

13 MAY 2022

12/5/22

[This question paper contains 3 printed pages.]

Your Roll No.



Sr. No. of Question Paper : 1012

Unique Paper Code : 32163403

Name of the Paper : Biofertilizers

Name of the Course : SEC: Botany for Honours

Semester : IV

Duration : 2 Hours 30 minutes Maximum Marks : 38

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any **three** questions in all.
3. Question No. **1** is compulsory.
4. Draw well labeled diagrams wherever necessary.

1. (a) Expand the Following (**any four**) : (1×4=4)

(i) AMF

(ii) PSB

(iii) YEMA

P.T.O.

1012

2

(iv) CFU

(v) BOD

(vi) IARI

(b) Define (**any two**): (2×2=4)

(i) Associative symbiosis

(ii) Appressorium

(iii) Starter culture

(iv) Biological Nitrogen fixation

2. Write short notes (**any three**): (5×3=15)

(a) Organic farming

(b) *Azotobacter* as biofertilizer

(c) Role of burrowing and nonburrowing earthworms in sustainable agriculture

(d) Actinorrhizal symbiosis

3. (a) Why biofertilizers are better than chemical fertilizers? Compare with the help of suitable examples. (8)

1012

3

(b) Discuss briefly isolation, and culturing process of *Rhizobium*. (7)

4. (a) Elaborate on the various methods of biocomposting and throw light on their significance as ecofriendly processes. (8)

(b) How VAM helps in sustainable agriculture. How it differs from ectomycorrhiza? (7)