



Indian School Al Wadi Al Kabir

Unit Test (2026-2027)

Class: XI
Date: 19.05.2026

Sub: Biology (044)
Set - II

Max. Marks: 30
Time: 1 Hour

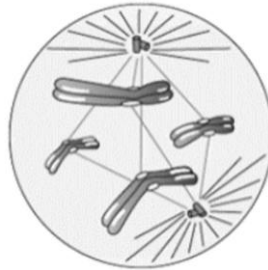
General Instructions:

Read the following instructions carefully.

- (i) All questions are compulsory.
- (ii) The question paper has five sections and 14 questions.
- (iii) Section A has 6 questions of 1 mark each; Section B has 3 questions of 2 marks each; Section C has 3 questions of 3 marks each; Section D has 1 case-based question of 4 marks and Section E has 1 question of 5 marks.
- (iv) There is no overall choice. However, internal choices have been provided in some questions. A student must attempt only one of the alternatives in such questions.
- (v) Wherever necessary, neat and properly labelled diagrams should be drawn.

SECTION – A		
Q. No.	QUESTION	Marks
1.	Which of the following statements is wrong? A. Leucoplasts have a double membrane boundary, DNA and their own protein-synthesising machinery but no pigments. B. The centrioles form the basal body of cilia and flagella. C. Lysosomes are double membrane-bound vesicles which contain hydrolytic enzymes. D. The Golgi cisternae are concentrically arranged near the nucleus.	1
2.	A common characteristic feature of plant sieve tube cells and most mammalian erythrocytes is: A. Absence of mitochondria B. Presence of cell wall C. Presence of haemoglobin D. Absence of nucleus	1
3.	Synapsis occurs between A. A male and a female gamete B. mRNA and ribosomes C. Spindle fibre and Centromere D. Two homologous chromosomes	1
4.	A bivalent consists of A. Four chromatids and four centromeres B. Four chromatids and two centromeres C. Two chromatids and two centromeres D. Two chromatids and one centromere	1
Question No. 5 to 6 consist of two statements – Assertion (A) and Reason (R) . Answer these questions by selecting the appropriate option given below:		

	(a) Both A and R are true, and R is the correct explanation of A. (b) Both A and R are true, and R is not the correct explanation of A. (c) A is true, but R is false. (d) A is false, but R is true.	
5.	Assertion (A): Cell walls are also present in fungi and bacteria, in addition to plants. Reason (R): All cell walls are made up of cellulose.	1
6.	Assertion (A): The Golgi apparatus remains in close association with endoplasmic reticulum. Reason (R): Materials from the endoplasmic reticulum that have to be packaged in the form of vesicles fuse with the cis face of the Golgi apparatus and move towards the maturing face.	1
SECTION - B		
7.	<u>Attempt either option A or B.</u> A. The prokaryotic cell, specifically bacteria, has certain specialised membrane structures formed by the extensions or infoldings of the cell membrane. They serve certain specific functions. i. What term is given to these infoldings? ii. Mention any two functions which they perform in the cell. OR B. What is meant by the cytoskeleton of a cell? Mention any two functions it performs.	2
8.	Draw a well-labelled diagram of mitochondria.	2
9.	Why is meiosis known as 'Reduction Division'? What is its significance?	2
SECTION - C		
10.	Leucoplasts are colourless plastids. Name and mention the storage products of the different types of leucoplasts.	3
11.	<u>Attempt either option A or B.</u> A. i) Give one difference between acrocentric and telocentric chromosomes. ii) How do neutral solutes move across the plasma membrane? Can the polar molecules also move across it in the same way? If not, how are these transported across the membrane? OR B. i) What are plasmodesmata? What is their function? ii) Ribosomes in prokaryotes are of the 70 S type. What does "S" stand for, and what does it measure?	3
12.	i) Label the given diagram and determine the stage and any two features of this stage.	3



ii) How does cytokinesis in plant cells differ from that in animal cells?

SECTION - D

13.	<p>The cell cycle, or cell-division cycle, is the sequential series of events that take place in a cell that causes it to divide into two daughter cells. These events include the growth of the cell, duplication of its DNA (DNA replication) and some of its organelles, and subsequently the partitioning of its cytoplasm, chromosomes and other components into two daughter cells in a process called cell division.</p> <p>A. Two key events take place during the S-phase in an animal cell. Name them.</p> <p>B. Write any two differences between the two phases of the cell cycle. <u>Attempt either C or D.</u></p> <p>C. How does the amount of DNA content (C) and the number of chromosomes (N) per cell change during different stages of the cell cycle?</p> <p style="text-align: center;">OR</p> <p>D. What is the G₀ quiescent stage of the cell cycle?</p>	4
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SECTION - E

14.	<p><u>Attempt either option A or B.</u></p> <p>A. What are the various stages of meiotic prophase-I? Enumerate the chromosomal events during each stage.</p> <p style="text-align: center;">OR</p> <p>B. i. Draw neat labelled diagrams of different stages of Mitosis. ii. Why is mitosis called equational division?</p>	5
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All the Best