

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

B. OPTOMETRY DEGREE EXAMINATION – September 2021
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. Chickenpox caused by
 - (a) Flavivirus
 - (b) Coronavirus
 - (c) Varicella zoster virus
 - (d) Zika virus
2. Stain used for mycobacterium tuberculosis
 - (a) Hematoxyllin and eosin stain
 - (b) Silver stain
 - (c) Ziehl-neelsen stain
 - (d) Pass stain
3. Immunoglobulin present in secretions
 - (a) Ig E
 - (b) Ig D
 - (c) Ig A
 - (d) Ig M
4. Sterilization method in Operation theatres
 - (a) Irradiation
 - (b) Hot air oven
 - (c) Cider solution
 - (d) Fumigation
5. Satellitism is caused by
 - (a) Stapylococcus
 - (b) Pneumococcus
 - (c) Tuberculosis
 - (d) Hemophillus

(p.t.o.)

II. Write True or False: (5 x 1 = 5)

1. Mycobacterium avium complex affects HIV infected people.
2. Corona virus is contagious.
3. IgG is diagnostic tool for chronic infection.
4. Mites are vector for Ricktsii.
5. Hepatitis A is sexually transmitted.

III. Fill in the blanks : (5 x 1 = 5)

1. Tuberculosis is _____ type of hypersensitivity.
2. Confirmatory test for HIV infection _____
3. BCG vaccine is used to prevent _____
4. Endemic typhus caused by _____
5. Parasites found _____ in eye

SECTION – B

II. Write short notes on any **THREE** of the following: (3 x 5 = 15)

1. Write about Immunoglobulin M and G.
2. Briefly elaborate about corona virus.
3. Discuss about types of sterilization method used in hospitals.
4. What is growth curve? Explain stages of growth curve.
5. Expand BCG. Write about pathogenesis and clinical features of Mycobacterium tuberculosis.

SECTION – C

III. Write an essay on any **ONE** of the following: (1 x 10 = 10)

1. What is flavivirus? Write briefly about dengue fever. Write about laboratory investigation in dengue fever?
2. Write the morphology, pathogenesis, and diagnosis of Mycobacterium tuberculosis and Mycobacterium lepra.

PART – B – PATHOLOGY

Time: One and half an hour

Maximum: 40 marks

SECTION - A

I. Multiple Choice questions:

(5 x 1 = 5)

1. Thalessemia is a
 - a. bleeding disorder
 - b. nutritional disorder
 - c. hemoglobinopathy
 - d. blastic disorder

2. Abscess is a collection of
 - a. lymphocytes
 - b. eosinophils
 - c. neutrophils
 - d. basophils

3. Acid present in M.Tuberculosis
 - a. phenol
 - b. mycolic
 - c. acetic
 - d. formic

4. Rubella causes
 - a. congenital cataract
 - b. heart disease
 - c. sensorineural deafness
 - d. all the above

5. Anaerobic bacteria
 - a. staphylococci
 - b. streptococci
 - c. mycobacterium
 - d. clostridium

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

(5 x 1 = 5)

1. Retinoblastoma is adulthood tumor.
2. Rubella virus occurs transplacentally.
3. Neutrophil plays a key role in chronic inflammation.
4. Metastasis is present in benign neoplasms.
5. Anaphylaxis is caused by lymphocytes.

(p.t.o)

--(4)--

III. Fill in the blanks:

(5 x 1 = 5)

1. Occupational disease acquired from sugarcane fibre is known as _____.
2. Sunflower cataract caused by _____.
3. Decreased lymphocyte count is known as _____.
4. _____ induced cataract is preventable blindness in developing countries .
5. Inflammatory mediator involved in fever _____.

SECTION - B

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

(3 x 5 = 15)

1. Write about melanoma? What are the precursor lesions of melanoma?
2. What is inflammation? Types of inflammation?
3. What are the tumors of eye? Write briefly about retinoblastoma.
4. Write about optic neuritis.

SECTION - C

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

(1 x 10 = 10)

1. What is inflammation? Write differences between acute and chronic inflammation. Write brief note on tuberculosis.
2. Write about various disorders of lens and explain in detail.

(Sl.No.M21112)