

# PRACTICE QUESTIONS

## Chapter 3

**Prokaryotic cells are characterized by having:**

- A. No membrane-bound organelles**
- B. No nucleus**
- C. DNA in an unbound region called the nucleoid**
- D. All of the above**

**Which of the following is not considered part of the endomembrane system?**

- A. Nuclear envelope**
- B. ER**
- C. Golgi apparatus**
- D. chloroplast**

**Which of the following structures is common to plant *and* animal cells?**

- A. Chloroplast**
- B. Mitochondria**
- C. wall made of cellulose**
- D. Tonoplast**

**Which of the following are not in animal cells?**

- A. Chloroplast**
- B. Central Vacuole**
- C. Cell wall**
- D. All of the above**

**Which of the following is present in a prokaryotic cell?**

- A. Mitochondrion**
- B. Ribosome**
- C. Nuclear envelope**
- D. Chloroplast**

**Chromatin is:**

**A. DNA+ protein**

**B. RNA+ protein**

**C. DNA**

**D. RNA**

**Nuclear envelope**

- A. surrounds nucleus**
- B. composes of two layers**
- C. Has pores for nuclear traffic**
- D. all of the above**



**Which cellular organelle contains enzymes that are considered digestive?**

**A. Golgi Apparatus**

**B. Lysosomes**

**C. Nucleus**

**D. Ribosomes**

**Most of the green colour of plants is due the presence of**

- A. a pigment called Carotene**
- B. a pigment called Chlorophyll**
- C. a nucleic acid called DNA**
- D. a sugar called cellulose**

**The extracellular matrix in animal cell membrane is made of**

**A. Cellulose**

**B. collagen fibers**

**C. Chitin**

**D. all of the above**

**What controls the entry and exit of molecules in cell?**

**A. Nucleus**

**B. Ribosomes**

**C. DNA**

**D. Plasma membrane**

**Both mitochondria and chloroplasts possess a**

- A. single membrane**
- B. double membrane**
- C. three-layered membrane**
- D. four-layered membrane**

**The nucleolus is the site of synthesis for**

- A. Proteins**
- B. lipids**
- C. rRNA**
- D. all of the above**

**The powerhouse of a cell is the**

- A. Plastids**
- B. Mitochondria**
- C. Golgi apparatus**
- D. Lysosomes**

**Plant cell wall is mainly made up of \_\_\_\_\_.**

- A. Collagen**
- B. Cellulose**
- C. Starch**
- D. Nucleic acid**



**Organelle called the membranes factory for the cell?**

**A. Lysosomes**

**B. Rough ER**

**C. Smooth ER**

**D. Cell wall**

is not a component of the endomembrane system?

**A. Plasma membrane**

**B. Lysosome**

**C. Mitochondria**

**D. Golgi apparatus**

**Organelle that accounts for more than half of total cell's membranes is?**

**A. Endoplasmic reticulum**

**B. Lysosome**

**C. Plasma membrane**

**D. Golgi apparatus**

**One of Smooth ER functions**

- A. Lipids synthesis**
- B. Protein synthesis**
- C. Making membrane**
- D. None of the above**

**Which of the following type of microscope is used to study the external structure of the cell?**

- A. Light Microscope**
- B. Scanning electron microscope**
- C. Transmission electron microscopes**
- D. None of the above**

**"TEM" refers to a photomicrograph taken by a \_\_\_\_\_.**

- A. Light microscope**
- B. Transmission electron microscope**
- C. Scanning electron microscope**
- D. Scanning-probe microscope**

**Which of the following organelles is most easily observed with a light microscope?**

- A. Ribosomes**
- B. Golgi bodies**
- C. Nucleus**
- D. Lysosomes**

\_\_\_\_\_ are the site of protein synthesis in the cytoplasm.

- A. Smooth endoplasmic reticulum
- B. Golgi apparatus
- C. Ribosomes
- D. Lysosomes



function(s) include the packaging, storage, and distribution of molecules produced by the ER.

- A. Golgi apparatus
- B. Rough endoplasmic reticulum
- C. Smooth endoplasmic reticulum
- D. mitochondria

**Which statement is INCORRECT about cilia and flagella ?**

- A. They are extracellular structures**
- B. They are made of microtubules**
- C. They have a rotational movement**
- D. All**

**In an animal cell, DNA may be found in the**

- A. Nucleus only.**
- B. Nucleus and mitochondria.**
- C. Nucleus and chloroplasts.**
- D. None of the above**

**Found only in eukaryotic cells.**

- A. Flagella**
- B. Cilia**
- C. A and B**
- D. None of them**

# ANSWERS

1. D
2. D
3. B
4. D
5. B
6. A
7. D
8. B
9. B
10. B

11. D
12. B
13. C
14. B
15. B
16. B
17. C
18. A
19. A
20. B

21. B
22. C
23. C
24. A
25. C
26. B
27. B