

**2019***Time : 3 hours**Full Marks : 75**Pass Marks : 34*

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

*The figures in the margin indicate full marks.*

*Answer five questions, selecting at least one from each Group in which*

*Q. No. 1 is compulsory.*

1. Explain the following :

3×5 = 15

(a) Koch's postulates

(b) Coenocytic condition

(c) Infection

(d) Early blight of potato

(e) Development of Oogonium in *Fucus*

AM – 1/2

(Turn over)

### Group – A

2. Describe the life-history of **Polysiphonia**. 15
3. Outline the classification of **Algae** put forward by Fritsch and comment briefly. 15
4. Write short notes on any **two** of the following :

$$7\frac{1}{2} \times 2 = 15$$

- (a) Sex-organs of **Chara**
- (b) Heterocyst
- (c) Algal pigments
- (d) Reproduction in **Nostoc**

### Group – B

5. Give an account of the symptoms and etiology of **Citrus Canker**. 15
6. Describe the life-cycle of the fungus which causes late blight of potato and their control. 15
7. Write a descriptive account of the structure and reproduction of **Cystopus**. 15

AM – 1/2

(2)

Contd.

**Group – C**

8. Describe the modes of multiplication in bacteria. 15
9. Describe the structure and properties of TMV. 15
10. Give an account of the role of bacteria in agriculture. 15



AM – 1/2 (7,000)

(3)

HG(1) — Bot (1)