(DMB21)

Total No. of Questions : 12] **[Total No. of Pages :02**

M.Sc. (Second) DEGREE EXAMINATION, DEC. – 2016

Second Year

MICRO BIOLOGY

Medical Microbiology

Time : 3 Hours **Maximum Marks : 70**

SECTION – A **(5 × 6 = 30)**

Answer any five of the following

Q1) Normal flora of oral cavity

Q2) Chemical barriers to infection

Q3) Treponema pallidum

Q4) Candidiasis

Q5) Mumps

Q6) Poliomyetilis

Q7) Polymyxin - B

Q8) Flucytocin

SECTION – B (4 × 10 = 40)

Answer all of the following

Q9) Describe the biological barriers to infection.

OR

Enumerate the concept of virulence, invasive factors and virulence of pathogens.

Q10) Describe the pathogenesis, symptoms, epidemiology, diagnosis and control of the disease caused by Corynebacterium diphtheriae.

OR

Write an account on systemic mycosis.

Q11) Describe the diseases caused by AIDS.

OR

Write an account on the protozoa diseases caused by Plasmodium species.

Q12) Write an account on the types of epidemics and disease reservoirs.

OR

Describe the development of chemotheraphy and properties of chemotherapeutic drugs.

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(DMB22)

Total No. of Questions : 12] **[Total No. of Pages :02**

M.Sc. (Second) DEGREE EXAMINATION, DEC. – 2016

Second Year

MICROBIOLOGY

Immunology and Cellular Microbiology

Time : 3 Hours **Maximum Marks : 70**

SECTION – A **(5 × 6 = 30)**

Answer any five of the following

Q1) Myeloid cells

Q2) Lymphokines

Q3) RIA

Q4) Agglutination

Q5) Phagocytosis

Q6) Pore forming toxins

Q7) Sporulation in Myxococcus xanthus

Q8) Cytokine signalling

SECTION – B (4 × 10 = 40)

Answer all of the following

Q9) Describe Humoral and cell – mediated immunity.

OR

Describe the structure and functions of primary lymphoid organs.

Q10) Describe the nature, types and functions of antibodies.

OR

Write an account on autoimmune diseases and their control.

Q11) Describe the molecular mechanism of adhesion and bacterial adhesions.

OR

Write an account on the mechanism of bacterial invasion

Q12) Write an account on the prokaryotic cell to cell signalling.

OR

Describe the induction of apoptosis by microbes.

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(DMB23)

Total No. of Questions : 12] **[Total No. of Pages : 02**

M.Sc. DEGREE EXAMINATION, DEC. - 2016

Second Year

MICROBIOLOGY

Microbial Genetics and Molecular Biology

Time : 3 Hours **Maximum Marks : 70**

Section - A

(5 x 6 = 30)

Answer any FIVE of the following

Q1) Recon

Q2) Ti-plasmid

Q3) SOS repair

Q4) Acridines

Q5) Operon concept

Q6) nif-genes

Q7) IS elements

Q8) DNA fingerprinting

Section - B

(4 x 10 = 40)

Answer ALL of the following

Q9) Describe the different theories of gene concept.

OR

Describe the genetic recombination in Bacteria.

Q10) Describe the types of DNA damages.

OR

Write an account on the types of mutations.

Q11) Describe transcription and translation in prokaryotes.

OR

Write an account on nod genes and their regulation in Rhizobium.

Q12) Write an account on the concept of r-DNA technology.

OR

Describe the applications of genetic engineering.

(DMB24)

Total No. of Questions : 12] **[Total No. of Pages : 02**

M.Sc. DEGREE EXAMINATION, DEC. - 2016

(Second Year)

MICROBIOLOGY

Food & Industrial Microbiology

Time : 3 Hours **Maximum Marks : 70**

Section - A

(5 x 6 = 30)

Answer any FIVE of the following

Q1) Dye reduction test.

Q2) ATP photometry

Q3) Sauerkraut

Q4) Botulism

Q5) Chelators

Q6) Antifoams

Q7) Fed batch culture

Q8) Characteristics of SSF

Section - B

(4 x 10 = 40)

Answer ALL questions

Q9) Describe the sources of microbial contaminations of foods.

OR

Describe the methods of food preservations.

Q10) Write an account on Single Cell Proteins.

OR

Write an account Cheddar cheese and Wine.

Q11) Describe fermentation processes.

OR

Write an account on strain improvement of industrial microorganisms.

Q12) Write an account on Recovery and purification of fermentation products.

OR

Describe the economic aspects of fermentation.

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