

**F.Y.B.SC. SEM – II (2014 COURSE) : SUMMER - 2018**  
**SUBJECT: Microbiology: Microbial Nutrition, Growth & Control**

Day : **Monday**  
Date : **16/04/2018**

**S-2018-0693**

Time: **03.00 PM TO 05.00 PM**  
Max Marks: 40

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**N.B**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the **RIGHT** indicate full marks.
  - 3) Draw neat labeled diagrams **WHEREVER** necessary.
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- Q.1** Attempt any **TWO** of the following: **(10)**
- a) Name different vitamins and give their role in microbial nutrition.
  - b) What are thermophiles?
  - c) How are microbes grouped based on their optimum pH required for growth?
- Q.2** Attempt any **TWO** of the following: **(10)**
- a) Write in short on pour plate method as an enumeration technique.
  - b) Describe how disinfectants are evaluated?
  - c) What are the features of the anaerobic organisms?
- Q.3** Attempt any **TWO** of the following: **(10)**
- a) What are complex media?
  - b) Give the use of gaseous agents in controlling microbial growth.
  - c) How is autoclave useful in sterilization? Describe in details
- Q.4** Write in short on/define/Explain any **FIVE** of the following: **(10)**
- a) Enrichment media
  - b) Stationary phase
  - c) Chemoheterotrophs
  - d) Strict anaerobe
  - e) Virucide
  - f) Pure culture
  - g) Cryopreservation

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