Based on Latest NCERT NEET Syllabus & NTA Guidelines

Topic & Wise Chapter

Home Assignment

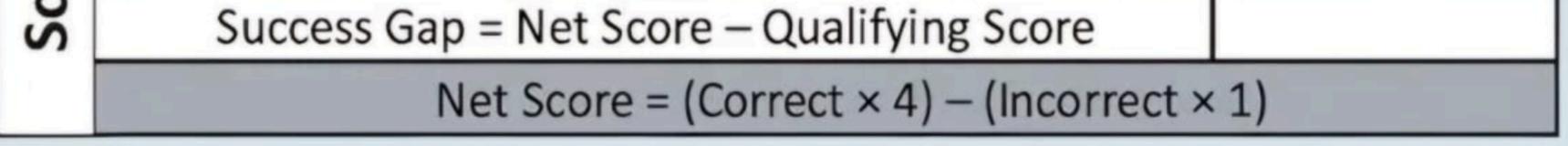


BIOLOGY CLASS XI & XII

	HOME ASSIGNMENTS CHAPTERWISE CB02 - BIOLOGY				
oring Grid	Total Questions	45	Total Marks	180	
	Attempted		Correct		
	Incorrect		Net Score		
	Cut-off Score	45	Qualifying Score	60	
õ					

GLOB

R/



Contents

Class XI

- 1. The Living World
- **Biological Classification** 2.
- 3. Plant Kingdom
- 4. Animal Kingdom
- Morphology of Flowering Plants 5.
- 6. Anatomy of Flowering Plants
- 7. Structural Organisation in Animals
- 8. Cell-The Unit of Life
- 9. Biomolecules
- 10. Cell Cycle and Cell Division
- 11. Photosynthesis in Higher Plants
- 12. Respiration in Plants
- 13. Plant Growth and Development
- 14. Breathing and Exchange of Gases
- 15. Body Fluids and Circulation
- 16. Excretory Products and Their Elimination
- 17. Locomotion and Movement
- Neural Control and Coordination 18.

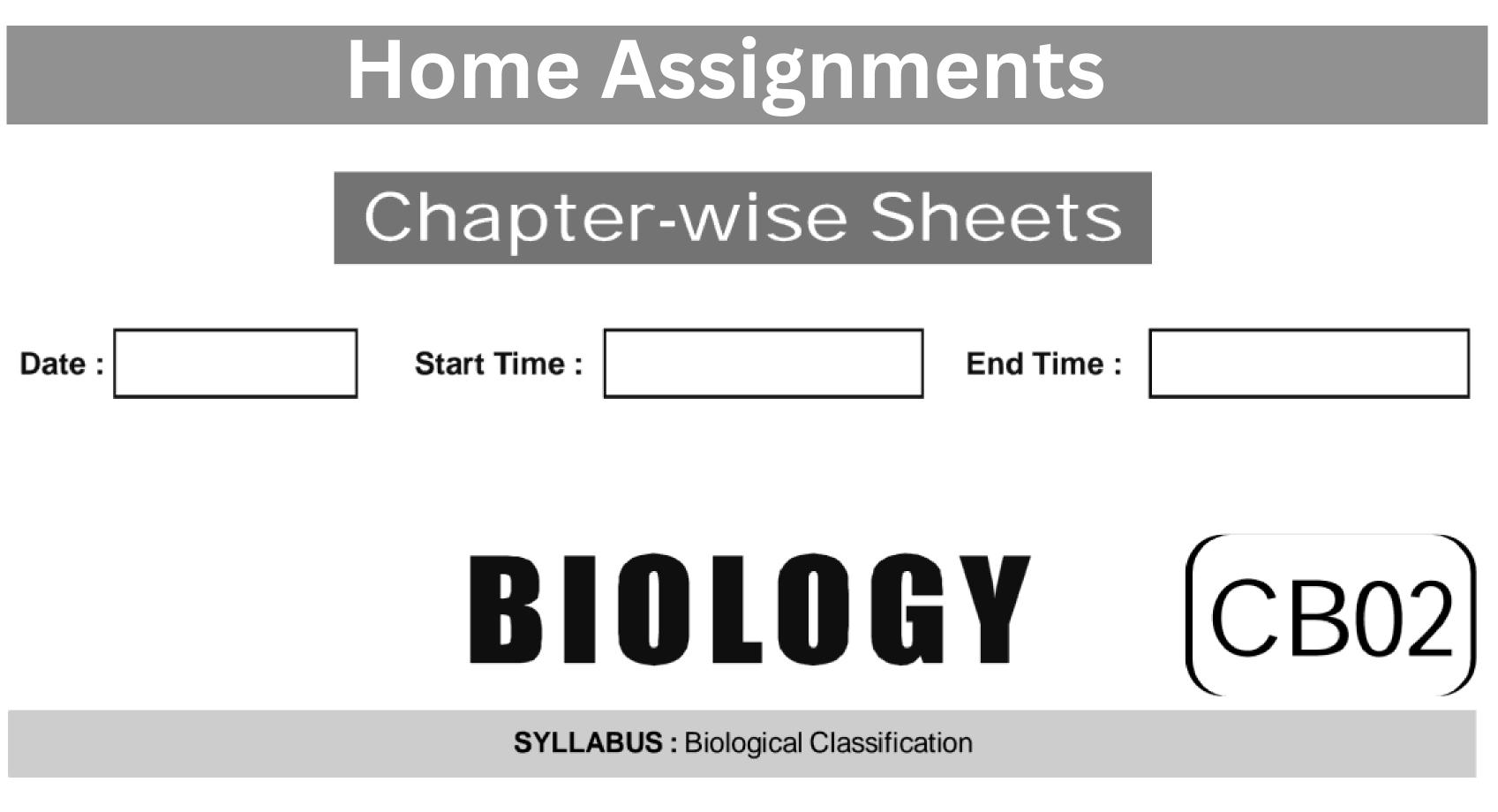


Contents

- Class XII
- 1. Sexual Reproduction in Flowering Plants
- 2. Human Reproduction
- Reproductive Health 3.
- Principles of Inheritance and Variation 4.
- 5. Molecular Basis of Inheritance
- 6. Evolution
- 7. Human Health and Diseases
- 8. Microbes in Human Welfare
- 9. Biotechnology: Principles and Processes
- 10. Biotechnology and Its Applications
- Organisms and Populations 11.
- 12. Ecosystem







Max. Marks : 180 Marking Scheme : + 4 for correct & (-1) for incorrect

Time : 60 min.

INSTRUCTIONS : This Daily Practice Problem Sheet contains 45 MCQs. For each question only one option is correct. Darken the correct circle/ bubble in the Response Grid provided on each page.

- **1.** Which of the following processes are involved in the reproduction of protista?
 - (a) Binary fission and fragmentation
 - (b) Cell fusion and zygote formation
 - (c) Spore formation and fragmentation
 - (d) Budding and spore formation
- 2. In prokaryotes, the genetic material is
 - (a) linear DNA with histones
 - (b) circular DNA with histones
 - (c) linear DNA without histones
 - (d) circular DNA without histones
- **3.** Which of the following bacteria carry out oxygenic photosynthesis by means of a photosynthetic apparatus similar to the eukaryotes?
 - (a) Purple sulphur bacteria

- (b) Green sulphur bacteria
- (c) Cyanobacteria
- (d) More than one option is correct
- 4. Bacteria is a group of prokaryotic organisms which is characterised by
 - (a) 70 S ribosomes
 - (b) Peptidoglycan cell wall
 - (c) Simple structure and complex behaviour
 - (d) All of the above.
- 5. What may be a 'photosynthetic protistian' to one biologist may be 'a plant' to another? Which of the given below features of slime moulds shows linkage with plant?
 - (a) Presence of holozoic nutrition
 - (b) Presence of diverse sexual reproduction
 - (c) Slime moulds have cellulosic spore wall
 - (d) Formation of fruiting bodies

Response Grid 1. abcd 2. abcd 3. abcd 4. abcd 5. abcd

Space for Rough Work



Home Assignments



в-6

- Choose the correct match 6.
 - Gonyaulax Red sea (a)
 - *Euglena* Chlorophyll a & c (b)
 - Desmids Chrysophytes (c)
 - Gymnodinium Hemicellulosic plates in wall (d)
- Nuclear dimorphism is shown by 7.
 - Paramecium (b) Amoeba (a)
 - Plasmodium (d) Trypanosoma (c)
- Most common type of genetic material present in bacte-8. riophages is
 - ds RNA ss RNA (a) (b)
 - ss DNA ds DNA (d) (c)
- 9. Which of the following statement about Mycoplasma is true:
 - They are smallest, disease causing thin walled organisms (a)
 - They differ from viruses in being cellular in organisation (b)
 - Insensitive to several antibiotics as they have 70S ribosomes (c)
 - They can survive without photosynthetic pigments (d) and genetic material
- Consider the following characters: 10.

Non-motile spores, saprophytic unicellular eukaryotes, transfer of gametes by wind currents, Differentiation of plasmodium under suitable conditions.

How many of the characters given in box belong to slime moulds?

- Four (b) One (a)

- 14. are important decomposers that cause decay and decomposition of dead bodies of plants and animals.
 - Saprotrophic bacteria (a)
 - Saprotrophic fungi (b)
 - Plants, like Sarracenia (c)
 - Both (a) and (b) (d)
- Chrysophytes are 15.
 - planktons nektons (b) (a)
 - benthic organisms (d) rooted submerged. (c)
- Eukaryotic, achlorophyllous and heterotrophic organisms 16. are grouped under which of the following kingdoms?
 - Monera Protista (b) (a)
 - Fungi Plantae (c) (d)
- Virion is 17.
 - nulceic acid of virus (a)
 - antiviral agent (b)
 - protein of virus (c)
 - completely assembled virus outside host. (d)
- In the five-kingdom system of classification, which single 18. kingdom out of the following can include blue, green algae, nitrogen-fixing bacteria and methanogenic archaebacteria?
 - (a) Fungi (b) Plantae
 - (d) Monera (c) Protista
- Viruses that infect bacteria, multiply and cause their lysis, 19.

	(c) Three (d) Two		are called				
11.	11. Eubacteria can be differentiated from archaebacteria on the			(a) Lysozyme	es (b) Lipolyt	ic	
	basis of				(c) Lytic	(d) Lysoge	nic
	(a) Ribosomes (b) Gene of tRNA		RNA	20.	Phenetic classification of organisms is based on		
	(c) Cell wall (d) Nutrition				 (a) Observable characteristics of existing organisms 		
12. Select the pair that consists of plant or animal bacterial diseases.			(b) The ancestral lineage of existing organisms				
	(a) Cholera and typhoid			(c) Dendogram based on DNA characteristics			
	(b) Citrus canker and crown gall			(d) Sexual characteristics			
(c) Malaria and dengue				21. The practical purpose of classification of living organisms			
(d) Both (a) and (b)			is to				
13. Cyanobacteria are classified under which of the following			ich of the following	(a) explain the origin of living organisms(b) trace the evolution of living organisms			
	kingdoms?						
	(a) Monera (b) Protista			(c) name the living organisms			
	(c) Algae	(d) Plantae			(d) facilitate identification of unknown organisms		
		6. abcd	7. (a)(b)(c)(d)	8.	abcd	9. abcd	10. abcd
	Response	11. abcd	12.00C			14. (a) b) c) d)	15. abcd
						$\sim \sim \sim \sim \sim$	\sim
	Grid		17.@b©d	10.	@bcd	19. @b©d	20. abcd
	21.abcd						
Space for Rough Work							



Home Assignments



B-1

CB02 ·

- **22.** A system of classification in which a large number of traits are considered, is
 - (a) artificial system (b) synthetic system
 - (c) natural system (d) phylogenetic system
- 23. In five kingdom system, the main basis of classification is
 - (a) structure of nucleus (b) mode of nutrition
 - (c) structure of cell wall (d) asexual reproduction
- 24. Phenetic classification is based on
 - (a) Sexual characteristics
 - (b) The ancestral lineage of existing organisms
 - (c) Observable characteristics of existing organisms
 - (d) Dendograms based on DNA characteristics
- **25.** In which kingdom would you classify the archaebecteria and nitrogen-fixing organisms. If the five-kingdom system of classification is used ?
 - (a) Monera (b) Plantae
 - (c) Fungi (d) Protista
- 26. Which of the following statements is not true for retroviruses?
 - (a) DNA is not present at any stage in the life cycle of retroviruses
 - (b) Retroviruses carry gene for RNA-dependent DNA polymerase
 - (c) The genetic material in mature retroviruses is RNA
 - (d) Retroviruses are causative agents for certain kinds of cancer in man

- **30.** Which of the following is not correctly matched?
 - (a) Root knot disease Meloidogyne javanica
 - (b) Smut of bajra Tolysporium penicillariae
 - (c) Covered smut of barley Ustilago nuda
 - (d) Late blight of potato Phytophthora infestans
- **31.** Which one of the following character was not used by R.H. Whittaker for biological classification ?
 - (a) Cell structure
 - (b) Physiological characters
 - (c) Thallus organisation
 - (d) Phylogenetic relationships
- 32. The first organisms to appear on earth were
 - (a) photoautotrophs (b) chemoautotrophs
 - (c) chemoheterotrophs (d) heterotrophs
- **33.** 'Comma' shaped bacteria are known as
 - (a) coccus (b) spiral
 - (c) spirillum (d) vibrio
- 34. Slime moulds in the division myxomycota (true slime moulds) have
 - (a) pseudoplasmodia.
 - (b) spores that develop into free living amoeboid cells.
 - (c) spores that develop into flagellated gametes.
 - (d) feeding stages consisting of solitary individual cells.
- **35.** Which one of the following statements about Mycoplasma is wrong ?
- 27. On how many criteria living organisms have been classified into five kingdoms ?
 - (a) Two (b) Four
 - (c) Five (d) Three
- 28. First true phylogenetic system of classification was given by
 - (a) Eichler (b) Engler and Prantl
 - (c) de Jussiaeu (d) de Candolle
- **29.** Which of the following is not a protist ?
 - (a) *Taenia* (b) *Amoeba*
 - (c) Paramecium (d) Euglena

- (a) They are pleomorphic.
- (b) They are sensitive to penicillin.
- (c) They cause diseases in plants.
- (d) They are also called (Pleuro pneumonia like organisms) PPLO.
- 36. African sleeping sickness is due to
 - (a) Plasmodium vivax transmitted by Tse-tse fly
 - (b) Trypanosoma lewsii transmitted by Bed Bug
 - (c) Trypanosoma gambiense transmitted by Glossina palpalis
 - (d) Entamoeba gingivalis spread by Housefly

Response Grid	27. (a) (b) (c) (d)	23.abcd 28.abcd 33.abcd	24. a b c d 29. a b c d 34. a b c d	26. abcd 31. abcd 36. abcd

Space for Rough Work





CB02

Home Assignments

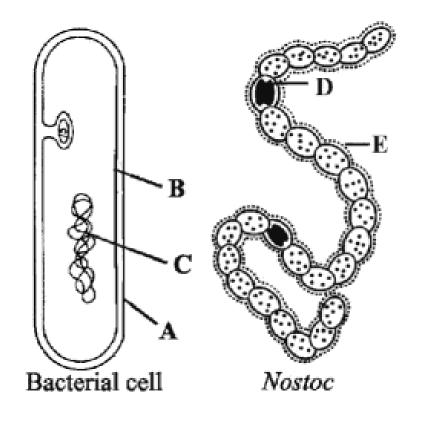
в-8

- Which one single organism or the pair of organisms is 37. **correctly** assigned to its taxonomic group?
 - Paramecium and Plasmodium belong to the same (a) kingdom as that of *Penicillium*
 - (b) Lichen is a composite organism formed from the symbiotic association of an algae and a protozoan
 - Yeast used in making bread and beer is a fungus (c)
 - (d) Nostoc and Anabaena are examples of protista
- Two animals which are the members of the same order must 38. also be the members of the same :
 - Class (b) Family (a)
 - Genus (d) Species (c)
- Bacteria lack alternation of generation because there is 39.
 - neither syngamy nor reduction division. (a)
 - distinct chromosomes are absent. (b)
 - no conjugation. (c)
 - no exchange of genetic material. (d)
- Capsid is **40**.

(c)

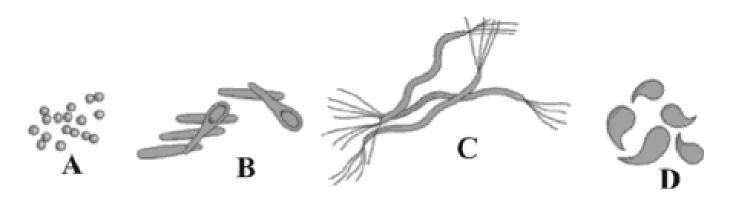
- genetic material of virus (a)
- protein cover of virus (b)
- extra genetic material of bacterium (C)
- house keeping genome of bacterium (d)
- A group of fungi with septate mycelium in which sexual 41. reproduction is either unknown or lacking are classified under

44. Refer to the given figures of bacteria cell and Nostoc and choose the option which shows correct label for the structures marked as A, B, C, D and E?

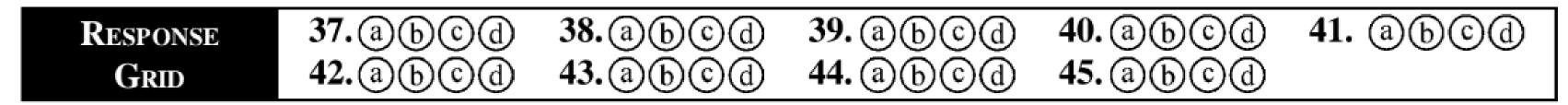


- (a) A Cell wall, B Cell membrane, C Heterocyst, D-DNA, E-Mucilagenous sheath
- (b) A Cell wall, B Cell membrane, C DNA, D – Heterocyst, E – Mucilagenous sheath
- (c) A Mucilagenous sheath, B Cell membrane, C-DNA, D-Heterocyst, E-Cell wall
- (d) A Cell membrane, B Cell wall, C DNA,
 - D Heterocyst, E Mucilagenous sheath
- Choose the correct names of the different bacteria given 45. below according to their shapes.

- phycomycetes (a)
 - (b) deuteromycetes basidiomycetes (d)
- ascomycetes A few organisms are known to grow and multiply at 42. temperatures of 100-105°C. They belong to
 - marine archaebacteria (a)
 - thermophilic sulphur bacteria (b)
 - blue-green algae (cyanobacteria) (c)
 - thermophilic, subaerial fungi (d)
- Mycoplasma is pleuromorphic due to 43.
 - absence of cell wall (a)
 - presence of three layered cell membrane (b)
 - the presence of sterol (c)
 - None of these (d)



- (a) A-Cocci, B-Bacilli, C-Spirilla, D-Vibrio
- A-Bacilli, B-Cocci, C-Spirilla, D-Vibrio (b)
- A-Spirilla, B-Bacilli, C-Cocci, D-Vibrio (c)
- A-Spirilla, B-Vibrio, C-Cocci, D-Bacilli (d)



Space for Rough Work

HOME ASSIGNMENTS CHAPTERWISE CB02 - BIOLOGY						
Total Questions	I Questions 45 Total Marks		180			
Attempted		Correct				
Incorrect	Incorrect					
Cut-off Score	Cut-off Score 45 0		60			
Success Gap = Net Score – Qualifying Score						
Net Score = (Correct × 4) – (Incorrect × 1)						

