

Vitthalbhai Patel & Rajratna P.T.Patel Science College V.V. Nagar

Internal Test: 2018(Semester III)

Date: 05-10-2018

Sub: Microbiology (US03CMIC-02)

Total Marks: - 50

Time: 03-00 to 05-00 p.m.

Q-1 Attempt all following multiple choice question. (08)

- (1) E.H. Haeckel proposed the kingdom for unicellular micro organisms that were typically neither plants nor animals is known as  
(a) Protista (b) Fungi (c) Algae (d) Prokaryotes
- (2) The mode of nutrition of kingdom animalia is by  
(a) Absorption (b) Photosynthesis (c) Ingestion (d) Osmosis
- (3) pH indicator dye used in MacConkey's medium is:  
(a) Phenol red (b) Neutral red (c) Congo red (d) None of these.
- (4) Which of the following can be used as a solidifying agent?  
(a) Peptone (b) Phosphate (c) Gelatin (d) All of these.
- (5) The time required for population to double is called:  
(a) Optimum time (b) Generation time (c) Growth time (d) None of these
- (6) Following is a method of isolation.  
(a) Streak plate (b) Serial dilution (c) Micromanipulator (d) All of these.
- (7) Cell cultures are the method of choice for propagation of viruses due to:  
(a) observable cytopathic effects.  
(b) Choice of cells for their susceptibility to particular viruses.  
(c) Relative economy of maintenance compared to animals.  
(d) All of the above.
- (8) Bacteriophages were discovered by  
(a) Koch and Pasteur (b) Twort and D'Herelle (c) Max Theiler (d) None of the above



Q-2 Attempt the following. (Any five) (10)

- (1) Define: (a) Classification (b) Nomenclature
- (2) Name the divisions of Bergey's Manual of Systematic bacteriology.
- (3) Define: (a) Selective media (b) Enriched media.
- (4) Write in brief on Obligate parasite.
- (5) Define: (a) Continuous culture.(b) Synchronous culture.
- (6) Compare: Direct microscopic count and Standard plate count method.
- (7) Define: (a) Prophage (b) Virulent phage.
- (8) What is the role of repressor protein in lysogeny?



Q-3 Explain Haeckel's & Whittaker's classification.

(08)

OR

Q-3 Enlist various characteristics used for classification and describe any three of them.

(08)

Q-4 Write in detail on nutritional requirements of bacteria.

(08)

OR

Q-4 Describe in detail: Common ingredients of culture media.

(08)

Q-5 Describe in detail on normal growth curve of bacteria.

(08)

OR

Q-5 What is isolation? Describe streak plate and spread plate method in detail.

(08)

Q-6 Describe in detail on Lytic cycle.

(08)

OR

Q-6 Enlist various methods used for cultivation of animal viruses and describe any two in detail.

(08)

\*\*\*\*\*-End-\*\*\*\*\*