

SEAT No. _____

[409 & A-62]

Sardar Patel University

M.Sc. Integrated Biotechnology, Eighth Semester Examination

Tuesday, 10th April, 2018

02:00 p.m. to 05:00 p.m.

PS08CIGMB1: Medical Microbiology

Total Marks: 70

Note:

1. Figures to the right indicate marks.
2. Draw neat and labeled diagram, wherever necessary.

Q.1

Attempt the followings

[8]

- i. *Trichomonas vaginalis* belongs to _____ class of protozoa.
a. Rhizopoda b. Sporozoa c. Mastigophora d. Rhizophora
- ii. Definitive host of *Taenia saginata* is _____.
a. Human b. Pig c. Cow d. Goat
- iii. BCG is a living attenuated vaccine derived from a strain of _____.
a. *M. tuberculosis* b. *M. caprae* c. *M. bovis* d. *M. microti*
- iv. Which one of the bacteris is causing "Pseudomembrane" formation,
a. *S. aureus* b. *S. pyogenes* c. *C. diphtheriae* d. None
- v. Earliest antigen marker used for diagnosis of HIV is,
a. P24 b. gp120 c. gp41 d. None
- vi. Which bacteria is known to cause "Pseudomembrane" formation
a. *C. diphtheria* b. *E. coli* c. *M. tuberculosis* d. *S. pyogenes*
- vii. Dermatomycoses is the study of,
a. Fungus disease of hair b. fungus disease of skin
c. fungal disease of nails d. all the above
- viii. In coccidioidomycosis infection is caused due to
a. Thorn prick b. trauma
c. skin penetration d. inhalation of arthrospores.

Q.2

Attempt any seven:

[14]

- i. Explain the morphological forms of *Entamoeba histolytica*.
- ii. What are the infective forms and mode of transmission of *Fasciola hepatica*?
- iii. What are Leishman-Donovan bodies?
- iv. What is M. tuberculosis complex?
- v. Draw labeled diagram to explain the morphology of *Streptococcus pneumoniae*.
- vi. Write a note on Coagulase test.
- vii. Write a note on Hepatitis B antigens.

(P.T.O.)

- viii. Enlist different methods for observing mold in clinical samples.
- ix. What are dimorphic fungi? Give examples.
- Q.3 A Discuss various morphological forms of Plasmodium observed during its life cycle. [6]
 B Life cycle of *Entamoeba histolytica* [6]
 OR
 B Discuss the life cycle of *Ascaris lumbricoides*. [6]
- Q.4 A Explain laboratory diagnosis methods for tuberculosis [6]
 B Discuss various virulence factors of *S. aureus*. [6]
 OR
 B Mention symptoms caused by infection of *C. diphtheriae* and methods of diagnosis used. [6]
- Q.5 A Explain classification of viruses given by Baltimore in 1970. [6]
 B Explain pathogenesis and clinical features of Herpes simplex virus. [6]
 OR
 B Give detailed structure and morphology of HIV. [6]
- Q.6 A What is Mycosis? How many types of mycosis are there? Explain with suitable examples. [6]
 B Discuss pathogenesis, laboratory diagnosis and treatment of Sporotrichosis [6]
 OR
 B Discuss pathogenesis, laboratory diagnosis and treatment of Coccidioidomycosis [6]
