B. L. D. E. Association's

S. B. ARTS & K. C. P. SCIENCE COLLEGE, VIJAYAPUR

I st INTERNAL TEST 20 -20

Name / ಹೆಸರು : Pallavi. M. Nayak Roll No./ಸಂಖ್ಯೆ : 2612 Date / ದಿನಾಂಕ : 10-7-20

Subject/ವಿಷಯ : Diversity of Non-flowering Plants Semester/ಸೆಮಿಸ್ಟರ್ : II Exam Seat No / ಪರೀಕ್ಷೆ ಸಂಖ್ಯೆ : U15KM21S0262

Invigilator's Signature / ಕೊಠಡಿ ಮೇಲ್ವಿಚಾರಕರ ಸಹಿ Signature of Evaluator / ಪರೀಕ್ಷಕರ ಸಹಿ Marks obtained/ ಪಡೆದ ಅಂಕಗಳು 25 / 30

Q I)

1. Heterocyst is large size cell of thick cell wall which help in nitrogen fixation. And it is a type of asexual reproduction in Nostac in which at favourable condition spores produce a new thallus body.
In Nostoc blue green algae it is present.

2. Algal bloom:- Extreme development of algae on the surface of water, be pond or lakes: due to sewage and air pollution.
Extent de growth of ~~plant~~ phytoplankton on the surface with different colour of algae red blue-green
Ex:- Oscillotoria. Blue-green algae.

3. 5. Oogamous:- It is type of ~~rep~~ sexual reproduction in which female gamete is larger than male gamete. Motile male gamete meet and fusion with non-motile female gamete after that fertilizati zygote formation takes place.
Ex:- Batracosperum In this algae Oogamous takes place.

6. Gametophyte:- It is a sexual reproduction used to takes place in Bryophytes. In this method one male and one female gametes are present which fuse and be produce new plant body
~~Ex:- In R~~ It is main plant body in Bryoph
Ex:- Riccia. In riccia this method can be see

4. Rhizoids:- Rhizoids are hair like structure which present at basal part of stem or in roots. It can be also known as false root which help in nitrozen fixation and soil attaching.

Q. II

1. General Characterstics of Bryophyte.

* Bryophytes are known as a Amphibeans of plant kingdom.
* It growns on moist area and terrestrial area also where shady and water content is more.
* Bryophytes are autotrophic in nature it prouce its own food. because of presence of chlorophyll.
* It is a thalloid and foliose body.
* Main plant body of Bryophyte is Gametophyte. Gametophyte is independent and sporophytes are partialy or totally depends on gametophyte.
* Reproduction takes place by 2 2 methods Asexual and sexualy.

2. Classification of Algae → 11 classes are present

1) Chlorophyceae :- Green Algae.
Pigment :- Chlorophyll a & b. Carotinoid.
Reserve Food :- Starch
Ex - Chlorella.

2) Xanthophyceae - Yellow Algae.
Pigment :- Xanthophyll
Reserve food :- Oil
Ex - Botrydium

3) Chrysophyceae - Light Brown Algae
Pigments :- Chlorophyll a, carotinoid, phyco fucoxanthin
Reserve food - Chalsminarion, and Lucosin
Ex :- Chrysophyrea.

4) Bacillariophyceae - Dialoms
Pigments - Chlorophyll a, Chromatophore red or orrange red colour.
Reserve food - Lucosin
Ex :- Pinnularia.
In this cell wall made up of silica & pectic

5) Cryptophyceae
Pigments :- Chlorophyll a, β carotinoid.
Reserve food - ~~Soil & to~~ Starch & Solid hydrocarbon
Ex - Cryptomonas

6) Dinophycae → Yellow or Gladin brown algae.
Pigments - Chlorophyll a carotinoids
Reserve food - Oil and fat
Ex → Petridinum

7) Chloromonoaceae - Bright Green algae
Pigment - Chromatophore of bright green colour, chlorophyll a & c, β carotenoids
Reserve food - Oil and fat
Ex :- Vaucheria, Tribonema

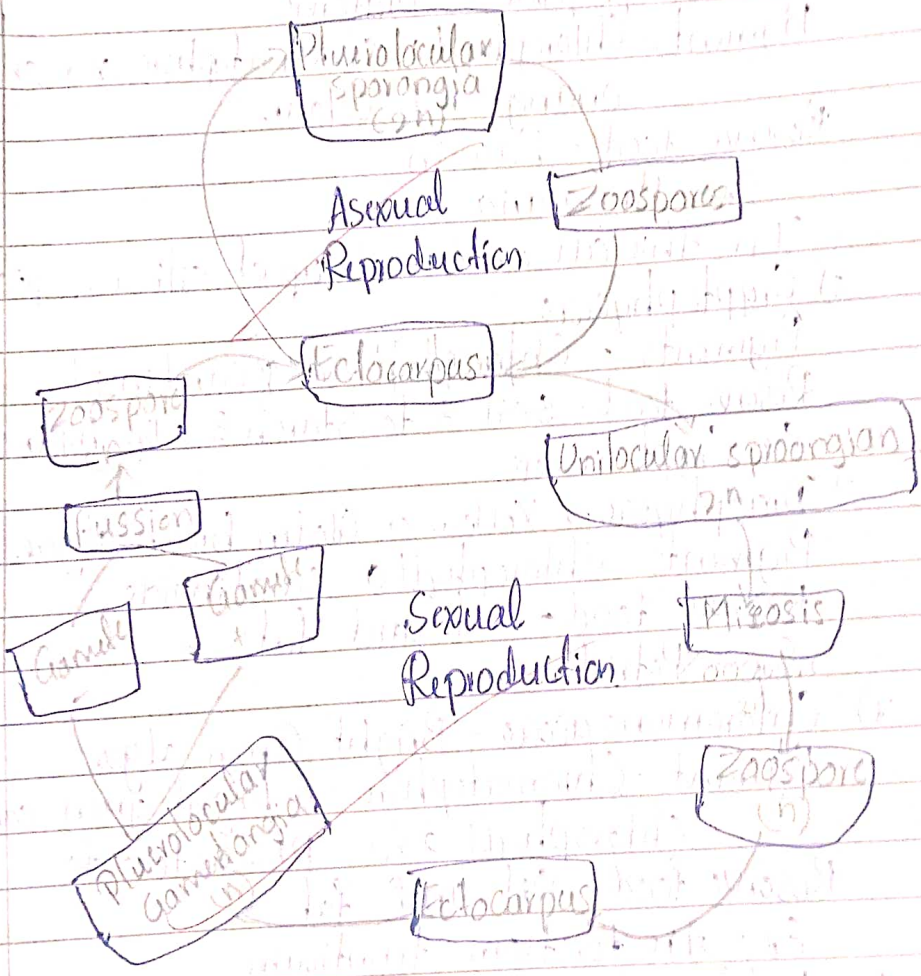
8) Euglenophyceae - Dark Green Algae.
Pigments :- Chlorophyll Chromatophore of dark green.
Reserve food → Paramylon
Ex :- Euglena

9) Phaeophyceae → Brown algae
Pigment - Fucoxanthin, Chlorophyll a
Reserve food - Starch and Mannitol & fat
Ex: Ectocarpus

10) Rhodophyceae: Red algae.
Pigment - Phycoerythrin, Chlorophyll a, carotenoids
Reserve food - Floridean starch
Ex - Batrachospermum

11) Myxophyceae - Blue Green algae
Pigment - Phycocinin, Chlorophyll a, carotenoids
Reserve food - Cyanophycean starch
Ex - Nostoc

4. Life Cycle of Ectocarpus.



* Reproduction of Ectocarpus held by 2 methods Asexual and Sexual
* In Asexual reproduction sporangia formation takes and each spores poduce new plant body.
* In sexual reproduction gametophyte are prese with the help of presence of gametes new plant pro form.
* After both reproduction. Heploid plant body form.

Q III.

4. General Account on Blue Green Algae.
* Blue Green Algae comes in class Myxophyceae.
* In this algae phycocinin pigments are present
* Nucleus is divided into nuclear membrane and nucleoulse.
* Bond orgonalls are absent.
* Chlrophyll pigment is present which help in photosynthesis and produce its own food.
* Cellwall made up of myxopeptid.
* Reproduction takes place in 02 methods asexual and vegitative.
* Sexual Reproduction is completely absent
* Occurence is fr. mostly fresh water and some are marine water.
* Life cycle is Heplontic lifecycle
* Heterocyst in this algae help in nitrogen fixation
* Best example of B.G.A is ~~Spi~~Spirulina
* This algae is very important in economi and medical
* Spirullina help in the treatment of canc and some discase. It is good for gut
* & It also consume as a died food to maintain Healthy body.

1: Economic Importance of Algae.

- Algae is rich in amino acids, vitamis, and proteins and elements
- Algae is used as food in many countries to maintain diet and healthy body.
- Algae is used in many medical use for example Spirullina use a treament in cancer.
- Algae used as in cosumetic and therapadics
- Algae Some biofuels are extracted from algal fed foodstock.
- Algae are used as food in aquadic animal and p help to grow
- Algae are used in thero surgiry and medicine.

1. Economic Importance of Algae.

- Algae is rich in amino acids, vitamis, and proteins and elemnts
- Algae is used as food in many coundries to maintain died and healthy body.
- Algae is usid in many medical use for examp Spirullina use a treament in cancer.
- Algae used as in cosumetic and therapatics
- Algae Some biofuels are extracted from algal feed foostock.
- Algae are used as food in aquatic animal and help to grow.
- Algae are used in thero surgiry and medicine.