Name: _____	**Subject:** Biology	**Class:** 9th	**Time:** 60 minutes	Total Marks:	**30**
Chapter No.5	**MJDexpert.com**			Obtained marks	

Objective Section

Q.1 Encircle the correct answer. (10x1=10)

1. In which stage of the cell cycle is each chromosome duplicated and consists of two chromatids?
   A) G1 Phase B) S Phase C) M Phase D) G2 Phase
2. Cells die each day by apoptosis in an adult human:
   A) 50-70 billion B) 50-90 billion C) 50-80 billion D) 50-100 billion
3. The longest phase of the cell cycle is:
   A) Interphase B) Prophase C) Metaphase D) Anaphase
4. The cells of _____ do not enter the G0 phase.
   A) Liver B) Kidneys C) Nerves D) Epithelial
5. At what stage of mitosis does the cell's nuclear membrane break?
   A) Prophase B) Metaphase C) Anaphase D) Telophase
6. Sea star regenerates its lost arm through:
   A) Budding B) Meiosis C) Mitosis D) Fragmentation
7. The process of formation of new tumors is called:
   A) Synapsis B) Crossing Over C) Metastasis D) Regeneration
8. Who discovered meiosis?
   A) August Weismann B) Oscar Hertwig C) Walther Flemming D) Golgi
9. **Drosophila melanogaster** is the scientific name of:
   A) Bat B) Mosquito C) Fruit fly D) Sparrows
10. Complete set of spindle fibers is called:
    A) Chromatin B) Kinetochore C) Mitotic spindle D) Cleavage

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Subjective Section

Q.2 Write short answers to the following questions: (10x2=20)

i. Define cell cycle. Name its two major phases.
ii. Differentiate between karyokinesis and cytokinesis.
iii. Differentiate between apoptosis and necrosis.
iv. How does cytokinesis occur in an animal cell?
v. Differentiate between somatic cells and germline cells.
vi. Differentiate between chromatin and chromosomes.
vii. Define mitosis and meiosis.
viii. Differentiate between benign and malignant tumors.
ix. What is meant by alternation of generation?
x. Define synapsis and crossing over.