

SEAT No. _____
[7/A-3]

SARDAR PATEL UNIVERSITY
S.Y.BSc. EXAMINATION
USO4EMIC 01 (SEMESTER IV)
Fundamental Microbiology
SUB: MICROBIOLOGY (E MIC 01)

No. of Printed Pages : 02

Date: 20-04-2019

Total Marks: 70

Time: 10-00 a.m. to 12-00 a.m.

Q-1 Attempt all following multiple choice question. (10)

- (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
(a) Absorption (b) Photosynthesis (c) Ingestion (d) Osmosis
- (3) Into which kingdom did Whittaker place prokaryotic microorganisms?
(a) Protista (b) Plantae (c) Monera (d) Algae
- (4) Normal flora of the human body is composed mainly of
(a) Fungi (b) Protozoa (c) Bacteria (d) Viruses
- (5) Which vitamin is requiring by germ free animals, which normal animals do not require?
(a) vitamin C (b) vitamin D (c) vitamin K (d) vitamin B
- (6) Fractional sterilization is also known as
(a) Tyndalization (b) Lyophilization (c) Incineration (d) Desiccation
- (7) Ultra violet light is most germicidal at a wavelength of
(a) 1300 A° (b) 2300 A° (c) 2650A° (d) 3650 A°
- (8) A device which uses dry heat to kill microorganisms is called
(a) Autoclave (b) Inspissator (c) Hot air oven (d) Waterbath
- (9) Carboic acid is another name for
(a) Alcohol (b) Phenol (c) β propiolactone (d) None of these
- (10) An agent that kills bacteria is called
(a) Bactericide (b) Sporocide (c) Bacteriostatic (d) None of these

Q-2 Attempt the following (any ten) (20)

- (1) Define : (a) Classification (b) Nomenclature
- (2) Give main two differences between Prokaryotes and Eukaryotes.
- (3) Give two names of bacteria; write it in its proper form.
- (4) Explain how a healthy human fetus acquires a normal flora.
- (5) What benefits might a human host derive from the normal flora?
- (6) Enlist factors affecting transmission of diseases.
- (7) What is an autoclave?
- (8) Define : (a) Plasmolysis (b) Plasmolysis
- (9) What is Incineration? Where is it used for control of microorganisms?
- (10) Write mode of action and clinical uses of Streptomycin antibiotic.
- (11) Define: (a) Antiseptic (b) Sanitizer
- (12) Write practical application and mode of action of Aldehydes.

(1)

(P.T.O.)

Q-3 Enlist various criteria used for classification of bacteria and explain any four in detail. (10)

OR

Q-3 (A) Explain "Whittaker five kingdom concept" (06)

(B) Explain in brief Bergey's manual of systemic bacteriology. (04)

Q-4 (A) Define infection and explain various types of infections (05)

(B) Write notes on Gnotobiotic life. (05)

OR

Q-4 (A) Write a note on Transmission of Disease. (07)

(B) Explain in brief: "Virulence" (03)

Q-5 Write in detail high temperature as an antimicrobial agent. (10)

OR

Q-5 Justify: Radiation can be used for control of microorganisms. (10)

Q-6 Write a note on:

(A) Phenol Co-efficient method. (06)

(B) Write on practical applications and mode of action of Phenol & its compounds. (04)

OR

Q-6 (A) Enlist and explain desirable characteristics of an antimicrobial agent. (06)

(B) Discuss mode of action and practical applications of Heavy metals. (04)

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