

## Biology - FSC Part 1 Biology English Medium Chapter 4 Preparation

Q1. What are ribosomal sub units? How their attachment is controlled?

**Ans 1:** Each eukaryotic ribosome consists of two subunits. The larger subunits sediments at 60S, while smaller subunit sediments at 40S. The two subunits on attachment with each other forms 80A particle. This attachment controlled by the presence of magnesium ions.

Q2. What is the role of centriole?

**Ans 1:** Just before a cell divides, its centrioles duplicate and one pair migrates to the opposite side of the nucleus. The spindle form between them. Centrioles play important role in the location of furrowing during cell division and help in the formation of cilia and flagella.

Q3. Compare primary cell with secondary wall.

**Ans 1:** Primary wall: The primary wall is composed of cellulose and some deposition of pectin and hemicellulose. Cellulose molecule are arranged in a criss cross manner. The primary wall is true and develops in newly growing cells.

**Ans 2:** Secondary wall: The secondary wall is formed inner to primary wall and comparatively thick and rigid. Chemically it is made up of inorganic salts, silica, waxes, cutin and lignin.

Q4. What is nucleolus? Give its function.

**Ans 1:** It is darkly stained body within the nucleus and is without any membranous boundary to separate it from the rest of the nuclear material.  
The ribosomal RNA is synthesized and stored in the n.

Q5. Give important functions of cytoplasm.

**Ans 1:** 1. It is center of great metabolic activities like proteins synthesis and glycolysis.  
2. It acts as strong house of chemicals.  
3. Several cell organelles are present in the cytoplasm.

Q6. Give two functions of cytoplasm.

**Ans 1:** Storage house of biomolecule: The most important function of cytoplasm is to act as storage house of biomolecule.  
Site for metabolic process: It is also a site for metabolic processes like glycolysis.

Q7. Define Tay-Sach's disease.

**Ans 1:** It is caused by the absence of an enzyme that mainly involved in catabolism of lipids. The accumulation of lipids in brain cells leads to mental retardation and even death.

---

Q8. What is "Omnis Cellula a Cellula" who proposed it?

**Ans 1:** It is a german term which means "New cells are formed from pre existing living cells" Rudolf Virchow proposed it.

---

Q9. How many types of endoplasmic reticulum are present?

**Ans 1:** There are two types of ER.

1. Rough endoplasmic reticulum
  2. Smooth endoplasmic reticulum.
- 

Q10. Give salient features of cell theory.

**Ans 1:** 1. Cell is structural and functional unit of living organism.

2. All organisms are composed of cells and cell products, some of them are unicellular and some are multicellular.

3. New cell arise from pre-existing cell.

---