

B. N. Bhandarkar College of Science, Thane.
Junior College
F.Y.J.C. 1st Term Examination, October 2014
Subject – Biology I and II

Day: Thursday
Date: 09/10/2014

Time: 11.00 am to 01.00 pm
Max. Marks: 50

- Note: 1) Answers to the two sections should be written in two separate answer papers.
2) Draw neat, proportionate labelled diagrams wherever necessary.
3) Figure to the right indicates full marks.
4) All questions are compulsory.

Section I

Q.1 Select and write appropriate answer from the given alternatives for each question: **05**

1. Synapsis is a characteristic of of _____
a) Diplotene b) Leptotene c) Pachytene d) Zygotene
2. Separation of the homologous chromosomes during meiosis occurs at _____
a) Anaphase – I b) Anaphase – II c) Metaphase – I d) Metaphase – II
3. Tobacco mosaic disease in plants is caused _____
a) Bacteria b) Fungi c) Slime moulds d) Viruses
4. In fungi, cell – wall is made up of _____
a) Cellulose b) Chitin c) Peptidoglycan d) Muramic acid
5. The algal component of lichen is known as _____
a) Phycobiont b) Mycobiont c) Ascolichen d) Basidiolichen

Q.2 A. Answer in *one sentence*: **05**

1. Give the examples of Archaeobacteria.
2. Define the term 'coenocytic hyphae' in Fungi.
3. What is cellular pool?
4. Enlist factors affecting enzyme activity.
5. Give the examples of 'Basidiomycetes'.

B. Sketch and label 'Metaphase'. **02**

C. Write a short note on (Any One) **02**

- a) Disaccharides b) Fruticose lichen

Q.3 A. Attempt *any two* of the following: **04**

- a) Define the term 'Binomial nomenclature'. Give its two rules.
- b) With a neat and labelled diagram, describe the pachytene stage of prophase - I.
- c) Describe the general characteristics of kingdom 'protista'.
- d) Give the roles of proteins.

B. Sketch and label 'Aqaricus' **02**

Q.4 Explain the following in brief (*any one*): **05**

- a) With neat and labelled diagram, describe the cell cycle.
- b) Describe the general properties of viruses. Enlist its types with examples.

Section II

- Q.1** **Select the correct answer from the given options and rewrite the sentence:** **05**
1. The term cell has been derived from the latin word _____
a) Cellula b) Celluca c) Cellulose d) Cutin
 2. Balanoglossus is also known as _____
a) Acorn worm b) Flat worm c) Round worm d) Tape worm
 3. In human skull, coronal suture is present between _____
a) Parietal & Occipital bones b) Two Parietal bones
c) Frontal and Parietal bones d) Temporal and Parietal bones
 4. Which of the following is the exocrine gland?
a) Adrenal b) Tear c) Thymus d) Thyroid
 5. In honey bee, respiration takes place by _____
a) Book gills b) Book lungs c) Gills d) Trachea

- Q.2** **A. Answer the following in one sentence:** **05**
1. Define the term – symmetry.
 2. What are plasmids?
 3. Which type of cells secrete histamine?
 4. How many bones are present in vertebral column of an adult human being?
 5. Enlist the types of proteins of plasma membrane.
- B. Sketch and label ventral view of Earthworm.** **02**
- C. Answer the following (Any One):** **02**
1. Describe the structure of ciliated epithelium.
 2. Write a note on Mesosomes.

- Q.3** **A. Answer the following (Any Two):** **04**
1. Give the functions of plasma membrane in prokaryotic cell.
 2. Distinguish between Male & Female Ascaris.
 3. Write the peculiar characters of Star fish.
- B. Sketch and label adipose connective tissue.** **02**

Q.4 **Write the distinguish characters of phylum – Mollusca.** **05**

OR

Q.4 **Describe the location, structure and function of Hyaline cartilage.** **05**

