

All questions carry equal marks

Q.1 Answer the following (any one)

14

What are the important criteria used to study the plant growth promoting activity from endophytes of root nodules, as studied by Nivya .

Or

Discuss the potentials of *Rhizobium* as plant growth promoter according to Kanchana et al

Q.2 Discuss the methodology and research paper of Zhen Zhu et al. dealing with fermentative residues as liquid fertilizers. 14

Or

Discuss the response of bacterial communities of *cajanus cajan* to bioinoculants and chemical fertilizers according to Gupta et al.

Q.3 Answer the following(Any one)

14

Discuss briefly evaluation of hydrolytic enzymes from microorganisms of medicinal plants as studied by Jalgaonwala.

Or

Write a note on antimicrobial activity of *Ralstonia sps.* As depicted by Asta Sinha et al.

Q.4 Answer the following(Any one)

14

Write a note on Bacterial and Fungal communities present in forest letter, and significant findings of Urbanova et al.

Or

Thoms et al have discussed links between aboveground and belowground microbial diversity. Highlight their significant findings.

Q.5 Answer the following(Any three)

14

(a)New fungal species from Western ghats.

(b)Growth factors from *Rhizobium*

(c)Preparation of Liquid residues by SSF

d)Isolation and growth of endophytic fungi.