

8. a) Why carbon monoxide is considered to be a dangerous pollutant?
 b) Complete and balance the following equations:
 i) $\text{Na} + \text{O}_2 \rightarrow$ ii) $\text{Al} + \text{HCl} \rightarrow$ (1+1)
9. Draw a neat and well labelled diagram of a candle flame. (2)
10. a) What is the colour and name of the compound formed due to corrosion of copper metal?
 b) With the help of an activity show that both air and moisture are necessary for rusting of iron to take place. (1+2)
11. a) What is the meaning of the word conservation of resources?
 b) Give two reasons as to why we need to conserve our natural resources. (1+2)
12. a) What is the composition of water gas?
 b) How is coke obtained?
 c) Give one use of:
 i) Coal tar ii) Ammonium compounds
 d) Define: Destructive Distillation Of Coal. ($\frac{1}{2} + \frac{1}{2} + 1 + 1$)
13. a) How is petroleum formed?
 b) What do you mean by
 i) refining? ii) fractions?
 c) Why petroleum is called black gold?
 d) Write the names and one use of the products obtained from fractional distillation of the residual oil. (any two) (1+1+1+2)
14. a) What are the conditions necessary for combustion to take place (three)?
 b) List any three characteristics of a good fuel.
 c) Which zone of the candle flame is the hottest and why?
 d) Write the working of Acid-Soda type of fire extinguisher. Write down the balanced chemical equation involved. (1+1+1+2)

BIOLOGY (Time : 1 hr.; M. Marks : 30)

1. Which hormone controls metamorphosis in frogs?
 a) Thyroxine b) adrenalin c) GH d) TSH (1)
2. Which combination of sex chromosome is present in male?
 a) XX b) XY c) AXX d) XYX (1)
3. Which of these is extinct?
 a) Lion b) Leopard c) Dodo d) Tiger (1)
4. The animals found in a particular region are known as
 a) flora b) fauna c) endangered d) extinct (1)
5. Which of the following is a hermaphrodite animal?
 a) Frog b) Cow c) Dog d) Earthworm (1)

6. Which of these is called the master gland?
a) Pituitary b) Testis c) Thyroid d) Pancreas (1)
7. Give one word for the following: (2)
a) The stage of life when the body becomes capable of reproduction.
b) The period of transition from a child to an adult.
c) The first period that a girl has.
d) The stoppage of the menstrual cycle.
8. List four ways in which forests are useful to us. (2)
9. Draw the life cycle of a mosquito. (2)
10. State the differences between external and internal fertilization with an example for each. (2)
11. Explain a) binary fission b) budding with the help of diagrams. (2)
12. Name any three endocrine glands and the hormones they secrete. (3)
13. What do you mean by endemic, extinct and endangered species? (3)
14. State any three differences between manure and fertilizers. (3)
15. Draw a well labelled diagram of nitrogen cycle. Also explain each step briefly. (5)

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