



**ST. LAWRENCE HIGH SCHOOL**  
**A JESUIT CHRISTIAN MINORITY INSTITUTION**



**SOLUTION – 7**

**Class: X**

**Sub: Life Science**

**Date: 05.07.2021**

**Topic: Ch 2 Continuity of Life: Cell cycle and Mitosis**

**F.M. : 15**

**Choose the correct option:**

**(1x15=15)**

1. What functions are performed by a cell during interphase?  
a) Constant synthesis of RNA b) Production of protein c) Increase in size **d) All of these**
2. Which phase acts as a temporary or permanent resting period in cell cycle?  
**a) Gap 0 (G<sub>0</sub>)** b) Gap 1 (G<sub>1</sub>) c) S d) Gap 2 (G<sub>2</sub>)
3. G<sub>1</sub> checkpoint ensures that everything is ready for \_\_\_\_ synthesis.  
a) protein b) RNA **c) DNA** d) none of these
4. What functions does G<sub>2</sub> checkpoint perform?  
a) Determines if the cell can proceed to enter M phase and divide b) Ensures that all chromosomes have been replicated accurately without any damage or mistake **c) a and b**  
d) None of these
5. Uncontrolled cell division can lead to formation of \_\_\_\_\_.  
a) muscle **b) tumour** c) tissue d) growth
6. Which type of animal cells show mitosis?  
a) Meristematic, embryonic and stem cells b) Embryonic, germinal epithelium and meristematic cells **c) Germinal epithelium, embryonic and stem cells** d) None of these
7. Anastral spindle formation is seen in \_\_\_\_\_.  
**a) plants** b) animals c) algae d) fungi
8. \_\_\_\_\_ is marked by the appearance of spindle and arrangement of chromosomes on the equator of the spindle  
a) Prophase **b) Metaphase** c) Anaphase d) Telophase
9. Simultaneous splitting of chromosomes at the centromeres creates \_\_\_\_\_.  
**a) daughter chromosome** b) sister chromatid c) kinetochores microtubule d) none of these
10. \_\_\_\_\_ is the division of cell cytoplasm into two separate cells.  
a) Meiosis b) Mitosis c) Karyokinesis **d) Cytokinesis**
11. Mitosis helps organisms in the \_\_\_\_\_ reproduction  
a) sexual **b) asexual** c) vegetative d) none of these
12. What are the significances of mitosis?  
a) Growth and development b) Replacement of old cells c) Regeneration **d) All of these**

13. Mitosis maintains equilibrium in the amount of \_\_\_\_\_ contents.  
a) DNA b) RNA **c) a and b** d) protein
14. The cells undergoing mitosis are called \_\_\_\_\_.  
**a) mitocytes** b) somatic cells c) germ cells d) cancer cells
15. Cytokinesis usually occurs in \_\_\_\_\_ along with the formation of daughter nuclei.  
a) prometaphase b) metaphase c) prophase **d) telophase**

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