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**NEPNY—05—2023**

**FACULTY OF SCIENCE AND TECHNOLOGY**

**M.Sc. (NEP) (First Year) (First Semester) EXAMINATION**

**NOVEMBER/DECEMBER, 2023**

**BOTANY**

**Paper-SBOTC-401**

**(Diversity of Microbes)**

**(Wednesday, 20-12-2023)**

**Time : 10.00 a.m. to 1.00 p.m.**

*Time—3 Hours*

*Maximum Marks—80*

*N.L. :—* (i) Question No. 1 is compulsory.

(ii) Of the remaining, attempt any *three* questions.

(iii) Draw neat and labelled diagram wherever required.

1. Write brief notes on the following :

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(a) Features and uses of VAM.

(b) Asexual reproduction in phytophthora fungi.

(c) Write any *two* methods transmission of plant virus.

(d) Chemoautotrophic bacteria.

P.T.O.

2. (a) Explain asexual reproduction in zygomycetes. 10
- (b) Describe fungi as biofertilizers. 10
3. (a) Explain yellow vein mosaic of Bhendi. 10
- (b) Describe Gram staining of Bacteria. 10
4. (a) Explain *four* types Mushrooms and medicinal uses. 10
- (b) What are Deuteromycetes ? Describe characteristic features of Deuteromycetes. 10
5. (a) Explain transformation in bacteria. 10
- (b) Describe economic importance of Mycoplasma. 10
6. Write brief notes on the following : 20
- (a) Structure of bacterial cell
- (b) Chemical composition of virus
- (c) General characters of mastigomycotina
- (d) Role of fungi in agriculture.