Chapter 4
Cell Structure and Signal Transduction

1. Which are examples of transmembrane transport between different subcellular compartments?
    (A) Transport from the stroma into thylakoid space
    (B) Transport from the cytoplasm into the lumen of the endoplasmic reticulum
    (C) Transport from the endoplasmic reticulum into the Golgi complex
    (D) Transport from mitochondrial intermembrane space into the mitochondrial matrix

2. Function of Golgi apparatus in animal cell
    (A) sorting
    (B) endocytosis of melanin granules
    (C) exocytosis of thyroxine hormone
    (D) packaging

3. The size of nucleus
    (A) directly proportional to that of cytoplasm
    (B) depends on the number of chromosomes
    (C) depends on the half of the volume of cell
    (D) depends on the ploidy level of the cell

4. Which of the sites have ribosomes?
    (A) Nucleus
    (B) Mitochondria
    (C) Chloroplast
    (D) Cytoplasm

5. Diseases associated with the lysosome malfunctioning are
    (A) Tay-sachs disease
    (B) I-cell disease
    (C) Pompe's disease
    (D) Marfan syndrome

6. What are the features that differentiates cilia from flagella?
    (A) Cilia are short compare to flagella
    (B) Flagella are less in number compared to cilia
    (C) Cilia found in eukaryotes and prokaryotes
    (D) Flagella move in an oar-like style while cilia move in breast stroke

7. Which out of the following are mediated transport?
    (A) Facilitated diffusion
    (B) Primary active transport
    (C) Secondary active transport
    (D) Simple diffusion

8. Mark the hormones, which can be inhibited by the effect of somatostatin.
    (A) GH
    (B) TSH
    (C) Dopamine
    (D) Glucagon

9. Postsynaptic dopamine antagonists used for the treatment of
    (A) schizophrenia
    (B) benign prostatic hyperplasia
    (C) psychosis
    (D) androgenic alopecia

10. The limbic system includes the
    (A) amygdala
    (B) pons
    (C) hypothalamus
    (D) hippocampus

Answer Key
1. **(A), (B), (D)**
2. **(A), (C), (D)**
3. **(A), (B), (D)**
4. **(B), (C), (D)**
5.   **(A), (B), (C)**
6. **(A), (B), (C)**
7. **(A), (B), (C)**
8. **(A), (B), (D)**
9. **(A), (C)**
10. **(A), (C), (D)**