Food Value

Ques. Give a detailed account on food value of Algae, Fungi and Mushroom?

Ans. **INTRODUCTION** ⟹ The study of Phycology and Mycology is perhaps as old as man's interest in Botany but their study has made great advancement in 20th century. Extensive researches are being done to find out the food value of Algae and fungi. It is now clear that - Algae being the most primitive among the plant kingdoms has not so scanty role in human life. It is of common practice to produce more and more food from Algae and fungi; as to solve food problems. In this regard Japan is far ahead than any other country where researches are conducted to solve the food problem through the source of Algae and fungi.

Food value of Algae ⟹ People of coastal countries like China and Japan have long been using seabeeds (to check) and certain other algaes as a source of food. Some of the more commonly used algae as food are Porphyra, Vulva, Alaria, Chlorella, Chondrus, Rhodymenia, Nostac, Laminaria, Fucus, and Saragassum.

Algae as a food is most popular in Japan, within last ten years. Japan has much improved in mass culture and Technique of farming of Algae. The following are the species

Food Value

which are used as food.

(1) **Porphyra laterera** ⇒ It is a popular species, which are eaten through out Japan and other countries like England and California. It is a red marine algae which is cultivated in shallow sea shore in commercial scale. It is very much rich in protein (30-35%) and Carbohydrate 40-45%. Finally Mainly high concentration of Vitamin A, B and C are also detected. The porphyra are eaten with rice. Its Soup is highly priced in Europe.

(2) **Laminaria japonica** ⇒ These are another species of class "phycophyceae which is extensively used as standard food in Japan and Europe. Its soup and source are very popular and its preparation is very easy. Now it is very popular in some of the western countries also.

Saragassum species — It is a member of brown algae and commonly called as seaweeds. It is very popular in Japanese fisher men. to check. A food is prepared named as KOMBIE. Which is very famous in Japan and prepared by the help of Sorgassum, Laminaria and Alaria.

Ulva lactuca ⇒ It is a member of chlorophyceae. Its thallus is very broad and fan shaped. It is also eaten in - Japan, Ireland and Denmark. Thus it is seen that Japanese Consume large no. of Algae as food.

Chlorella ⇒ It has drawn much attention of

Food Value

phycologist than any other algae because they contain much percentage of protein than any other vegetable or egg. It also contains cell vitamins from 'A' to 'D'. This is why Japan China and America are busy to find out the food value of chlorella. It is most popular algae which decorates Pastries, Sandwitches, rice cake, Fish cake and jelly Cake in Japan.

(6) Agar agar ⟹ It is also used in preparation of jelly, Jam and Icecream. They are the main media in which creams are being mixed for the preparation of jellies. So indirectly they are also used as food.

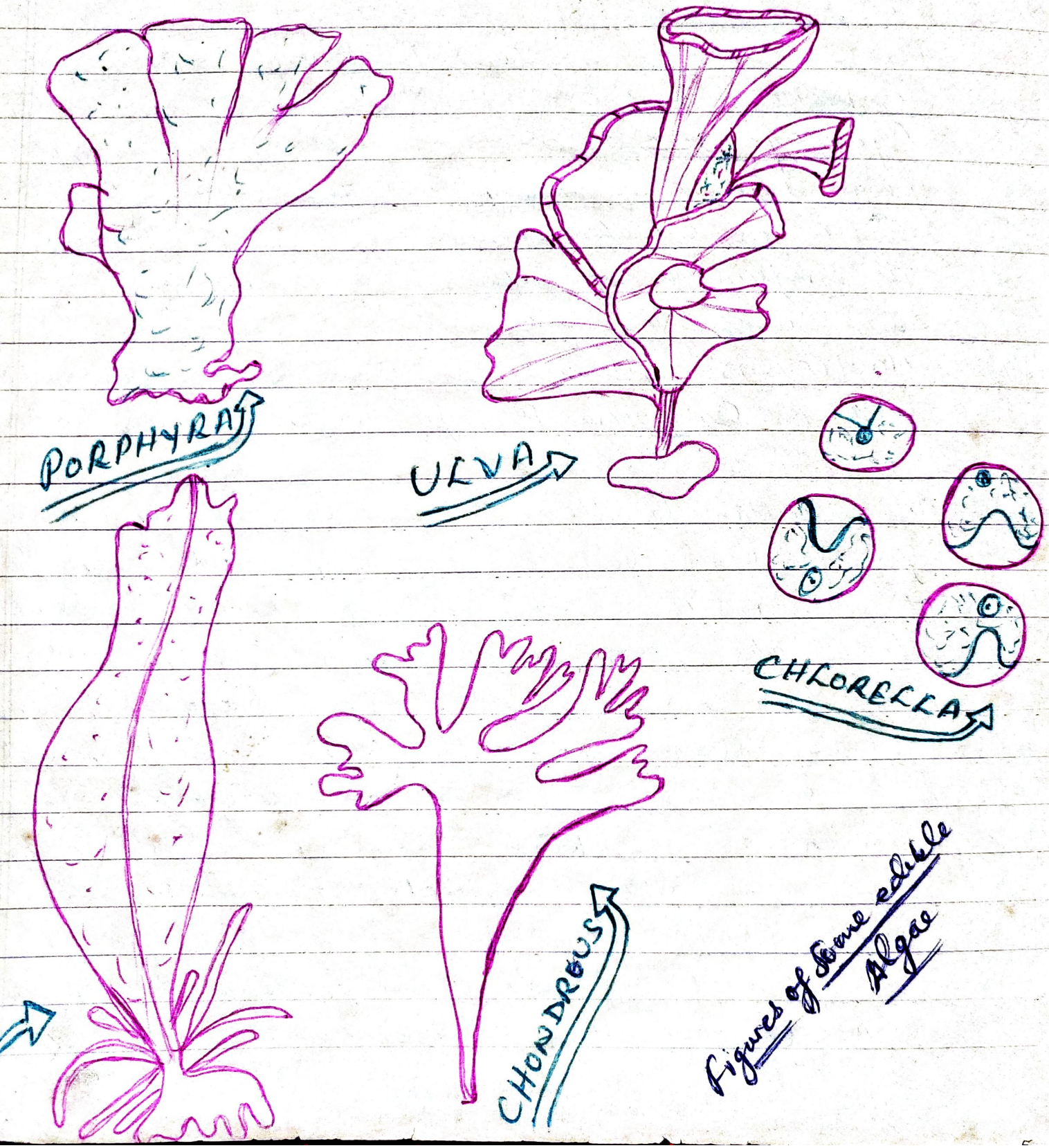
(7) Macrocystis ⟹ It is also used to be eaten by Hen's cocks in California. It's preparation is also served to Cattle.

(8) In addition to their direct use as food many algae provide meal to human being indirectly by virtue of position in food webs in natural habitates. In both fresh and marine water, Algae are eaten by lower animals like protozoa, insects etc which intern are eaten by higher animals such as fish. Fish constitute an important source of protein to mankind. Thus it is marked that algae are also indirectly responsible for increasing protein contents to men.

Researches are being conducted in U.S.A. on the possible use of chlorella in space

Food Value

flights and regeneration of food cycling.
Many developing countries are facing grave food storage. In order to meet this challenge, it can be solved out food problem through algae.



Figures of some edible Algae