

**Kendriyavidyalaya , IIT campus chennai-36**

**Science question bank ( FA3)**

**Class:- X**

**VERY SHORT ANSWER:- 3X1 = 3 M**

1. Define homologous series .
2. DEFINE Alotrophy.
3. Define menarche.
4. What is micelle?
5. Draw the asexual reproduction taking place in amoeba.
6. Why producers are always occupy the first level in ecosystem.
7. Write the difference between binary and multiple fission.

**SHORT ANSWER :- 4X 2= 8 M**

8. Describe the role of a) fallopian tube b) ovary c) placenta d) uterus .
9. Write the difference between pollination and fertilization.
10. Write the difference between external fertilization and internal fertilization.
11. Write the member and IUPAC name for n=3 for the Aldehyde, Ketone acid and alcohol Family.
12. Give a chemical test to distinguish between saturated and unsaturated hydrocarbon.
13. What do you mean by ten percent law.

**SHORT ANSWER 3X3= 9 M**

14. Write the difference between food chain and food web.
15. Write the difference between gamete and zygote.
16. Write the electronic dot structure for carbon-di-oxide, methane, water, sulphur.
17. Give reason: element carbon forms mainly by covalent bonding.

ii) diamond has a high melting point.

iii) graphite is a good conductor of electricity.

18. A carboxylic acid  $C_2H_4O_2$  reacts with an alcohol in the presence of  $H_2SO_4$  to form a compound "X". The alcohol on oxidation with alkaline  $KMnO_4$  followed by acidification gives the same carboxylic acid  $C_2H_4O_2$ . Write the name and structure of a) carboxylic acid b) alcohol c) the compound X.

19. Write the difference between self pollination and cross pollination.

**LONG ANSWER 4X 5 = 20 M**

20. Write the chemical equation for the following

a) substitution

b) reaction of ethanol with excess conc.  $H_2SO_4$  at 443 K.

c) industrial preparation of vanaspathi.

d) oxidation of propanol

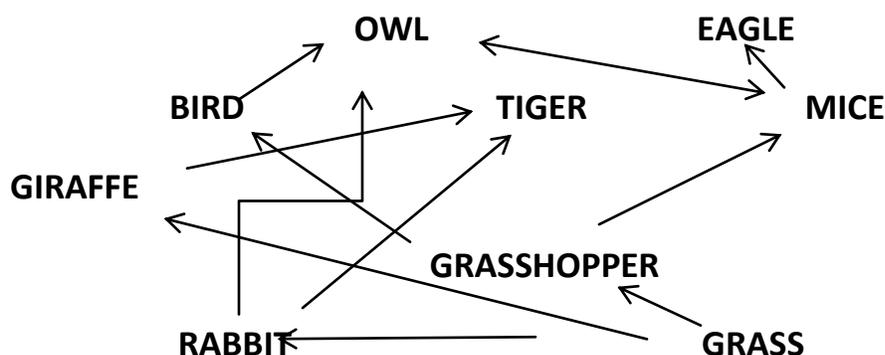
21. Draw and explain the process of fertilization that takes place in flowering plants.

22. Explain isomerism. State any four characteristics of isomers. Draw the possible isomers of butane.  $C_4H_{10}$

23. Explain the male reproductive system of human beings.

24. What is soap? Why are soaps not suitable for washing clothes when water is hard.

25. The diagram below shows a food web.



a. How many food chains are interlinked in this food web?

**b. Complete the following table by using the food web shown above.**

<b>Producer</b>	<b>Primary CONSUMER</b>	<b>Secondary consumer</b>	<b>Tertiary consumer</b>

**C. Write down the food chain which provides the greatest amount of energy to the organism at the end of the chain.**