

Instructions :

- It is compulsory to attempt all the questions. Marks of the questions are mentioned against them.
- Question no. 01 to 05 are objective type. Each question Carries 1 marks.
- Question no. 6 to 17 are short answer type questions, answer them in about 30 words. Each question Carries 2 marks.
- Question no. 18 to 20 are short answer type questions, answer them in about 75 words. Each question Carries 3 marks.
- Question no. 21 to 23 are long answer type questions, answer them in about 120 words. Each question Carries 4 marks.

Question 1. Choose the correct option and write-

1 × 6 = 6

- Rusting of Iron is an example of:
(a) Reduction (b) Oxidation
(c) Corrosion (d) Dissociation
- The pH value of a base solution is
(a) $\text{PH} > 7$ (b) $\text{PH} < 7$ (c) $\text{PH} = 7$ (d) $\text{PH} = 0$
- Lungs are located
(a) In Thoracic Cavity (b) In abdominal Cavity
(c) Near Intestine (d) Below Pancreas
- Involuntary actions are controlled by ?
(a) Cerebrum (b) Cerebellum (c) Medulla oblongata (d) Spinal Cord
- When an object is placed at centre of curvature in front of concave mirror then the image will be formed:
(a) At focus (b) At infinity
(c) At centre of curvature (d) Between focus and centre of curvature
- The Presbyopia is corrected by using:
(a) Convex lens (b) Concave lens (c) Bifocal lens (d) Cylindrical lens

Question 2. Fill in the blanks and write-

1 × 6 = 6

- The Chemical reaction in which exchange of ions takes place between reactants are called reactions.
- hormone is secreted by Pancreas.
- is the functional unit of kidney.
- The focal length of mirror is infinity.
- The SI unit of power of lens is
- To store the rain water and to use it is called

Question 3. Write True or False.

- (i) CH_3OH is a base because OH is present in it. **F**
(ii) Oxalic acid is found in tamarind. **F**
(iii) Liver converts ammonia into urea. **T**
(iv) Concave Mirror is used as shaving mirror. **T**
(v) The power of convex lens is negative. **T**
(vi) The infrared radiations are absorbed by Ozone layer. **T**

Question 4. Match and write the correct pair-

1 × 6 = 6

[A]

- (i) Pituitary gland
(ii) Female Hormone
(iii) Mirror formula
(iv) Lens formula
(v) Tyndal effect
(vi) Twinkling of stars

[B]

- (a) $1/f = 1/v + 1/u$
(b) Scattering
(c) Atmospheric refraction
(d) Thyrotropic
(e) $1/f = 1/v - 1/u$
(f) Oestrogen

Question 5. Write the answer in one word or sentence-

1 × 6 = 6

- (i) What is correct formula of plaster of Paris?
(ii) What is the function of pheromone?
(iii) What is the least distance of distinct vision?
(iv) Which part of human eye regulates the intensity of light entering in the eye?
(v) What is food chain?
(vi) What are biodegradable substances?

Question 6: Why should a magnesium ribbon be cleaned before burning in air?

Or

Why does colour of copper sulphate solution change when iron nail is dipped in it?

Question 7: What is Galvanization?

Or

What is combination reaction? Give an example.

Question 8: What is Aquaria?

Or

How is slaked lime obtained by quick lime? Write chemical reaction.

Question 9: Why does aqueous solution of an acid conduct electricity?

Or

Write any two importance of pH in our daily life.

Question 10: What is the role of acid in our stomach?

Or

What is autotrophic nutrition?



Question 11: Write definition and chemical equation of photosynthesis.

Or

Write any two functions of Lymph.

Question 12: Write any two functions of fore brain.

Or

Write any two functions of Cytokinin hormone.

Question 13 : Write any two functions of Neuron.

Or

Write name of any two endocrine glands of human along with name of hormone secreted by them.

Question 14: Write laws of reflection.

Or

What is critical angle?

Question 15: What is the power of lens ? Write its SI unit.

Or

Define Magnification and write its formula.

Question 16: What do you mean by Total Internal Reflection?

Or

What is Tyndall effect?

Question 17: What is Ecology ? Write main components of Ecosystem.

Or

Give any two ways in which non biodegradable substances would affect the Environment.

Question 18 : Define Corrosion and write any two ways to prevent the corrosion.

Or

What is Rancidity? Write two methods of prevention of rancidity.

Question 19: Make labeled diagram of Nerve cell.

Or

What is Reflex action? Explain its mechanism.

Question 20 : The power of lens is -2.0 D find its focal length. Which type of lens is this?

Or

An object is placed at a distance of 10 cm from a convex mirror of focal length 15 cm. Find the position and nature of image.

Question 21 : Write any four differences between an acid and a base.

Or

Write two use of each of the followings

(a) Backing Soda (b) Bleaching Powder (c) Plaster of Paris (d) Washing Soda

Question 22 : Write any four differences between aerobic respiration and anaerobic respiration.

Or

Write any four differences between an artery and a vein.

Question 23: Explain Myopia and Hypermetropia with causes and correction.

Or

Why does Sky appear Red during Sunrise and Sunset?

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