

**NEW**  
**Part-III 3-Tier**  
**2018**  
**MICROBIOLOGY**  
**(Honours)**  
**PAPER—VIII**  
**(PRACTICAL)**

Full Marks : 100

Time : 6 Hours

*The figures in the right-hand margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

Answer all questions.

1. Enumerate the *Azoatobacter* sp. in the supplied soil sample (A). 15  
[Principle—2; Procedure—3; Spot assessment—4; Result—4; Comment—2]
2. Determine the dissolve oxygen level in the supplied water sample (B). 15  
[Principle—2; Procedure—3; Spot assessment—4; Result—4; Comment—2]

(Turn Over)

3. Isolate the plasmid DNA from given bacterial culture (C) and confirm the isolation through agarose gel electrophoresis. 25  
*[Principle—4; Procedure—6; Spot assessment—6; Result—6; Comment—3]*
  4. Determine the growth curve of given bacterial culture (D) in time dependent manner. 15  
*[Procedure—4; Spot assessment—4; Result and graph—5; Comment—2]*
  5. Submission of report of excursion. 10  
*[Report preparations—5; Presentation—5;]*
  6. Viva-Voce. 10
  7. Laboratory Note Book. 10
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