DPP - Daily Practice Problems

Name : _____ Date : _____

Start Time : _____ End Time : _____

BIOLOGY 01

SYLLABUS : The Living World

Max. Marks : 120 **Time : 60 min.**

GENERAL INSTRUCTIONS

- The Daily Practice Problem Sheet contains 30 MCQ's. For each question only one option is correct. Darken the correct circle/ bubble in the Response Grid provided on each page.
- You have to evaluate your Response Grids yourself with the help of solution booklet.
- Each correct answer will get you 4 marks and 1 mark shall be deduced for each incorrect answer. No mark will be given/ deducted if no bubble is filled. Keep a timer in front of you and stop immediately at the end of 60 min.
- The sheet follows a particular syllabus. Do not attempt the sheet before you have completed your preparation for that syllabus. Refer syllabus sheet in the starting of the book for the syllabus of all the DPP sheets.
- After completing the sheet check your answers with the solution booklet and complete the Result Grid. Finally spend time to analyse your performance and revise the areas which emerge out as weak in your evaluation.

DIRECTIONS (Q.1-Q.30) : There are 30 multiple choice questions. Each question has 4 choices (a), (b), (c) and (d), out of which ONLY ONE choice is correct.

1. The most important feature of all living systems is to
   (a) utilize oxygen to generate energy.
   (b) replicate the genetic information.
   (c) produce gametes.
   (d) utilize solar energy for metabolic activities.

2. First life on earth was
   (a) cyanobacteria (b) chemoheterotrophs
   (c) autotrophs (d) photoautotrophs

3. Which of the following is not true for a species?
   (a) Members of a species can interbreed.
   (b) Gene flow does not occur between the populations of a species.
   (c) Each species is reproductively isolated from every other species.
   (d) Variations occur among members of a species.

4. Classification given by Bentham and Hooker is
   (a) artificial (b) natural
   (c) phylogenetic (d) numerical

RESPONSE GRID	1. ⓐⓑⓒⓓ	2. ⓐⓑⓒⓓ	3. ⓐⓑⓒⓓ	4. ⓐⓑⓒⓓ

Space for Rough Work

5. Basic unit or smallest taxon of taxonomy/classification is
   (a) species (b) kingdom
   (c) family (d) variety
6. A taxon is a
   (a) group of related families.
   (b) group of related species.
   (c) type of living organisms.
   (d) taxonomic group of any ranking.
7. An important criterion for modern day classification is
   (a) resemblances in morphology.
   (b) anatomical and physiological traits.
   (c) breeding habits.
   (d) presence or absence of notochord.
8. The term phylum was given by
   (a) Cuvier
   (b) Haeckel
   (c) Theophrastus
   (d) Linnaeus
9. Sequence of taxonomic categories is
   (a) Class – Phylum – Tribe – Order – Family – Genus – Species
   (b) Division – Class – Family – Tribe – Order – Genus – Species
   (c) Division – Class – Order – Family – Tribe – Genus – Species
   (d) Phylum – Order – Class – Tribe – Family – Genus – Species
10. Binomial nomenclature means
   (a) one name given by two scientists.
   (b) one scientific name consisting of a generic and specific epithet.
   (c) two names, one latinised, other of a person.
   (d) two names of same plant.
11. Linnaeus is credited with
   (a) binomial nomenclature
   (b) theory of biogenesis
   (c) discovery of microscope
   (d) discovery of blood circulation
12. Species is
   (a) unit of classification.
   (b) unit in the evolutionary history of a tree.
   (c) specific class of evolution.
   (d) not related to evolution.
13. "Taxonomy without phylogeny is similar to bones without flesh" is the statement of
   (a) Oswald Tippo
   (b) John Hutchinson
   (c) Takhtajan
   (d) Bentham and Hooker
14. The practical purpose of classification of living organisms is to
   (a) explain the origin of living organisms.
   (b) trace the evolution of living organisms.
   (c) name of the living organisms.
   (d) facilitate identification of unknown organisms.

RESPONSE GRID					
	5. ⓐⓑⓒⓓ	6. ⓐⓑⓒⓓ	7. ⓐⓑⓒⓓ	8. ⓐⓑⓒⓓ	9. ⓐⓑⓒⓓ
	10. ⓐⓑⓒⓓ	11. ⓐⓑⓒⓓ	12. ⓐⓑⓒⓓ	13. ⓐⓑⓒⓓ	14. ⓐⓑⓒⓓ

Space for Rough Work

15. The book '*Genera Plantarum*' was written by
    (a) Bessy
    (b) Hutchinson
    (c) Engler and Prantl
    (d) Bentham & Hooker

16. Which of the following is less general in characters as compared to genus?
    (a) Species
    (b) Division
    (c) Class
    (d) Family

17. Genus is a group of similar and related
    (a) order
    (b) genera
    (c) families
    (d) species

18. Founder of "*Taxonomy*" is
    (a) Aristotle
    (b) John Ray
    (c) Haeckel
    (d) Linnaeus

19. Which one of the following is the species?
    (a) *Carnivora*
    (b) *Canis*
    (c) *Familiaris*
    (d) *Canis familiaris*

20. Naming of which of the following is incorrect?
    (a) *Apis Indica*
    (b) *Trypanosoma gambiense*
    (c) *Ficus Bengalensis*
    (d) *Mangifera indica*

21. Which of the following covers the largest number of organisms?
    (a) Genus (b) Family
    (c) Phylum (d) Class

22. Which one of the following statement is correct regarding 'L' in the scientific name of *Mangifera indica* L. ?
    (a) Letter L. signifies latin language.
    (b) The name is reverse with *Indica* preceeding *mangifera.*
    (c) Letter L. signifies taxonomist Linnaeus.
    (d) Letter L. is superfluous.

23. A species is defined as "the group of actually or potentially inter-breeding natural population producing fertile offspring and reproductively isolated from such other groups". The above statement is given by
    (a) Carolus Linnaeus
    (b) Mayr
    (c) J.B. Lamarck
    (d) Charles Darwin

24. Specimen used for original publication by the author is
    (a) holotype (b) isotype
    (c) syntype (d) lactotype

RESPONSE GRID					
	15. ⓐⓑⓒⓓ	16. ⓐⓑⓒⓓ	17. ⓐⓑⓒⓓ	18. ⓐⓑⓒⓓ	19. ⓐⓑⓒⓓ
	20. ⓐⓑⓒⓓ	21. ⓐⓑⓒⓓ	22. ⓐⓑⓒⓓ	23. ⓐⓑⓒⓓ	24. ⓐⓑⓒⓓ

Space for Rough Work

25. The complete name of a plant in binomial nomenclature has
    (a) three parts (words) (b) two parts (words)
    (c) five parts (words) (d) one part (word)

26. The term '*New systematics*' was introduced by
    (a) Adolf Engler (b) Karl Prantl
    (c) George Bentham (d) Julian Huxley

27. Biosystematics aims at
    (a) identification and arrangement of organisms on the basis of their cytological characteristics.
    (b) the classification of organisms based on broad morphological characters.
    (c) delimiting various taxa of organisms and establishing their relationships.
    (d) the classification of organisms based on their evolutionary history and establishing their phylogeny on the totality of various parameters from all fields of studies.

28. In a hierarchical system of plant classification, which one of the following taxonomic ranks generally ends in 'ceae'?
    (a) Family
    (b) Genus
    (c) Order
    (d) Class

29. Branch connected with nomenclature, identification and classification is called
    (a) ecology
    (b) taxonomy
    (c) morphology
    (d) physiology

30. The science of naming the plant is known as
    (a) classification
    (b) identity
    (c) nomenclature
    (d) taxonomy

RESPONSE GRID	25. ⓐⓑⓒⓓ	26. ⓐⓑⓒⓓ	27. ⓐⓑⓒⓓ	28. ⓐⓑⓒⓓ	29. ⓐⓑⓒⓓ
	30. ⓐⓑⓒⓓ				

DAILY PRACTICE PROBLEM SHEET 1 - BIOLOGY			
Total Questions	30	Total Marks	120
Attempted		Correct	
Incorrect		Net Score	
Cut-off Score	40	Qualifying Score	64
Success Gap = Net Score – Qualifying Score			
Net Score = (Correct × 4) – (Incorrect × 1)			

Space for Rough Work

DPP-1

1. (a)	2. (b)	3. (b)	4. (b)
5. (a)	6. (d)	7. (b)	8. (a)
9. (c)	10. (b)	11. (a)	12. (a)
13. (c)	14. (d)	15. (d)	16. (a)
17. (d)	18. (a)	19. (c)	20. (c)
21. (c)	22. (c)	23. (b)	24. (a)
25. (b)	26. (d)	27. (d)	28. (a)
29. (b)	30. (c)		