

VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM
(Deemed to be University)

B.Sc OPTOMETRY DEGREE EXAMINATION – August 2018
Second Year

MICROBIOLOGY AND PATHOLOGY

Time: Three hours

Maximum: 80 marks

Use Separate answer books for Part A and Part B

PART – A - MICROBIOLOGY

Time: One and half an hour

Maximum: 40 marks

SECTION – A

I. Choose the correct answer for the following : (5 x 1 = 5)

1. Operation theatres are sterilized by
 - a) Incineration
 - b) Fumigation
 - c) Irradiation
 - d) Autoclave

2. Which of the following is described as atypical mycobacteria
 - a) Mycobacterium Kansasii
 - b) M.Leprae
 - c) M.tuberculosis
 - d) Nocardia

3. Hydatid cyst is caused by
 - a) Malarial parasite
 - b) Echinococcus granulosus
 - c) Microfilaria
 - d) None of the above

4. HIV is a
 - a) RNA virus
 - b) DNA virus
 - c) Interferon
 - d) Prion

5. Infections in eye is caused by
 - a) Penicillium
 - b) Rhinosporidium
 - c) Candida

d) Cryptococcus

(p.t.o.)

-- (2) --

II. Write True or False :

(5 x 1 = 5)

1. Bacteria take long time to multiply.
2. Viruses grow in living cells only.
3. HIV is an airborne infection.
4. Anaerobic organisms do not need oxygen.
5. Corneal ulcers are caused by fungi.

III. Fill in the blanks :

(5 x 1 = 5)

1. _____ helps in locomotion.
2. Milk is sterilized by _____.
3. Blood agar is an example of _____ media.
4. _____ is a DNA virus.
5. Fungi can be cultured in _____ agar.

SECTION – B

II. Write short notes on any **THREE** of the following:

(3 x 5 = 15)

1. Ophthalmia neonatarum.
2. Prophylaxis of Hepatitis.
3. Lab diagnosis of Typhoid
4. Bacterial spores
5. Hot air oven.

SECTION – C

III. Write an essay on any **ONE** of the following:

(1 x 10 = 10)

1. Draw and describe a bacterial cell.
2. Discuss the morphology, cultural characteristics, biochemical reactions of Staphylococcus. What are the diseases caused by it? How will you treat and prevent a Staphylococcal infection.

(p.t.o)

PART – B – PATHOLOGY

Time: One and half an hour

Maximum: 40 marks

SECTION - A

I. Multiple Choice questions:

(5 x 1 = 5)

1. Primary pulmonary tuberculosis
 - a. Ghon's complex
 - b. Millary TB
 - c. Sarcoidosis
 - d. Amyloidosis

2. PCV, MHC, MCV, Hb, MCHC – all decreased in
 - a. Megaloblastic anemia
 - b. Iron deficiency anemia
 - c. Hemolytic anemia
 - d. Immune hemolytic anemia.

3. Rubella infection before 16 weeks of gestation cause
 - a. Meningitis
 - b. Microcephaly
 - c. Cataract
 - d. Encephalitis

4. Malarial infection is caused by
 - a. Plasmodium vivax
 - b. Rickettsia
 - c. Virus
 - d. Bacteria

5. Trachoma caused by
 - a. Fungus
 - b. Virus
 - c. Chlamydia trachomatis
 - d. Rickettsia

II. State whether the following statements are **TRUE** or **FALSE**:

(5 x 1 = 5)

1. Methanol poisoning leads to blindness.
2. Heart failure cells present in heart.
3. Panophthalmitis is inflammation of choroid.
4. Pigmented nodule of the Iris – lish nodule.
5. Pterygium arise in the limbus and migrate to cornea.

--(4)--

III. Fill in the blanks:

(5 x 1 = 5)

1. Haemochromatosis is disorder of _____.
2. Melanoma is a _____ tumour.
3. Leprosy is caused by _____ organism.
4. Iris, choroids and ciliary bodies constitute _____.
5. Corneal thinning and ectasia without inflammation is _____.

SECTION - B

IV. Answer any **THREE** of the following:

(3 x 5 = 15)

1. Vascular events of inflammation
2. Different types of necrosis and write about liquefactive necrosis
3. Open angle glaucoma
4. Sympathetic ophthalmia

SECTION - C

V. Discuss in detail on any **ONE** of the following questions:

(1 x 10 = 10)

1. Classify tumours of eye and write about meibomian carcinoma.
2. Aetiopathogenesis and clinical features of pthisis bulbi.
