Sl.No. M19246 Course Code: 2740205

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

B.OPTOMETRY DEGREE EXAMINATION – March 2019 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:

 $(5 \times 1 = 5)$

- 1. Actionomycetes is
 - a) Gram positive bacteria
 - b) Gram negative
 - c) Fungus
 - d) A yeast like form
- 2. Hepatitis B is caused by
 - a) RNA virus
 - b) DNA virus
 - c) Mycoplasma
 - d) Rickettsia
- 3. Glass vessels and syringes are best sterilized by
 - a) Hot air oven
 - b) Autoclaving
 - c) Simple boiling
 - d) Irradiation
- 4. Pollovirus in OPV results in the production of
 - a) Ig G
 - b) Ig A
 - c) Ig M
 - d) Ig D
- 5. Candida albicans causes all of the followings except.
 - a) Endocarditis
 - b) Menigitis
 - c) Myceloma
 - d) Oral thrush

II. Write True or False:

 $(5 \times 1 = 5)$

- 1. Human immune deficiency virus is a retro virus.
- 2. Herpes simplex virus is a double standard RNA virus.
- 3. T. Verrucosum is spread from animals to man.
- 4. VDRL is positive one week after appearance of chancre.
- 5. Botulinum toxin acts on parasympathetic system.

III. Fill in the blanks:

 $(5 \times 1 = 5)$

- 1. Visceral larva migrans of children caused by_____.
- 2. Trophozoites and cysts are the part of ______.
- 3. Acute hemorrhagic conjunctivitis is caused by_____.
- 4. Mantoux test is used to find out _____.
- 5. If orbit infected with multiple pathogen is known as_____.

SECTION - B

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

 $(3 \times 5 = 15)$

- 1. Illustrate the ocular lesions of staphylococcus and Chlamydia.
- 2. Explain the morphology and pathogenesis of Candida.
- 3. Discuss in detail on dimorphic fungi.
- 4. Elaborate the pathogenesis and ocular lesions of para influenza virus.
- 5. Write short notes on life cycle and pathogenesis of Taenia solium.

SECTION - C

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

 $(1 \times 10 = 10)$

- 1. Write an essay on physical and chemical methods of sterilization.
- 2. Write the protochol of gram's and Acid- fast staining.

PART - B - PATHOLOGY

Time: One and half an hour Maximum: 40 marks

SECTION - A

I. Multiple Choice questions:

 $(5 \times 1 = 5)$

- 1. Which of the following enzyme is involved in inflammatory reaction?
 - a. Amylase
 - b. Libase
 - c. Urease
 - d. Cyclo oxygenase
- 2. Phenylketonuria is due to the defect of
 - a. Nutrition
 - b. Gene
 - c. Kidney
 - d. Liver.
- 3. If the accumulation of dust with sputum in lungs is known as
 - a. Edema
 - b. Thrombosis
 - c. Embolism
 - d. infarction
- 4. Primary retinal detachment is seen in
 - a. High myopia
 - b. Diabetes
 - c. Malignant melanoma
 - d. All the above
- 5. Most common benign tumor of the orbit is
 - a. Optic nerve glioma
 - b. Meningioma
 - c. Mixed tumor
 - d. Haemangioma

II. State whether the following statements are TRUE or FALSE: $(5 \times 1 = 5)$

- 1. Acit- fast staining is used to detect tuberculosis.
- 2. Collagen plays an important in healing of corneal damages.
- 3. Epinephrine increases aqueous production and decreases outflow facility.
- 4. Zonular cataract is the part of traumatic cataract.
- 5. Ocular lesions of leprosy include fascicular keratitis.

III. Fill in the blanks:

 $(5 \times 1 = 5)$

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- 2. Atherosclerosis and high blood pressure damage the brain cells leading to ______.
- 3. Histoplasmic capsulatum is the examples for type of _____ fungi.
- 4. The patient with acne rosacea and seborrhoeic dermatitis is prone to
- 5. Specific changes produced by the alloy of copper in the eye is

SECTION - B

IV. Answer any THREE of the following:

 $(3 \times 5 = 15)$

- 1. In what way the Chlamydiae is differing from viruses? Explain the ocular lesions caused by the chlamydiae.
- 2. Explain the types and clinical characteristics of diabetic retinopathy.
- 3. Write briefly on the bacterial corneal ulcer.
- 4. What are the secondary glaucoma? Explain any two.

SECTION - C

V. Discuss in detail on any ONE of the following questions: $(1 \times 10 = 10)$

- 1. Write the types and clinical features of retinoblastoma.
- 2. Explain the ocular pathophysiology of fungi.

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