



ગુજરાત માધ્યમિક અને ઉચ્ચતર માધ્યમિક શિક્ષણ બોર્ડ, ગાંધીનગર

STD - 10

Sub: - Science (11) (E)

2021-22

Total Marks: - 25

Unit Test -1

Time: - 45 Minutes

- Instruction: This paper contains total 12 questions, all are compulsory.

Section -A

Answer the following:

4 Marks

Q - 1 Which of the following is not physical changes?

- (a) Boiling of water to give water vapour. (b) Melting of ice to give water
(b) Combustion of Liquefied Petroleum Gas (LPG). (d) Dissolution of salt in water.

Q - 2 Quicklime is used to whitewash walls of the house, which of the following is chemical formula of it?

- (a) CaCO_3 (b) Ca(OH)_2 (c) CaO (d) None of these.

Q - 3 The refractive index of any medium is always.....

- (a) 1 (b) >1 (c) <1 (d) 0

Q - 4 Which of the following groups contains only non-biodegradable things.

- i. Stick, paper, leather
ii. Polythene, sanitizer, PVC
iii. Plastic, sanitizer, grass
iv. Plastic, Bakelite, DDT

- (a) (iii) (b) (iv) (c) (i) and (iii) (d) (ii) and (iv)

Section -B

• **Do as directed:**

8 Marks

Q - 5 A magnesium ribbon is burnt in the air to give a white compound 'X' accompanied by emission of light. If the burning ribbon is now placed in an atmosphere of nitrogen, it continues to burn and forms a compound 'Y'.

- (a) Write the chemical formulae of 'X' and 'Y'.
(b) Write a balanced chemical equation, when 'X' is dissolved in water.

Q - 6 What is refraction? Write the laws of refraction.

Q - 7 How can you help in reducing the problem of waste disposal? Give any two methods.

Q - 8 Describe the types of waste on the basis of degradation.

Section -C

• **Answer in brief:**

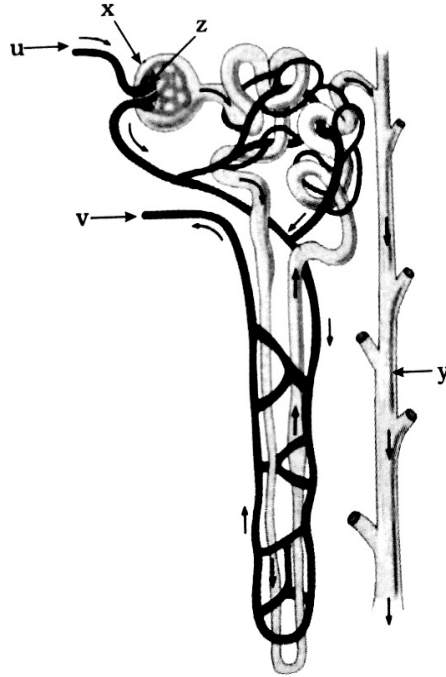
9 Marks

Q - 9 What is combination reaction? Explain with the help of chemical reaction.

Q - 10 What is the power of lens? Write SI Unit of power of lens and Write the Equation Showing relation between power of lens and focal length.

Q - 11 Observe the following diagram carefully and answer the following:

- (i) Which structure is shown in the diagram? Which nitrogenous wastes are removed from blood by this structure?
- (ii) Label the different parts in the given diagram.
- (iii) Identify 'X' and write its shape as well function.



Section -D

• **Answer in detail**

4 Marks

Q - 12 Describe human digestive system.

OR

Q - 12 Explain human respiratory system.

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