

SECOND TERMINAL EXAMINATION, 2014

BIOLOGY

Class - XI

M.M. : 70

Time : 3½ hrs.

Date – 05.03.2014

General Instructions:

- All the questions are compulsory.
- This Question paper consists of **four Sections** A, B, C and D. Section A contains **8 Questions** of **1 mark** each. Section B contains **8 questions** of **2 marks** each. Section C contains **7 questions** of **3 marks** each. Section D contains **3 questions** of **5 marks** each.
- Question No. **27** is **OTBA** question on theme II carrying **10 marks**..
- There is no overall choice. However, internal choices are provided in one question of two marks, one question of three marks and three questions of five marks. You have to attempt only one of the alternatives in such questions.
- Draw neat and labelled diagrams, wherever necessary.

SECTION A

- Q.1 Name the highest and lowest taxonomic category.
- Q.2 Give two distinctive features of kingdom Monera.
- Q.3 Differentiate between Racemose and cymose inflorescence.
- Q.4 What is crossing over?
- Q.5 Give two examples of secondary meristem.
- Q.6 Give two examples of Red algae.
- Q.7 Where is cuboidal epithelium found in man?
- Q.8 Name the phylum to which these organisms belong –
- a) Ascaris b) Starfish c) Myxine d) Sponge

SECTION – B

- Q.9 Draw the Zwitterionic form of Amino acid. Name a basic and acidic amino acid.
- Q.10 Draw a labelled diagram of Metaphase of mitosis.
- Q.11 Explain the following terms :
- a) water potential b) pressure potential
- Q.12 What is the role of Boron and Copper in plants?
- Q.13 Draw a labelled diagram of electron transport chain.
- Q.14 Give the importance of Auxin in plants.
- Q.15 Describe Expiration and Inspiration in man.
- Q.16 Differentiate between the following :
- a) blood and lymph
- b) Systemic and pulmonary circulation

OR

Draw a labelled diagram of cross section of kidney.

SECTION – C

- Q.17** Explain sliding filament theory in muscles.
- Q.18** Give the function of the following hormones.
a) ACTH b) ADH c) Glucagon d) Oestrogen
- Q.19** Draw a cross section of eye.
- Q.20** Explain symplast and Apoplast pathway of transport.
- Q.21** Give the function of the following :
a) Trypsin b) Rennin c) Sucrase d) HCl
e) Lipase f) ptylin
- Q.22** Explain cardiac cycle in man with diagram.
- Q.23** Describe EMP pathway.

OR

Explain the following terms in short

- a) F-actin b) Rubisco c) Master gland

SECTION – D

- Q.24** Explain Meiosis with labelled diagrams.

OR

Describe the counter current mechanism in kidney.

- Q.25** Explain transmission of nerve impulse across a synapse.

OR

Explain Kreb's cycle.

- Q.26** Describe the Life cycle of a fern.

OR

Give the function of the following :

- a) Tracheids and Vessels b) Plasmolysis c) Nitrogenase
d) Gastrin e) Sarcomere

- Q.27 Section – Open Text – Based assessment (OTBA)**

Instructions :

- These questions are based on theme-II provided to you by the Board.
 - The suggested word limit for the questions is 100-120 words. However, depending on the question, your answer could be shorter/longer. It is important to present your views, arguments and conclusions logically, coherently in your own language; based on the concepts learnt during teaching learning sessions till class IX, their applicability with respect to the open test material and your own awareness of the given theme.
- a) India is known for its rich forests and biological diversity. Explain how forests play a vital role in economic and industrial development of our country. (5)
- b) Is constructing roads through dense forest beneficial? Write your views on this. (5)

