

Answer all the questions .

1. Select the correct answer to the questions from the given option (Write the correct answer only): [5]

i. Which of these scientists added 'all cells arise from pre-existing cells' to cell theory?

- a) Theodor Shwann
- b) Rudolf Virchow
- c) Edward Jenner
- d) Matthias shleiden

ii. Which of these sets of organelles are present in both animal and plant cells?

- a) Chromosome, centrosome and chloroplast
- b) Vacuoles, chromosome, cellulose
- c) Chromosome, ribosomes, nucleosomes
- d) Xanthophyll, haemoglobin, carotene

iii. Which of these organelles are also called 'protein factories' of cell?

- a) Mitochondria
- b) Ribosome
- c) Endoplasmic Reticulum
- d) Golgi bodies

iv. The structure of a cell is always suited to its \_\_\_\_\_.

- a) *Origin*
- b) Organism
- c) Life span
- d) Function

v. Which of these is an example of a prokaryotic cell ?

- a) Human
- b) Bacterium
- c) Mango
- d) Amoeba

2. Name the following / Answer in brief. [1X10=10]

- a) Inward finger like processes present in a mitochondria.
- b) Define protoplasm. Write a function of a 'semi-permeable' membrane.
- c) Differentiate between the ribosomes and nucleus of a prokaryotic and a eukaryotic cell .
- d) The two plant pigments that are not found in plastids.
- e) The two organelles besides nucleus with their own DNA.
- f) Expand the abbreviation 'DNA'.
- g) Write location of centrosome and its function.
- h) Write any one function of 'dictyosome' and one of mitochondria.
- i) How does a nucleosome help in protein synthesis?
- j) Name any two shapes in which human cells are found citing one example of each.

2. Draw a bacterial cell and label any 6 parts in it. Write two ways in which it is different from a human cell. [5]

\*\*\*\*\* ALL THE BEST \*\*\*\*\*