

BSc DEGREE EXAMINATION MAY 2017
' (Fourth Semester)

Branch- MICROBIOLOGY

SOIL & AGRICULTURAL MICROBIOLOGY

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks!

Answer ALL questions .

ALL questions carry EQUAL marks

(10x2 = 20)

- 1 Zymogenous.
- 2 Actinomycetes.
- 3 Synergism.
- 4 • Ammensalism.
- 5 Bioleaching.
- 6 Nitrification.
- 7 BGA.
- 8 Rhizobium.
- 9 Bt - toxin.
- 10 My copesticides.

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 5 = 25)

- 11 a Explain about soil bacterial population and its significance in soil transformation.

OR

b Write about autochthonous microflora.

- 12 a Write about commensalisms with suitable example.

OR *

b* Write about competition with suitable example. .

- 13 a Draw and explain phosphorous cycle.

OR

b Write about role of microorganisms in decomposition of organic matter.

- 14 a Give a detailed account on algal Biofertilizer.

OR

b State symbiotic association between microbes and insects.

- 15 a Write about viral biopesticides.

OR

b Write about bacterial insecticides.

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 Write in detail about distribution and abundance of protozoans in soil.
- 17 State the negative interaction with reference to predation and parasitism.
- 18 Give a detailed about on steps involved in sulphur cycle.
- 19 Write in detail about "symbiotic nitrogen fixation process.
- 20 Write about advantages and disadvantages of microbial insecticides.