

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

Internal Test: 2018(Semester III)

Date: 01-10-2018

Sub: Microbiology (US03E MIC-01)

Total Marks: - 50

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

Q-1 Attempt all following multiple choice question.

(08)

(1) Who invented Microscope?

- (a) Antony Van Leeuwenhoek (b) Joseph Lister  
(c) Robert Koch (d) None of these

(2) What is the contribution of Sergei N. Winogradsky?

- (a) Discovered Phagocytosis (b) Discovered Nitrogen fixing Bacteria  
(c) Discovered Complement fixation reaction. (d) Introduced use of Antiseptic

(3) In bacteria these is responsible for permeability of chemicals

- (a) Pili (b) Cell membrane (c) Flagella (d) All of these.

(4) DNA consists of

- (a) Calcium (b) Phosphate (c) Protein (d) None of these.

(5) The eyepiece of the microscope provides magnification of

- (a) 20x (b) 40x (c) 10x (d) None of these

(6) A film of a specimen on a microscope slide is called

- (a) Smear (b) Layer (c) Coating (d) Area

(7) Phototrophs are

- (a) organisms which use chemical compounds as source of energy  
(b) organisms which use radiant energy  
(c) organisms which use inorganic compounds  
(d) organisms using organic compounds

(8) Organisms which rely on chemical compounds for their energy

- (a) Lithotrophs (b) Organotrophs  
(c) Phototrophs (d) Chemotrophs



Q-2 Attempt the following. (Any five)

(10)

(1) What is Fermentation?

(2) Define: (a) Pure culture (b) Colony

(3) Give two example of Cytoplasmic Inclusion.

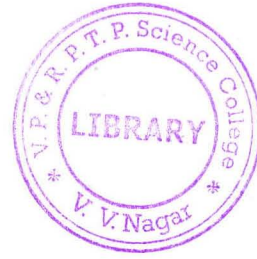
(4) Write any two functions of capsule.

(5) Why fixation of smear is necessary?

(6) What is resolving power?

(7) Distinguish between lithotrophs and organotrophs.

(8) Describe selective media with an example.



- Q-3 Write a note on: "Germ theory of Disease" (08)  
OR
- Q- 3 (A) Give an account on Molecular Biology. (04)  
(B) Write Koch's Postulates. (04)
- Q-4 Write a note on cell wall of Eubacteria. (08)  
OR
- Q-4 Describe bacterial Endospore. (08)
- Q-5 Describe the design of compound microscope and explain the functions of each components of microscope. (08)  
OR
- Q-5 (A) Explain gram's staining in detail. (04)  
(B) Explain simple staining in detail and give one two example of basic dye. (04)
- Q-6 Describe the methods used for isolation of bacteria. (08)  
OR
- Q-6 Draw a typical bacterial growth curve and label the various phases and describe each in detail. (08)

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