

# INTERNATIONAL INDIAN SCHOOL – DAMMAM

MODEL EXAMINATION 2012-2013

SUBJECT: BIOLOGY

TIME:3 HOURS

CLASS XI

MAX. MARKS:70

## SET A

**General Instructions:** This question paper consists of four sections **A,B,C** and **D**. Section **A** contain 8 questions of **one** mark each, section **B** is of **10** questions of **two** marks each, Section **C** is of 9 questions of **three** marks each and Section **D** is of **3** questions of **five** marks each.

All questions are compulsory.

There is no overall choice. However, internal choice has been provided in one question of two marks one question of three marks and all the three questions of five marks

Wherever necessary, the diagrams drawn should be neat and properly labeled

### Section A

1. What is Racemose inflorescence? 1
2. Name the organelle of the cell called as Suicidal bag. 1
3. What is conjoint vascular bundle. 1
4. Name the single U shaped bone present at the base of buccal cavity. 1
5. How is peptide bond formed? 1
6. Name the space between lens and retina in the eye. 1
7. What is G<sub>0</sub> phase of cell cycle? 1
8. State the main function of bile juice. 1

### Section B

9. How does cytokinesis in plant cell differ from that of animal cell? 2
10. Write the major rules for the binomial nomenclature. Why they are needed? 2
11. Distinguished between simple epithelium and compound epithelium. 2
12. What are ribosomes? State the function of ribosomes. In what way eukaryotic ribosomes differ from prokaryotic ribosomes?

Or

- What are mesosomes? State any two functions. 2

13. What are the two main differences between cyclic and non cyclic photophosphorylation that occur during photosynthesis. 2
14. Draw the normal ECG. What do components of the PQRST curve write about its significance? 2
15. Differentiate between Uremia and Uricotemia. 2
16. What is fruit? Differentiate between true and false fruit. 2
17. Draw the diagram of Nerve cell and labeled ant four parts. 2
18. What is Hydroponics? Mention its two uses. 2

### Section C

19. What is meant by biological nitrogen fixation? Explain the process of biological nitrogen fixation. What is the role of leg Hb in nitrogen fixation 3
20. Draw the structure of maize grain. 3
21. What is active and passive absorption of minerals across the cell membrane? 3
22. Write the six distinguished features of phylum Echinodermata 3
23. What are nucleosides and nucleotides? Give one example of each. 3
24. Write the three functions of plant growth regulators- Auxins and Ethylene each.

Or

What is arithmetic and geometric growth? Draw the graph showing an ideal geometric growth curve 3

25. Describe the normal breathing in human beings. 3
26. What is a movable joint? Give example of each. 3
27. What is periderm? How is periderm formation take place in dicot stem? 3

### Section D

28. What is the nature of proteins? Describe the primary, secondary, tertiary and quaternary structure of protein.

Or

Describe the Hatch-Salck pathway with the help of schematic representation. 5

29. Mention the different steps of Glycolysis highlighting the places where ATP is consumed or produced.

Or

What is photorespiration? Describe the process in detail and link it with Calvin cycle. 5

30. Draw the internal diagram of heart. Explain the initiation of heart beat.

Or

Draw the diagram of a Nephron . Explain the hormonal control of kidney functions.5