

Total No. of Questions : 7] [Total No. of Printed Pages : 7

**RA-363**

**M.Sc. I<sup>st</sup> Semester (Reg./ATKT)**

**Examination, 2019**

**Biotech.**

**Paper - III**

**General Applied Microbiology**

**Time : 3 Hours]**

**[Maximum Marks : 85**

**Note :- Objective type questions of 1.5 mark each.**

**SECTION - 'A'**

**Objective Type Questions**

**I. Choose the correct answer : 1.5×10=15**

**(i) All of the following scientist got Nobel Prize for their**

**RA-363**

**(1)**

**P.T.O.**

contribution in the field of Microbiology except.

(a) Antony Van Leeuwenhoek

(b) Elie Metchnikoff

(c) Paul Ehrlich

(d) Robert Koch

(ii) Which of the following bacteria was not discovered by Robert Koch ?

(a) Bacillus anthracis

(b) Mycobacterium tuberculosis

(c) Salmonella typhi

(d) Vibrio cholera

(iii) Which among the following kingdoms were proposed by Whittaker ?

(a) Monera

(b) Protista, Fungi

(c) Plantae, Animalia

(d) Monera, Protista, Fungi, Plantae, Animalia

(iv) Which among the following are characteristics of archaeobacterial different from eubacteria ?

**RA-363**

**(2)**

- (a) Methane-producers
  - (b) Extreme halophiles
  - (c) Thermoacidophiles
  - (d) Methane-producers, extremehalophiles, and thermoacidophiles
- (v) Which of the following viruses possesses an envelope ?
- (a) Herpesirus
  - (b) Reovirus
  - (c) Tobacco mosaic virus
  - (d) Papillomavirus
- (vi) Rous sarcoma virus consists of RNA as its genetic material.
- (a) True
  - (b) False
- (vii) Which of the following does not kill endospores ?
- (a) Autoclave
  - (b) Incineration
  - (c) Hot air sterilization
  - (d) Pasteurization

- (viii) Which disinfectant was the most effective against Salmonella?
- (a) Phenol
  - (b) Cetylpyridinium chloride
  - (c) Hexachlorophene
  - (d) Merthiolate
- (ix) The association which involves the exchange of nutrients between two species is referred to as .....
- (a) Mutualism
  - (b) Syntrophism
  - (c) Commensalism
  - (d) Antagonism
- (x) Ammonia or ammonium is oxidized to nitrite followed by the oxidation of nitrite to nitrate is called as
- (a) Nitrogen fixation
  - (b) Nitrification
  - (c) Denitrification
  - (d) Nitrogen assimilation

**SECTION - 'B'**

**Short Answer Type Questions 5×5=25**

**Note :-** Short Answer type 5 questions of 5 mark each with internal choice.

2. (i) Write difference between prokaryotic and eukaryotic organisms.

**OR**

Explain sterilization techniques.

- (ii) Write note on any two
- (a) Numerical taxonomy
  - (b) Ribotyping
  - (c) Ribosomal RNA sequencing
- (iii) Explain structure and characteristics of plant virus.

**OR**

Describe about sporulation in bacteria.

- (iv) Give an example and their uses of antimicrobial agents

**OR**

Role of Penicillin and cephalosporin as an antibiotics.

- (v) Write note on soil microbial flora.

RA-363

(5)

P.T.O.

**OR**

Explain symbiotic association - types.

**SECTION - 'C'**

**Long Answer Type Questions 9×5=45**

**Note :-** Long Answer type 5 question of 9 mark each with internal choice.

3. Describe the principle of microbial nutrition and preparation of culture media.

**OR**

Explain the enrichment culture techniques for isolation of microbes. <http://www.onlinebu.com>

4. Describe the various techniques used in bacterial classification.

**OR**

Write about new approaches of bacterial taxonomic.

5. Give an brief account of Adenovirus and Retrovirus with diagrams.

**OR**

Explain Monoauxic, Diauxic growth curve and factor affecting microbial growth.

RA-363

(6)

6. Describe the physical and chemical agents used for control of Microorganisms.

**OR**

Explain role of antifungal antibiotics and resistance of antibiotics.

7. Explain the role of soil microorganisms in balance of ecology.

**OR**

Define symbiosis and write about symbiotic association of microorganisms.

+++

<http://www.onlinebu.com>

Whatsapp @ 9300930012

Your old paper & get 10/-

पुराने पेपर्स भेजे और 10 रुपये पायें,

Paytm or Google Pay से

RA-363

(7)