



**Progressive Education Society's
Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16
(Autonomous)
External Examination – January 2023
Faculty: Science and Technology**

Semester: I

Program: B.Sc. Blended

Program (Specific): B.Sc. Blended Chemistry

Class: F.Y.B.Sc. Blended

Name of the Course: Diversity of Life

Course Code: BIO 104

SET: A

Course Type: CC

Max.Marks: 50

Time: 2.5 Hr.

Instructions to the candidate:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Draw a well labelled diagram wherever necessary.*

SECTION: A

Q.1] Multiple Choice question (10)

10 marks

- 1) Group Monera include.....
a) Arche and eubacteria b) Plants and animals c) Fungi d) protozoan
- 2) In Green Algae reserve food is
a) Starch b) Aliginc acid c) Manitol d) Fucoxanthin
- 3) Dianoflagellates belongs to
a) Monera b) Fungi c) Protista d) Anemalia
- 4) Vascular plants are known as
a) Bryophytes b) Tracheophytes c) Embryophytes d) None of these
- 5) Which of the following group is mainly parasitic or saprophytic
a) Bryophytes b) Algae c) Tracheophytes d) Fungi
- 6) Amoeba belongs to the phylum
a) Porifera b) Protozoa c) Annelida d) Arthropoda
- 7) Water canal system is characterstics of
a) Phylum Porifera b) Phylum Coelentrata c) Phylum Echinodermata d) Phylum Mollusca

8) An example of class Nematoda

- a) Ascaris b) Sponges c) Planaria d) Star fish

9) Petromyzon and Myxine belongs to

- a) Class Cyclostoma b) Class Amphibia c) Class Reptilia d) Class Mammalia

10) An example of class mammalia is

- a) Pigeon b) Bat c) Frog d) Turtle

SECTION: B

Q.2] Explain in brief. (Any 10 out of 12)

20 Marks

- i) Write any two uses of green algae.
- ii) Write any two differentiating characters of algae and fungi.
- iii) What is endosymbiotic theory?
- iv) Why bryophytes are called as amphibians in plant kingdom?
- v) Enlist the important characters of prokaryotic cell and draw a diagram.
- vi) What are the different types of stele evolved in pteridophytes?
- vii) Write two distinguishing features of phylum coelentrata.
- viii) Differentiate between chondrithysces and oestithysces
- ix) What do you mean by protostomes . Give an example.
- x) Write two characters of phylum Platyhelminthes with one example.
- xi) Define osmoregution and name the organelle of phylum protozoa associated with it.
- xii) Comment on the class amphibian with examples.

SECTION: C

Q.3] Answer the following (any 4 out of 6)

20 Marks

- i) Write the general features of red algae and comment on its importance.
- ii) Explain the two different mechanism through which the multicellularity thought to be evolved? Comment on advantages of multicellularity.
- iii) Write the salient features of class mammalian with two examples.
- iv) Explain aerial adaptations.
- v) Define Evolution and explain evolution occurs through natural selection.
- vi) Write the general characters of fungi and comment on its economic importance.