

PRACTICE PAPER (2019-20)

Subject : SCIENCE

GMT-I/250

Time : 3.00 Hrs

Class : X

M.M. : 80

General Instructions

1. The question paper comprises three sections A, B and C. Attempt all the sections.
2. All questions are compulsory.
3. Internal choice is given in each section.
4. All questions in **Section-A** are **one mark** questions comprising MCQ, VSA type and Assertion-reason type questions. They are to be answered in one word or in one sentence.
5. All questions in **Section-B** are **three marks**, short answer type questions. These are to be answered in about 50 – 60 words each.
6. All questions in **Section-C** are **five marks**, long answer type questions. These are to be answered in about 80-90 words each.
7. This question paper consist of a total of 30 questions.

SECTION (A)

1. How is the brain protected from shocks and injuries?
2. An element 'Z' atomic number 17. Find out Period and Group in modern periodic table.
3. Q Nos. 3(a) -3(d) on the basis of your understanding of the following paragraph and the related studied concepts:

There are different types of chemical reactions occurring around us or being carried out for the benefit of mankind, e.g. combination reactions, decomposition reactions, displacement reactions, precipitation reactions, reduction-oxidation (redox) reactions, photochemical reactions etc.

3 (a) Combustion of coke is a combination reaction. CO_2 is not a pollutant. Then why is combustion of coke harmful?

3 (b) Which reaction followed by two combination reactions are involved in white wash of walls?

3 (c) Give one use of tin plating in daily life.

3 (d) How photochemical reactions have played an important role in photography?

4. For Q. nos. 4 (a) – 4 (d) are based on the information given below. Study these information related to answer that follow :

Adrenaline hormones is released in the body during stress or emergency situations. It generates several responses which together enable the body to deal with a situation. Given below is a table related to the effects of Adrenaline hormone on liver glycogen and blood as a result of increased adrenaline secretion glucose.

Concentration of glycogen in the liver	Concentration of glucose in the blood
Decrease	Increase
Increase	Increase
No effect	Decrease

4. (a) Identify the gland from which the adrenaline hormone is secreted.
4. (b) Which one of the following is an effect of adrenaline hormone in an individual?
- (a) Increased rate of breathing (b) Increased muscle strength
- (c) Decreased metabolism of fats (d) Both (a) and (b)
4. (c) Adrenal gland is which type of gland?
- (a) Endocrine (b) Exocrine
- (c) Paracrine (d) None of these
4. (d) Which of the following options given in table above correctly depicts the effects of adrenaline on blood glucose?

sometimes jewellers mix a large quantity of copper and silver in gold to earn more profit.

- (i) What precautions should you take while purchasing gold jewellery?
- (ii) Why does government insist on purchasing hallmarked jewellery?
- (iii) What can a consumer do while buying jewelleryes?

Or

A metal X left in moist air for a longer time, loses its shiny brown surface and gains a green coat. Why has this happened? Name and give the chemical formula of the given coloured compound and identify the metal. List two ways to prevent this process.

- 18. Explain homologous and analogous organs with suitable example.
- 19. (i) Give the function of the earth wire in electrical instruments. Why is it necessary to earth the metallic electric appliances?
(ii) What are the harmful effects of overloading in an electric supply? When does it occur?
(iii) What is the capacity of fused wire in the line to feed
(a) lights and fans (b) appliances of 2kw or more power

Or

Obtain an expression for the heat produced in a conductor of resistance R, when current I is flowing through it.

- 20. (i) Define Homologous series with example.
(ii) Define Isomerism with suitable example.
(iii) Write IUPAC name (i) $\text{CH}_3\text{CH}_2\text{CHO}$ (ii) $\text{CH}_3\text{CH}_2\text{CH}_2\text{COOH}$
- 21. Explain nutrition in Amoeba with suitable diagram.

22. If two resistors of resistance 5Ω and 10Ω respectively, are connected to a battery of 6 V , then determine the value of the total resistance and current in the circuit when they are connected in

(i) Parallel combination

(ii) Series combination

23. What is Tropism? Define different types of tropism with suitable example.

Or

Answer the following

(i) Which endocrine gland is present in males but not females?

(ii) Name the endocrine gland associated with throat.

(iii) Which gland secretes both digestive enzymes as well as hormones?

24. Draw structure of human excretory system and explain it.

Section (C)

25. Define different defects of eye. Explain with suitable diagrams.

Or

Define these-

(i) twinkling of Stars

(ii) atmospheric refraction

(iii) Formation of Rainbow

(iv) Refraction through Prism (correct diagram only)

(v) Sky appears blue

26. (i) Draw diagram of female reproductive system and label it.

(ii) Draw diagram of male reproductive system and label it.

27. (i) Mention any two precautions to avoid overloading of domestic electric circuits.
(ii) Draw magnetic lines of force for a current carrying solenoid. Also explain the pole formation at this end.
28. (i) What is rancidity? How can you prevent food material?
(ii) What is a thermite reaction? Write equation also.
(iii) Explain redox reaction with example.
29. (i) What is the principle of electric motor.
(ii) Draw structure of Electric motor.
(iii) Explain the working of electric motor.
30. Define- (any five)
- (i) Modern periodic law
 - (ii) Catenation
 - (iii) Roasting
 - (iv) Importance of pH in everyday life
 - (v) Esterification reaction
 - (vi) difference between baking soda and baking powder
 - (vii) Preparation of bleaching powder and use
 - (viii) Ohm's law
 - (ix) Artificial evolution
 - (x) Monohybrid and di hybrid cross