**KARIM CITY COLLEGE, JAMSHEDPUR**

**DEPARTMENT OF BOTANY**

**SYLLABUS DISTRIBUTION**

**AS PER FYUGP, NEP -2022**

**MAJOR -01 SESSION (2023-2027) CREDIT-06 THEORY-03 PRACTICAL-01**

**MICROBIOLOGY & PHYCOLOGY**

**DR. AFTAB ALAM KHAN:**

**FULL MRKS: 60 TIMES: 3 HOURS**

**UNIT -01:**

General characteristics; classification (Baltimore), structure and replication of

DNA virus (T4 phage), lytic and lysogenic cycle; RNA virus (TMV), General

Characteristics of bacteria, Cell structure; Reproduction and recombination

(Conjugation, transformation and transduction).

Unit III**:** Chlorophyta and Phaeophyta and Rhodophyta General Characteristics

features of Chlorophyta, Phaeophyta and Rhodophyta; Occurrence &amp; Range

of thallus organization of Chlorophyta, Pheaophyta and Rhodophyta. Structure

and Reproduction in Volvox, Oedogonium, Chara, Ectocarpus and Polysiphonia.

Commercial cultivation and economic importance of green algae, red algae and

brown algae.

**DR. SHARMILA CHAKRABORTY: 10 Hours:**

**Unit II:**  Algae, Cyanophyta and Xanthophyta Characteristic features of Algae & phycology its Classification (by Fritsch), Ranges of thallus organization in Cyanophyta and

Xanthophyta. Cell structure and Reproduction of Spirulina, Nostoc &amp; Vaucheria

**Unit III:** General characteristics features of Chlorophyta, Phaeophyta and

Rhodophyta; Occurrence &amp; Range of thallus organization of Chlorophyta,

Pheaophyta and Rhodophyta. Structure and Reproduction in Volvox,

Oedogonium, Chara, Ectocarpus and Polysiphonia. Commercial cultivation and

economic importance of green algae, red algae and brown algae.