

NEET (2025)

SHORT PRACTICE TEST - 01

DURATION: 60 Minutes

M.MARKS : 192

Topics Covered

Physics:	Basic Maths & Calculus (Mathematical Tools) (Complete Chapter)
Chemistry:	Some Basic Concept of Chemistry (Complete Chapter) Redox Reaction: Introduction, Classical idea of Redox Reactions - Oxidation and Reduction Reactions, Redox Reactions in Terms of Electronic Concept, Competitive Electron Transfer Reactions Oxidation Number, Limitations of Concept of Oxidation Number, Oxidation Number and Nomenclature, Types of Redox Reactions, Application of Redox Reactions, Balancing of Redox Reactions, Redox Reactions and Electrode Processes
Botany:	Cell - The Unit of Life : What is a Cell ? Overview of the cell, Cell Theory, Prokaryotic cells, Cell Membrane, Cell Wall
Zoology:	Structural Organization in Animals : Tissues, Animal Tissues, Epithelium Tissue, Cell Junctions, Connective Tissue, Muscular Tissue, Nervous Tissue, FROG

General Instructions:

1. Immediately fill in the particulars on this page of the test booklet.
2. The test is of **60 minutes** duration.
3. The test booklet consists of **48** questions. The maximum marks are **192**.
4. All questions are compulsory.
5. There is only one correct response for each question.
6. Each correct answer will give **4** marks while **1** Mark will be deducted for a wrong MCQ response.
7. No student is allowed to carry any textual material, printed or written, bits of papers, pager, mobile phone, any electronic device, etc. inside the examination room/hall.
8. On completion of the test, the candidate must hand over the Answer Sheet to the Invigilator on duty in the Room/Hall. However, the candidates are allowed to take away this Test Booklet with them.
9. **Do not fold or make any stray mark on the Answer Sheet (OMR).**

OMR Instructions:

1. Use blue/black dark ballpoint pens.
2. Darken the bubbles completely. Don't put a tick mark or a cross mark where it is specified that you fill the bubbles completely. Half-filled or over-filled bubbles will not be read by the software.
3. Never use pencils to mark your answers.
4. Never use whiteners to rectify filling errors as they may disrupt the scanning and evaluation process.
5. Writing on the OMR Sheet is permitted on the specified area only and even small marks other than the specified area may create problems during the evaluation.
6. Multiple markings will be treated as invalid responses.
7. **Do not fold or make any stray mark on the Answer Sheet (OMR).**

Name of the Student (In CAPITALS) : _____

Roll Number : _____

OMR Bar Code Number : _____

Candidate's Signature : _____ **Invigilator's Signature** _____

SECTION-(I) PHYSICS

1. Convert angle from radian to degree $\frac{\pi}{2}$ rad:

- (1) 60° (2) 30°
(3) 90° (4) 0°

2. If $y = x^2 + 4x^3 - 8x + 4$, then find $\frac{dy}{dx}$:

- (1) $2x + 4x^2 - x$ (2) $2x + 12x^2 - 8$
(3) $2x + 4x^3 - 8$ (4) $2x + 12x^2 - x$

3. Find the solutions of given equation:
 $2x^2 + 3x - 2 = 0$:

- (1) $x = -3, \frac{1}{2}$ (2) $x = 3, \frac{1}{2}$
(3) $x = -2, \frac{1}{2}$ (4) $x = 2, \frac{1}{2}$

4. Find sum of $1 + \frac{1}{3} + \frac{1}{9} + \frac{1}{27} \dots$ up to ∞ term:

- (1) $\frac{3}{2}$ (2) $\frac{2}{3}$
(3) $\frac{4}{3}$ (4) $\frac{3}{4}$

5. What is the value of $\log_2 16$?

- (1) 8 (2) 4
(3) $1/8$ (4) 16

6. If $\cos \theta = \frac{4}{5}$ then find the value of $\tan \theta$:

- (1) $\frac{4}{5}$ (2) $\frac{3}{5}$
(3) $\frac{4}{3}$ (4) $\frac{3}{4}$

7. Find the value of $\cos (330^\circ)$:

- (1) $\sin 45^\circ$
(2) $-\cos 30^\circ$
(3) $\cos 60^\circ$
(4) $\sin 60^\circ$

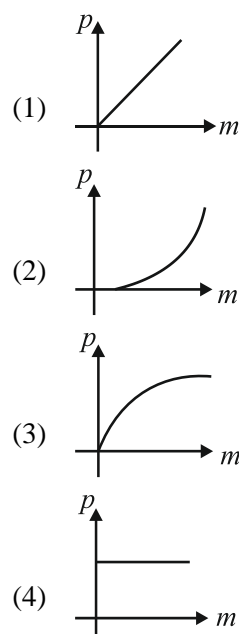
8. If $\frac{\sin \theta + \cos \theta}{\sin \theta - \cos \theta} = \frac{7}{3}$ then find $\tan \theta$?

- (1) $\frac{3}{5}$ (2) $\frac{5}{2}$
(3) $\frac{5}{3}$ (4) $\frac{2}{5}$

9. Distance between points $(2, 3, -7)$ and $(-2, 0, 5)$ is:

- (1) 5
(2) 13
(3) $\sqrt{145}$
(4) $\sqrt{119}$

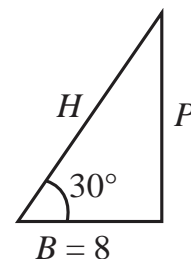
10. Draw graph between momentum(p) and mass(m) of the object for constant kinetic energy E
 $[p = \sqrt{2mE}]$:



11. $\int_0^{\pi/2} (\sin \theta + \cos \theta) d\theta$:

- (1) 1 (2) 0
(3) 2 (4) -1

12. Find the value of P :



- (1) $\frac{\sqrt{3}}{8}$
(2) 8
(3) $\frac{8}{\sqrt{3}}$
(4) 0

SECTION-(II) CHEMISTRY

- 13.** Oxidation state of oxygen is (-1) in:
 (1) NO_2
 (2) MnO_2
 (3) PbO_2
 (4) Na_2O_2
- 14.** Number of atoms present in 6.8 g of NH_3 is:
 (Molar mass of $\text{NH}_3 = 17 \text{ g/mol}$)
 (1) $1.2 N_A$
 (2) $16 N_A$
 (3) $12 N_A$
 (4) $1.6 N_A$
- 15.** The maximum number of molecules present in:
 (1) 11.2 L of H_2 gas at STP
 (2) 5.6 L of N_2 gas at STP
 (3) 1.2 g of H_2 gas
 (4) 1.6 g of O_2 gas
- 16.** Which of the following is **not** a redox reaction?
 (1) $2\text{Na} + \text{Cl}_2 \rightarrow 2\text{NaCl}$
 (2) $\text{C} + \text{O}_2 \rightarrow \text{CO}_2$
 (3) $\text{AgNO}_3 + \text{NaCl} \rightarrow \text{AgCl} + \text{NaNO}_3$
 (4) $\text{Zn} + \text{H}_2\text{SO}_4 \rightarrow \text{ZnSO}_4 + \text{H}_2$
- 17.** Given below are two statement: one is labelled as Assertion A and the other is labelled as Reason R:
Assertion A: The number of O atoms in 1 g of O_2 , 1 g of O_3 and 1 g of atomic oxygen is same.
Reason R: O_2 and O_3 have different molar masses.
 In the light of the above statements, choose the **correct** answer from the options given below:
 (1) A is true but R is false.
 (2) A is false but R is true.
 (3) Both A and R are true and R is the correct explanation of A.
 (4) Both A and R are true but R is NOT the correct explanation of A.
- 18.** The empirical formula of a compound is CH_2O , having molecular mass 120. The molecular formula of compound is:
 (1) $\text{C}_2\text{H}_4\text{O}_2$
 (2) $\text{C}_4\text{H}_8\text{O}_4$
 (3) $\text{C}_3\text{H}_6\text{O}$
 (4) $\text{C}_5\text{H}_{10}\text{O}_5$
- 19.** The amount of NaOH required to prepare 250 mL of 0.1 M solution is:
 (Molar mass of NaOH = 40 g/mol)
 (1) 1 g (2) 10 g
 (3) 4 g (4) 6 g
- 20.** Molarity of an aqueous solution of H_2SO_4 is 18M. If the density of solution is 1.8 g/cm^3 , then the molality of solution is:
 (Molar mass of $\text{H}_2\text{SO}_4 = 98 \text{ g/mol}$)
 (1) 180 m (2) 250 m
 (3) 360 m (4) 500 m
- 21.** The number of electrons present in 8.4 g of CO is:
 (Molar mass of CO = 28 g/mol)
 (1) $0.3 N_A$ (2) $1.4 N_A$
 (3) $2.8 N_A$ (4) $4.2 N_A$
- 22.** Which of the following concentration term is temperature independent?
 A. Molarity
 B. (w/w)%
 C. Mole fraction
 (1) A and B only
 (2) A and C only
 (3) B only
 (4) B and C only
- 23.** 4 g of hydrogen is ignited with 4 g of oxygen, the amount of water formed is:

$$\text{H}_2(\text{g}) + \frac{1}{2}\text{O}_2(\text{g}) \rightarrow \text{H}_2\text{O}(\text{l})$$

 (1) 2.5 g
 (2) 0.5 g
 (3) 4.5 g
 (4) 8 g
- 24.** Consider the following statement:
 A. Addition of oxygen or electronegative element to a substance is called oxidation.
 B. Electron donors act as reducing agent.
 C. An oxidising agent accepts electrons.
 The **correct** statements are:
 (1) A and B only
 (2) A and C only
 (3) B and C only
 (4) A, B and C

SECTION-(III) BOTANY

25. A specialised differentiated form of cell membrane called mesosome is the characteristic of;
- (1) eukaryotes. (2) only plants.
(3) only animals. (4) prokaryotes.
26. Identify the **incorrect** function of the cell membrane among the following.
- (1) cell growth.
(2) formation of intracellular junctions.
(3) endocytosis.
(4) cell division.
27. The concept of "*Omnis cellula-e cellula*" regarding cell theory was first proposed by;
- (1) Rudolf Virchow.
(2) Theodor Schwann.
(3) Matthias Schleiden.
(4) Robert Brown.
28. Given below are two statements:
Statement I: Plasmid DNA confers certain unique phenotypic characters to bacteria.
Statement II: One such character of plasmid is resistance to antibiotics.
In the light of the above statements, choose the most appropriate answer from the options given below:
- (1) Statement I is correct but Statement II is incorrect.
(2) Statement I is incorrect but Statement II is correct.
(3) Both Statement I and Statement II are correct.
(4) Both Statement I and Statement II are incorrect.
29. Given below are two statements: one is labelled as Assertion A and the other is labelled as Reason R:
Assertion A: The cytoplasm is the main arena of cellular activities in both the plant and animal cells.
Reason R: Various chemical reactions occur in it to keep the cell in the non-living state.
In the light of the above statements, choose the **correct** answer from the options given below:
- (1) A is true but R is false.
(2) A is false but R is true.
(3) Both A and R are true and R is the correct explanation of A.
(4) Both A and R are true but R is NOT the correct explanation of A.
30. Choose the **odd** one out related to the examples of prokaryotic cells.
- (1) Bacteria
(2) Blue-green algae
(3) Mycoplasma
(4) Human cheek cells
31. The innermost portion of a mature plant cell wall possesses;
- (1) primary cell wall.
(2) plasma membrane.
(3) secondary cell wall.
(4) middle lamella.
32. The four basic shapes of bacteria includes all **except**;
- (1) rod like. (2) spherical.
(3) comma shaped (4) irregular.
33. The largest isolated single cell is the egg of an;
- (1) ostrich. (2) onion.
(3) human. (4) blue-green algae.
34. Match the **List-I** with **List-II**.
- | List-I | | List II | |
|--------|-----------------------|---------|------------------------|
| (A) | Mycoplasmas | (I) | 3 to 5 μm |
| (B) | Viruses | (II) | 7.0 μm |
| (C) | Bacteria | (III) | 0.3 μm |
| (D) | Human red blood cells | (IV) | 0.02-0.2 μm |
- Choose the **correct** answer from the options given below:
- (1) A-III, B-II, C-IV, D-I
(2) A-III, B-IV, C-I, D-II
(3) A-II, B-I, C-IV, D-III
(4) A-II, B-III, C-I, D-IV
35. Movement of water by diffusion in cell membrane is called;
- (1) osmosis. (2) passive transport.
(3) active transport. (4) Both (2) and (3)
36. No organelles, like the ones in eukaryotes are found in prokaryotic cells **except** for;
- (1) lysosomes.
(2) endoplasmic reticulum.
(3) mesosomes.
(4) ribosomes.

SECTION-(IV) ZOOLOGY

37. Select the **odd** one out of the following w.r.t male reproductive system of *Rana tigrina*.

- (1) Vasa efferentia (2) Bidder's canal
(3) Testes (4) Oviduct

38. Which of the following is an **incorrect** pair?

(1)	Specialised tissue	Cartilage
(2)	Dense regular tissue	Tendons
(3)	Columnar epithelium	Stomach
(4)	Compound epithelium	Intestine

39. Given below are two statements: one is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: Frogs have a long alimentary canal.

Reason R: Frogs are carnivores.

In the light of the above statements, choose the **correct** answer from the options given below.

- (1) A is true but R is false.
(2) A is false but R is true.
(3) Both A and R are true and R is the correct explanation of A.
(4) Both A and R are true but R is not the correct explanation of A.

40. Which of the following is involved in functions like forming a diffusion boundary?

- (1) Columnar epithelium
(2) Compound epithelium
(3) Ciliated epithelium
(4) Squamous epithelium

41. Select the **incorrect** statement w.r.t *Rana tigrina*.

- (1) They are ureotelic.
(2) Vascular system is of open type.
(3) Pancreatic juice digest carbohydrates.
(4) The medulla oblongata passes out through foramen magnum.

42. _____ is present beneath the skin.

Choose the **correct** option to fill the blank.

- (1) Adipose tissue (2) Cartilage
(3) Ligament (4) Tendon

43. Frogs are beneficial to mankind because they:

- (1) eat insects and protect the crops.
(2) maintain ecological balance.
(3) serve as an important link of food webs.
(4) all of these

44. Match the **List-I** with **List-II**.

List-I		List-II	
(A)	Squamous epithelium	(I)	Biceps
(B)	Skeletal muscles	(II)	Outer ear joints
(C)	Cartilage	(III)	Skin
(D)	Dense irregular connective tissue	(IV)	Inner lining of blood vessels

Choose the **correct** answer from the options given below.

- (1) A-III, B-II, C-I, D-IV
(2) A-I, B-III, C-II, D-IV
(3) A-II, B-I, C-IV, D-III
(4) A-IV, B-I, C-II, D-III

45. Read the following statements w.r.t *Rana tigrina*.

- A. There are ten pairs of cranial nerves arising from the brain.
B. During aestivation gaseous exchange takes place through lungs.
C. RBCs are enucleated.
D. The forelimbs end in four digits.
E. Copulatory pad is present in male frogs.

Which of the above statements are **correct**?

- (1) A, B and C only (2) A, D and E only
(3) A, B and E only (4) B, D and E only

46. All of the following are **incorrect** statements, **except**:

- (1) salivary gland is an endocrine gland.
(2) adhering junctions help stop substances from leaking.
(3) smooth muscles are voluntary and non-striated.
(4) cardiac muscles are found only in heart.

47. Given below are two statements.

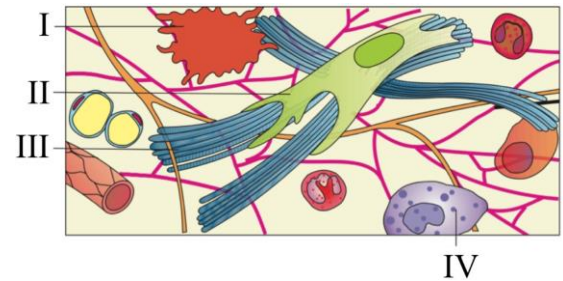
Statement I: Blood contains RBCs, WBCs, platelets and fibre secreting cells.

Statement II: Arrival of the disturbance at the neuron's endings, triggers events that may cause stimulation or inhibition of adjacent neurons.

In the light of the above statements, choose the most appropriate answer from the options given below.

- (1) Statement I is correct but Statement II is incorrect.
- (2) Statement I is incorrect but Statement II is correct.
- (3) Both Statement I and Statement II are correct.
- (4) Both Statement I and Statement II are incorrect.

48. Refer to the given below diagram.



Which of the following secrete modified polysaccharides?

- (1) I
- (2) III
- (3) II
- (4) IV

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DURATION : 60 Minutes

M. MARKS : 192

Answer Key

PHYSICS

1. (3)
2. (2)
3. (3)
4. (1)
5. (2)
6. (4)
7. (4)
8. (2)
9. (2)
10. (3)
11. (3)
12. (3)

CHEMISTRY

13. (4)
14. (4)
15. (3)
16. (3)
17. (4)
18. (2)
19. (1)
20. (4)
21. (4)
22. (4)
23. (3)
24. (4)

BOTANY

25. (4)
26. (2)
27. (1)
28. (3)
29. (1)
30. (4)
31. (3)
32. (4)
33. (1)
34. (2)
35. (1)
36. (4)

ZOOLOGY

37. (4)
38. (4)
39. (2)
40. (4)
41. (2)
42. (1)
43. (4)
44. (4)
45. (2)
46. (4)
47. (2)
48. (3)

SECTION-(I) PHYSICS

- | | |
|---|--|
| <p>1. (3)
$\pi \text{ rad} = 180^\circ$</p> <p>2. (2)
$y = x^2 + 4x^3 - 8x + 4$
$\frac{dy}{dx} = 2x + 12x^2 - 8$</p> <p>3. (3)
Formula based</p> <p>4. (1)
Infinite GP,
$S = a/(1 - r)$
Where $r = 1/3$
So, $S = 3/2$</p> <p>5. (2)
$\log_2 16$
$= \log_2 2^4$
$= 4 \log_2 2$
$= 4$</p> <p>6. (4)
$\cos \theta = \frac{B}{H} = \frac{4}{5}$
$P^2 = H^2 - B^2$
$P = 3$
$\tan \theta = \frac{P}{B} = \frac{3}{4}$</p> <p>7. (4)
$\cos(270^\circ + 60^\circ) = \sin 60^\circ = \frac{\sqrt{3}}{2}$
$270^\circ \rightarrow 90^\circ \times 3$</p> | <p>8. (2)
$\frac{\sin \theta + \cos \theta}{\sin \theta - \cos \theta} = \frac{7}{3}$
$\frac{\cos \theta (\tan \theta + 1)}{\cos \theta (\tan \theta - 1)} = \frac{7}{3}$
$3 \tan \theta + 3 = 7 \tan \theta - 7$
$4 \tan \theta = 10$
$\tan \theta = \frac{5}{2}$</p> <p>9. (2)
Distance = $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2 + (z_2 - z_1)^2}$
$\sqrt{(-2 - 2)^2 + (0 - 3)^2 + (5 + 7)^2}$
$\Rightarrow \sqrt{16 + 9 + 144} = 13$</p> <p>10. (3)
$P^2 = 2m \text{ K.E.}$
$m \propto P^2$</p> <p>11. (3)
$\int_0^{\pi/2} (\sin \theta + \cos \theta) d\theta = (-\cos \theta + \sin \theta)_0^{\pi/2}$
$= (-1 + 1) - (-1 + 0) = 2$</p> <p>12. (3)
$\cot \theta = \frac{B}{P}$
$\cot 30^\circ = \frac{8}{P}$
$P = \frac{8}{\sqrt{3}}$</p> |
|---|--|

SECTION-(II) CHEMISTRY

- | | |
|--|--|
| <p>13. (4)
Oxidation state of oxygen:</p> <ul style="list-style-type: none"> • in $\text{NO}_2 = -2$ • in $\text{MnO}_2 = -2$ • in $\text{PbO}_2 = -2$ • in $\text{Na}_2\text{O}_2 = -1$ <p style="text-align: right;">[New NCERT Class 11th Page No. 14]</p> <p>14. (4)
Moles of $\text{NH}_3 = \frac{6.8}{17} = 0.4$
Number of atoms of $\text{NH}_3 = \text{moles} \times N_A \times \text{atomicity}$
Number of atoms of $\text{NH}_3 = 0.4 \times N_A \times 4$
Number of atoms of $\text{NH}_3 = 1.6 N_A$
[New NCERT Class 11th Page No. 17]</p> | <p>15. (3)</p> <ul style="list-style-type: none"> • Molecules in 11.2 L of H_2 gas at STP
$= \frac{11.2}{22.4} \times N_A = 0.5 N_A$ • Molecules in 5.6 L of N_2 gas at STP
$= \frac{5.6}{22.4} \times N_A = 0.25 N_A$ • Molecules in 1.2 g of H_2 gas
$= \frac{1.2}{2} \times N_A = 0.6 N_A$ • Molecules in 1.6 g of O_2 gas
$= \frac{1.6}{32} \times N_A = 0.05 N_A$ <p style="text-align: right;">[New NCERT Class 11th Page No. 17]</p> |
|--|--|

16. (3)
 $\text{AgNO}_3 + \text{NaCl} \rightarrow \text{AgCl} + \text{NaNO}_3$
 This reaction is not a redox reaction because there is no change in oxidation state of any element.
[New NCERT Class 11th Page No. 18]

17. (4)
- The number of O atoms in 1 g of O_2 = $\frac{1}{32} \times 2 \times N_A = \frac{N_A}{16}$
 - The number of O atoms in 1 g of O_3 = $\frac{1}{48} \times 3 \times N_A = \frac{N_A}{16}$
 - The number of O atoms in 1 g of atomic oxygen = $\frac{N_A}{16}$

Hence, number of O atoms are same.

[New NCERT Class 11th Page No. 21]

18. (2)
 Empirical formula = CH_2O
 Empirical mass = $12 + 2 + 16 = 30$
 Molecular mass = 120
 $n = \frac{\text{molecular mass}}{\text{empirical mass}} = \frac{120}{30} = 4$
 Hence, molecular formula = $(\text{CH}_2\text{O})_4 = \text{C}_4\text{H}_8\text{O}_4$
[New NCERT Class 11th Page No. 20]

19. (1)
 Moles of NaOH = $\frac{M \times V(\text{mL})}{1000}$
 where M = Molarity of NaOH solution
 V(mL) = Volume of solution in mL
 $= \frac{0.1 \times 250}{1000} = 0.025$
 Mass of NaOH = $0.025 \times 40 = 1\text{ g}$
[New NCERT Class 11th Page No. 16]

20. (4)
 Molarity of H_2SO_4 = 18 M
 Moles of H_2SO_4 = 18
 Volume of H_2SO_4 = 1000 mL
 Mass of H_2SO_4 = $18 \times 98 = 1764\text{ g}$
 Mass of solution = $1.8 \times 1000 = 1800\text{ g}$
 Mass of solvent = $1800 - 1764 = 36\text{ g}$
 Molality = $\frac{\text{moles of } \text{H}_2\text{SO}_4}{\text{mass of solvent}} \times 1000$
 Molality = $\frac{18}{36} \times 1000 = 500\text{ m}$
[New NCERT Class 11th Page No. 18]

21. (4)
 Number of moles of CO = $\frac{8.4}{28} = 0.3$
 Electrons in 8.4 g of CO = $0.3 \times N_A \times 14 = 4.2 N_A$
[New NCERT Class 11th Page No. 17]

22. (4)
 Weight percentage and mole fraction both are temperature independent term.
[New NCERT Class 11th Page No. 16]

23. (3)
 $2\text{H}_2(\text{g}) + \text{O}_2(\text{g}) \rightarrow 2\text{H}_2\text{O}(\text{l})$
 Moles of H_2 = $\frac{4}{2} = 2$
 Moles of O_2 = $\frac{4}{32} = 0.125$
 Here, limiting reagent is O_2 .
 Hence, moles of water formed = $0.125 \times 2 = 0.25$
 Amount of water formed = $0.25 \times 18 = 4.5\text{ g}$
[New NCERT Class 11th Page No. 14]

24. (4)
- Reducing agent : donates electrons
 - Oxidising agent : accepts electrons
- [New NCERT Class 11th Page No. 11]**

SECTION-(III) BOTANY

25. (4)
 A specialised differentiated form of cell membrane called mesosome is the characteristic of prokaryotes.
[New NCERT Class 11th Page No. 90]

26. (2)
 The fluid nature of the membrane is also important from the point of view of functions like cell growth, formation of intercellular junctions, secretion, endocytosis, cell division etc.
[New NCERT Class 11th Page No. 94]

27. (1)
 Rudolf Virchow proposed "*Omnis cellula-e cellula*".
[New NCERT Class 11th Page No. 88]

28. (3)
- Plasmid DNA confers certain unique phenotypic characters to bacteria.
 - One such character of plasmid is resistance to antibiotics.
- [New NCERT Class 11th Page No. 90]**

29. (1)
- The cytoplasm is the main arena of cellular activities in both the plant and animal cells.
 - Various chemical reactions occur in it to keep the cell in the living state.
- [New NCERT Class 11th Page No. 88]

30. (4)
- The prokaryotic cells are represented by bacteria, blue-green algae, mycoplasma and PPLO. Human cheek cells are examples of eukaryotic cells.
- [New NCERT Class 11th Page No. 89]

31. (3)
- The innermost portion of a mature plant cell wall possesses secondary cell wall.
- [New NCERT Class 11th Page No. 94]

32. (4)
- The four basic shapes of bacteria includes rod like, spherical, comma shaped and spiral.
- [New NCERT Class 11th Page No. 89]

33. (1)
- The largest isolated single cell is the egg of an ostrich.
- [New NCERT Class 11th Page No. 89]

34. (2)
- | | |
|-----------------------|------------------------|
| Mycoplasmas | 0.3 μm |
| Viruses | 0.02-0.2 μm |
| Bacteria | 3 to 5 μm |
| Human red blood cells | 7.0 μm |
- [New NCERT Class 11th Page No. 88, 89, 90]

35. (1)
- Movement of water by diffusion in cell membrane is called osmosis.
- [New NCERT Class 11th Page No. 94]

36. (4)
- No organelles, like the ones in eukaryotes are found in prokaryotic cells except for ribosomes.
- [New NCERT Class 11th Page No. 90]

SECTION-(IV) ZOOLOGY

37. (4)
- Vasa efferentia, Bidder's canal and testes are found in male reproductive system of frogs.
 - A pair of oviducts is found in female frogs.
- [Old NCERT Class 11th Page No. 119]

38. (4)
- Compound epithelium covers the dry surface of the skin, the moist surface of buccal cavity, pharynx, inner lining of ducts of salivary glands and of pancreatic ducts.
 - Stomach and intestine are lined by columnar epithelium.
- [Old NCERT Class 11th Page No. 101]

39. (2)
- Frogs have a short alimentary canal.
 - Frogs are carnivores.
- [Old NCERT Class 11th Page No. 117]

40. (4)
- The squamous epithelium is made of a single thin layer of flattened cells with irregular boundaries.
 - They are found in the walls of blood vessels and air sacs of lungs and are involved in functions like forming a diffusion boundary.
- [Old NCERT Class 11th Page No. 101]

41. (2)
- Vascular system of frogs is well-developed and closed type.
- [Old NCERT Class 11th Page No. 116]

42. (1)
- Adipose tissue is a type loose connective tissue located mainly beneath the skin.
- [Old NCERT Class 11th Page No. 102]

43. (4)
- Frogs are beneficial for mankind because they eat insects and protect the crop.
 - Frogs maintain ecological balance because these serve as an important link of food chain and food web in the ecosystem.
- [Old NCERT Class 11th Page No. 120]

44. (4)
- | | |
|-----------------------------------|-------------------------------|
| Squamous epithelium | Inner lining of blood vessels |
| Skeletal muscles | Biceps |
| Cartilage | Outer ear joints |
| Dense irregular connective tissue | Skin |
- [Old NCERT Class 11th Page No. 119]

45. (2)

- During aestivation gaseous exchange takes place through skin.
- RBCs are nucleated and contain red coloured pigment namely haemoglobin.

[Old NCERT Class 11th Page No. 116]

46. (4)

- Salivary gland is an exocrine gland.
- Adhering junctions cement the adjacent cells together.
- Smooth muscles are involuntary and non-striated.

[Old NCERT Class 11th Page No. 103]

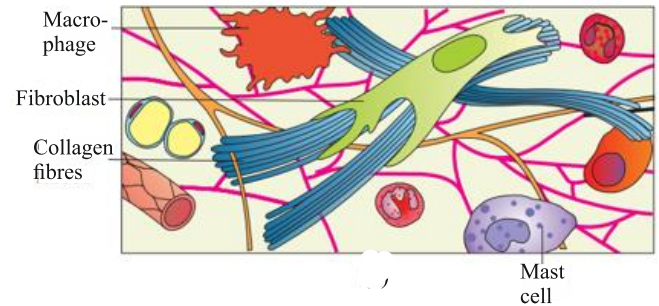
47. (2)

- Blood is a fluid connective tissue containing plasma, red blood cells (RBC), white blood cells (WBC) and platelets.
- Blood is the only connective tissue which does not contain fibre secreting cells.

- Arrival of the disturbance at the neuron's endings, triggers events that may cause stimulation or inhibition of adjacent neurons.

[Old NCERT Class 11th Page No. 104]

48. (3)



- In all connective tissues except blood, the cells secrete fibres of structural proteins called collagen or elastin.
- These cells secrete modified polysaccharides, which accumulate between cells and fibres and act as matrix (ground substance).

[Old NCERT Class 11th Page No. 103]