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

BDS DEGREE EXAMINATION – February 2020 Second Year

GENERAL MICROBIOLOGY

SECTION A

| Time: Twenty Minu | tes | | | | | Maximum: | 20 marks |
|--------------------------|-----|--|--|--|--|----------|----------|
| Register Number : | | | | | | | |

Signature of the candidate Signature of the Invigilator

Instructions to the candidates

- **1.** Write your Register Number and sign at the place specified on the first page of this Question Booklet.
- 2. Do not open this question booklet until Invigilator announces the commencement of the examination.
- **3.** Answer ALL the Twenty questions. They carry equal marks. No negative marking for wrong answers.
- 4. Answers should be marked legibly in the SHEET provided in capital letters.
- 5. THE QUESTION BOOKLET SHOULD NOT BE TAKEN OUT OF THE EXAMINATION HALL.
- 6. Questions should not be copied and taken out of the Examination Hall. Any one found violating this rule shall not be permitted to write the examination and shall be sent out of the Hall.
- 7. At the end of 20 minutes, when the Invigilator announces 'STOP WRITING' you must stop writing immediately. If the candidate tries to attempt to answer the questions after the prescribed time, their answer script becomes invalid.
- 8. Hand over the questions booklet containing answer sheet to the invigilator when you finish answering or immediately after 20 minutes.

GENERAL MICROBIOLOGY SECTION-A (20X1=20 MARKS)

(Multiple choice questions)

Time: Twenty Minutes

Maximum: 20 marks

Select the most appropriate answer and answer in the answer sheet attached:

- 1. Which among the following is filamentous bacteria?
 - A. Mycoplasmas
 - **B.** Spirochetes
 - C. Actinomycetes
 - D. Vibrios
- 2. Bacterial chromosome is
 - A. Single stranded and circular
 - B. Double stranded and circular
 - C. Single stranded and linear
 - D. Double stranded and linear
- 3. Which of the following is the major immunoglobulin in human serum, accounting for 80% of the immunoglobulin pool?
 - A. IgA
 - B. IgD
 - C. IgG
 - D. IgM
- 4. The basic immunoglobulin unit is composed of
 - A. 2 identical heavy and 2 identical light chains
 - B. 2 identical heavy and 2 different lights chains
 - C. 2 different heavy and 2 identical light chains
 - D. 2 different heavy and 2 different light chains
- 5. Which one of the following is a primary lymphoid organ
 - A. Lymph nodes
 - B. Spleen
 - C. Thymus
 - D. Peyer's patches

- 6. Toxic shock syndrome is caused by
 - A. Staphylococcus albus
 - B. Staphylococcus aureus
 - C. Streptococcus pyogenes
 - D. Enterococcus faecalis

7. Salmonella typhi is causative bacteria of

- A. Undulant fever
- B. Remittent fever
- C. Dengue fever
- D. Enteric fever

8. BCG vaccine contains the avirulent stains of

- A. Human tubercle bacilli
- B. Bovine tubercle bacilli
- C. Avian tubercle bacilli
- D. Atypical mycobacterium
- 9. Streptococcus pyogenes produces all of the following lesions EXCEPT
 - A. Paronychia
 - B. Impetigo
 - C. Erysipelas
 - D. Boils

10. All of the following characters are true about Neisseria gonorrhoeae EXCEPT

- A. Gram negative cocci
- B. Obligate aerobe
- C. Oxidase positive
- D. Arranged in clusters
- 11. Koplik's spots will develop in
 - A. HIV
 - B. Measles
 - C. Mumps
 - D. Rubella
- 12. Which of the following virus has a complex symmetry?
 - A. HIV
 - B. Picornavirus
 - C. Poxvirus
 - D. Influenza virus

- 13. Polio virus is transmitted by
 - A. Faeco-oral route
 - B. Respiratory route
 - C. Animal bite
 - D. Insect bite

14. Which of the following hepatitis virus spreads through faeco-oral route?

- A. Hepatitis A virus
- B. Hepatitis B virus
- C. Hepatitis C virus
- D. Hepatitis D virus
- 15. Black water fever is caused by
 - A. Plasmodium vivax
 - B. Plasmodium falciparum
 - C. Plasmodium ovale
 - D. Plasmodium malariae
- 16. Tinea versicolor is caused by
 - A. Malassezia furfur
 - B. Candida albicans
 - C. Aspergillus niger
 - D. Penicillium sp
- 17. Which of the following will cause systemic mycosis?
 - A. Epidermophyton floccosum
 - B. Microsporumgypseum
 - C. Trichophyton rubrum
 - D. Histoplasma capsulatum
- 18. All of the following are standard precautions EXCEPT
 - A. Use of Personal Protective Equipment (PPE)
 - B. Hand wash
 - C. Proper sharp disposal
 - D. Avoid touching the infected blood
- 19. Disposable syringes are disposed in
 - A. White translucent bin
 - B. Red colour bin
 - C. Yellow colour bin
 - D. Blue colour bin
- 20. Bacteria which is commonly responsible for hospital acquired urinary tract infection is
 - A. Pseudomonas aeruginosa
 - B. Staphylococcus albus
 - C. Escherichia coli
 - D. Klebsiella pneumoniae

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GENERAL MICROBIOLOGY

Time : Three hours Maximum : 70 marks Answer ALL Questions Answer Section A in the Answer Sheet attached to it 20 marks – 20 minutes to be handed over to the invigilator immediately after 20 minutes Answer Section B & C in the same answer book

| Time : 2 hours 40 minutes | SECTION – B & C | Maximum : 50 marks |
|---------------------------|-----------------|--------------------|
| | SECTION – B | |
| I. Write an Essay on : | | $(1 \ge 10)$ |

1. Describe the morphology, pathogenesis, laboratory diagnosis and prophylaxis of corynebacterium diphtheria.

II. Write short notes on :

- 2. Chemical disinfectants
- 3. Secretory immunoglobulin
- 4 Lymph node

Sl.No. M22012

SECTION – C

III. Write an Essay on :

- 5. Describe the life cycle, pathogenesis, complications and laboratory diagnosis of plasmodium falciparum.
- IV. Write short notes on : $(3 \times 5 = 15)$
- 6. Immunoprophylaxis of Rabies
- 7. Cultivation of virus
- 8. Cryptococcus neoformans

 $(3 \times 5 = 15)$

 $(1 \times 10 = 10)$