Biology

Chapter - Cell Division

Worksheet No. 1

I. State whether the following statements are true or false:-

i) Meiosis leads to recombination of character.

ii) Germ cells divide meiotically to produce gametes.

iii) Mitosis results in four daughter cells.

iv) Somatic cells of multicellular organisms arise from a single cell by meiosis.

v) Mitosis is the type of cell division occurring in the cells of injured parts of the body.

II. Give the biological term for the following:-

i) The stage in mitosis when the nucleolus starts disappearing.

ii) Division of nucleus.

iii) The phase of cell cycle during which the cell grows.

iv) The phase of the cell cycle in which DNA replication takes place.

v) The stage at which chromosomes reach the opposite poles.

vi) The shortest phase of mitosis.

III. Draw a well-labelled diagram to show the anaphase stage of mitosis in a plant cell having Four chromosomes.

IV. i) Draw a neat labelled diagram to show the metaphase stage of mitosis in animal cell Having ‘6’ chromosomes.

ii) How many daughters cells are formed at the end of meiosis?

iii) With reference to cell division explain the following terms:

1. Chromatid 2. Centromere 3. Haploid

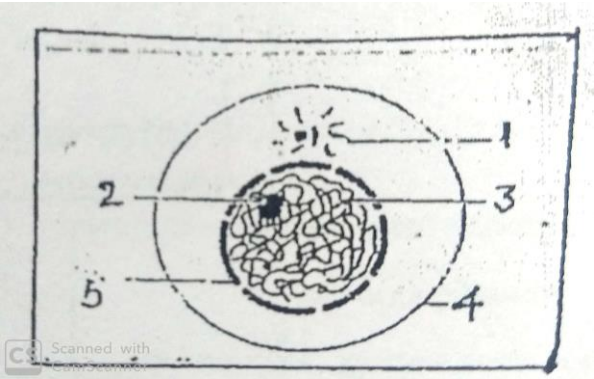
iv) Name the type cell division that occurs during:-

i) Growth of shoot

ii) Formation of pollen grain

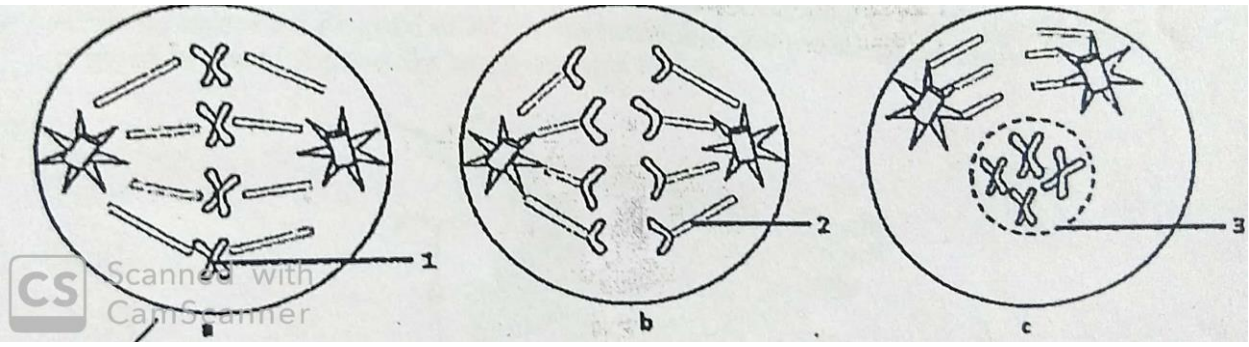
iii) Repair of worn-out tissues

V. The figure shown below is of a cell. Study the figure and answer the following questions:-



i) Identify the stage of the cell cycle.
ii) Label the parts 1,2,3,4 and 5.
iii) Write any two characteristics of this phase.

VI. Stages of cell division are given below. Study the diagram and answer the questions that follow:-



i) Identify the stages of cell division a, b and c.
ii) Arrange the stages in the correct sequence using the alphabets given under them.
iii) How many daughter cells are formed during this type of cell division?
iv) Name the parts labelled 1, 2 and 3.
v) Write the names of anyone pair of compatible nitrogenous bases found in the DNA molecule.