

Seat No. 1049



SK-234

Total No. of Pages : 3

M.Sc. (Part - I) (Semester - II) (CBCS - R) Examination, April - 2017
MICROBIOLOGY

MIC-203: Medical Microbiology (Paper - VII)

Sub. Code : 61406

Day and Date : Wednesday, 19-04-2017

Total Marks : 80

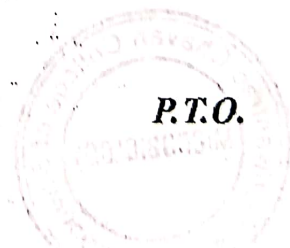
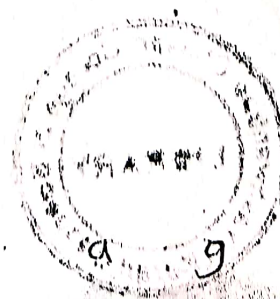
Time : 11.00 a.m. to 2.00 p.m.

- Instructions :**
- 1) Total of five questions are to be answered from the entire paper.
 - 2) Question 1 is compulsory.
 - 3) Attempt any two questions from each section. Section - I (Q.2 to 4) and Section - II (Q. 5 to 7).
 - 4) Answers to all the questions are to be written in the same answer book.
 - 5) Supplements will not be provided.
 - 6) Figures to the right indicate full marks.

Q1) State whether following statements are true or false:

[16]

- a) Ataxia-telangiectasia is an abnormality due to immuno deficiency of T cells only.
- b) Congenital thymic aplasia is a not an inheritable illness.
- c) In Bordet-Gengou glycerin potato blood agar used for *Bordella* spp., blood is used to make the medium nutritionally rich.
- d) Invasin is an adhesin that can mediate bacterial invasion into host eukaryotic cells.
- e) *Histoplasma capsulatum* is dimorphic fungus growing as yeasts on culture media and as septate mycelium in animal tissues.
- f) Mycetoma is a localised granulomatous infection of subcutaneous tissues which most often affects foot.
- g) *Mycobacterium tuberculosis* cells grow faster on Lowenstein and Jenson's medium showing visible colonies within 24 to 48 hours.



- h) Man suffering from *Leptospira conicola* infections show mening symptoms.
- i) In filariasis mosquito is a definitive host while man is an intermediate host.
- j) Viral encephalitis is illness of liver.
- k) Neonatal herpes disease is caused by herpes virue type - II.
- l) For an adult individual, usual dose of lovastatin is 20 g, ones in a day.
- m) Systemic lupus erythematosus is pridominant in females of child bearing age.
- n) Q fever in human is acquired by inhaling the dust contaminated by rickettsia derived from animals but not by ticks.
- o) C1q complement deficiency disorder can be due to deficiency of C-1 inactivator.
- p) Fish shaped mouth is a characteristic feature of ataxia.

SECTION - I

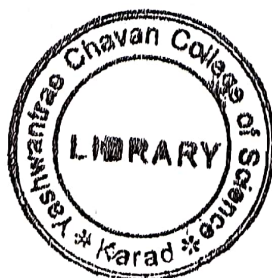
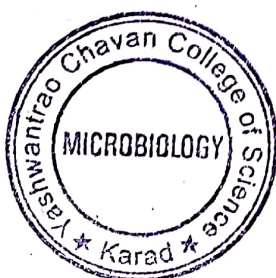
- Q2) a) Explain various attributes of pathogens and the mechanism of causing disease in host. [16]

OR

- b) Describe in brief about causative agent and its characteristics, lab diagnosis, transmission, prevention and control of disease caused by *Bordetella pertussis*. [16]

- Q3) Describe in Brief (ANY TWO): [16]

- a) Role of sporulation and capsulation in Survival of pathogenes.
- b) Morphological, cultural and biochemical characters of *Rickettsia burnetii*.
- c) Systemic Mycoses.



Q4) Write short notes on (ANY FOUR):

- a) Role of coagulase enzyme in the virulence.
- b) Collection and Preliminary processing of clinical samples.
- c) Transmission of leptospirosis.
- d) Preliminary processing of clinical specimens.
- e) Clinical features of Pityriasis.
- f) Pathogenesis of Subcutaneous Mycoses.

SECTION - II

Q5) a) Describe in brief atopic diseases.

[16]

OR

- b) What are auto immune diseases? Explain the mechanisms of inductions of autoimmunity.

[16]

Q6) Describe in Brief (ANY TWO):

[16]

- a) Ataxia telangiectasia.
- b) Congenital thymic aplasia.
- c) X-linked hypogammaglobulinemia.

Q7) Write short notes on (ANY FOUR):

[16]

- a) Filariasis.
- b) Role of Lovastatin in health care.
- c) GVH disease.
- d) Systemic autoimmune disease.
- e) Complement deficiency disorder.
- f) Prevention and control of influenza caused by H1N1 virus.

0300300

Med-2017



-3-

