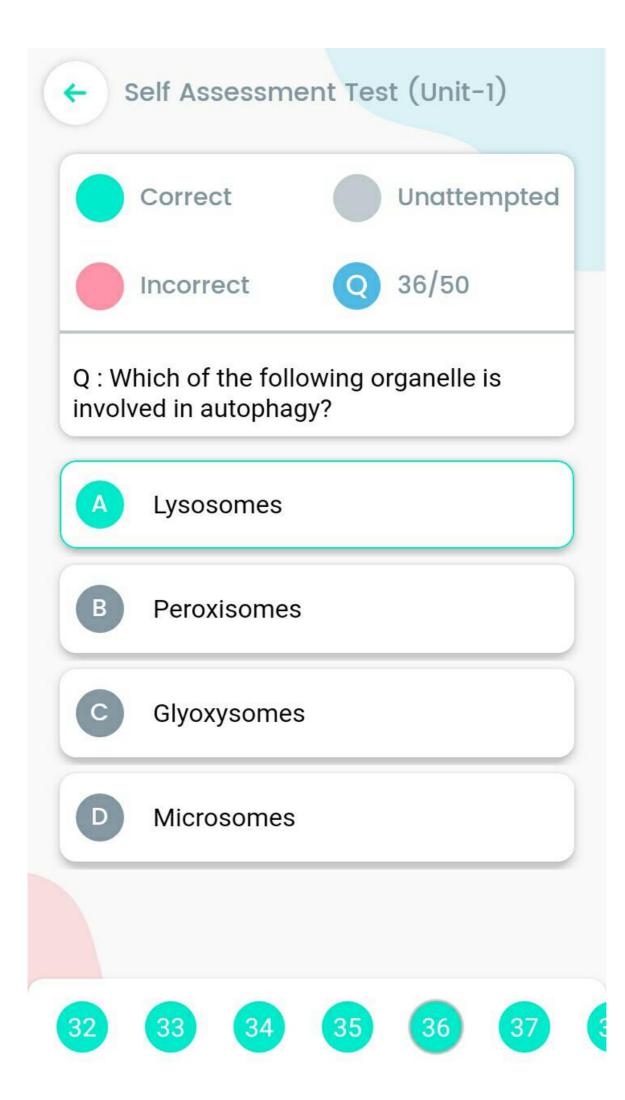
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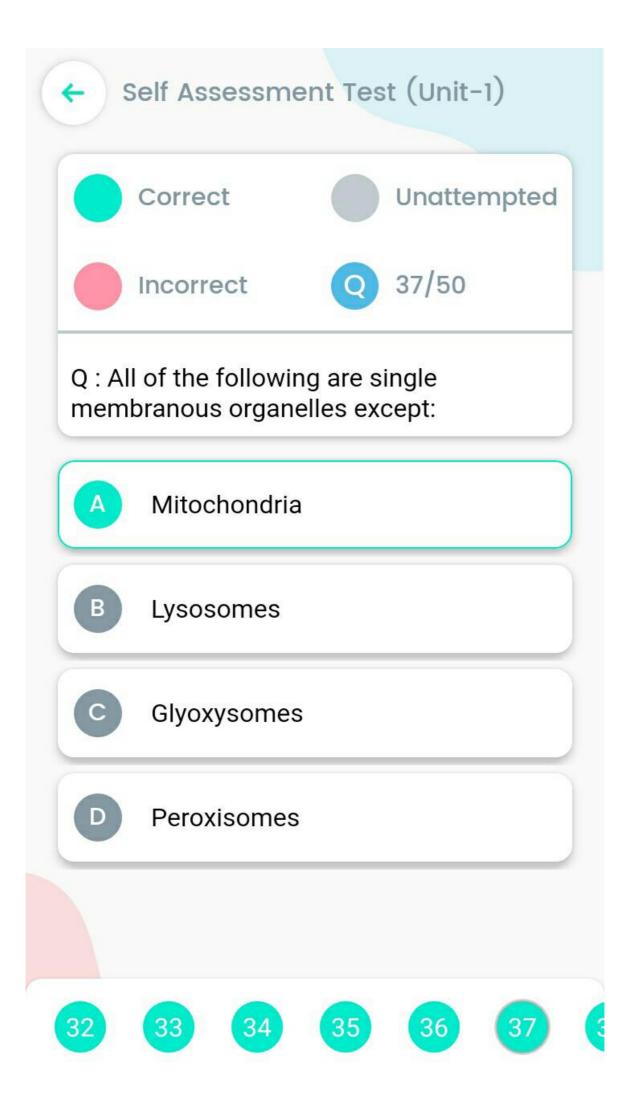


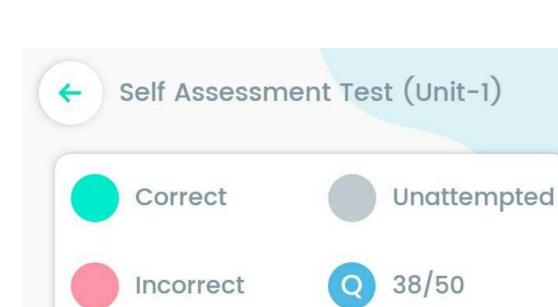












- Q: Lysosomes are most abundant in:
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