

Applied Pathology & Microbiology

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

(Use separate answer booklet for Section A & B)

Section – A

Applied Pathology (50 Marks)

Q.P Code :J3755

LONG ESSAY

2 X 10 = 20 Marks

1. Define atherosclerosis and describe the risk factors, etiopathogenesis, clinical features and morphology of atherosclerosis ?
2. Define and Classify anemia? Describe the etiopathogenesis and laboratory findings in iron deficiency anemia ?

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

3. Describe the laboratory findings in Acute Myeloid Leukemia ?
4. Describe the pathophysiology of heart failure ?
5. Define cardiac hypertrophy and list the etiology for right and left ventricular hypertrophy ?
6. Classify Congenital heart diseases and describe tetralogy of fallot?
7. Describe the etiopathogenesis and laboratory findings in immune thrombocytopenic purpura?

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

8. List the laboratory findings in Myocardial Infarction
9. Describe the morphology of heart in hypertensive heart disease
10. List 06 acquired valvular heart disease
11. List 03 types of pericardial effusion with their etiology
12. List 03 causes for microcytic hypochromic anemia
13. List the laboratory investigations used in bleeding disorder
14. Classify aneurysms

Section – B

Applied Microbiology (50 Marks)

Q.P Code : J3756

(Use separate answer booklet for Section-B)

LONG ESSAY

2 X 10 = 20 Marks

1. Define and Enumerate the various causative agents of catheter associated urinary tract infection. Discuss in detail the predisposing factors and infection control and preventive measures of Catheter associated urinary tract infection (2+3+5)
2. Define the term multidrug resistance in microorganisms. Discuss in detail the risk factors and preventive measures for occurrence of multidrug resistance organism (2+4+4)

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

3. Clostridium difficile: Disease caused by, Risk factors and its preventive measures
4. Define Ventilator associated Pneumonia, agents causing VAP and its preventive measures
5. The impact and cost attributed to Health care associated infection
6. Biomedical waste management in health care settings
7. Blood borne pathogens: risk factors and its preventive measures

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

8. Steps of hand hygiene
9. Name 3 organisms transmitted to health care workers through feco oral route
10. Mention 3 vaccines recommended for health care workers
11. Mention three routes of transmission of infection
12. Mention 3 indications for Microbiological surveillance of ICU
13. Three indications for isolation of patients
14. Mention three personal protective equipment



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences Second Year (Semester-III)

March 2021 Examination

B.Sc. Cardiac care Technology (CCT)

Time : 3 Hrs.

Paper – II

[Max. Marks : 100]

Introduction to Cardiac care Technology

Q.P Code : J3760

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

1. Describe the ECG changes that can occur in TMT, their clinical significance and enumerate the indications for stopping TMT
2. Describe Sokolow Lyon and Romhilt Estes score in the diagnosis of LVH and explain the ECG manifestations in both pressure and volume overloaded condition

Short essay (Any ten)

10 X 5 = 50 Marks

3. Explain the types and ECG manifestations in 2nd degree AV block
4. Explain the conduction problems in the distal parts of left bundle branch
5. List absolute and relative contra indications for TMT
6. Write a note on Bruce protocol
7. Explain the fate of pharyngeal arch arteries in detail
8. ECG manifestation and causes of RAE
9. Write a note on cardiac axis
10. List coronary indications of TMT
11. Explain the formation of IAS in detail with neat labelled diagram
12. ECG manifestation and clinical significance of RAE
13. Write the components of conduction system of the heart with neat labelled diagram
14. Explain the structures of RA and RV in detail

Short Answers (Any ten)

10 X 3 = 30 Marks

15. ECG criteria of LAFB
16. ECG criteria of 1st and 3rd degree AV block
17. List any 4 criteria to stop TMT
18. ECG criteria of RBBB
19. Write a note on Morris index
20. How do you determine HR for regular and irregular rhythm of ECG
21. Write a note on Fossa ovalis
22. Explain clockwise and counterclockwise rotation of heart in ECG
23. ECG criteria of Dextrocardia
24. Explain the structure of LV
25. List causes of RAD and LAD
26. Explain adult systemic circulation



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B.Sc. Allied Health Sciences Second Year (Semester-III)

March 2021 Examination

B.Sc. Cardiac Care Technology

Time : 2 hrs

[Max. Marks : 40]

Subject : Applied Pharmacology

Q.P Code : J3770

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY

1 X 10 = 10 Marks

1. Classify adrenergic receptor blockers. Explain the mechanism, uses and contraindications of propranolol (3+2+3+2)

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

2. Explain the mechanism, uses and adverse effects of amlodipine (1.5+2+1.5)

3. Explain the mechanism of action, uses and adverse effects of thiazide (1+2+2)

4. List the crystalloids and colloids and write their uses (2+3)

5. Explain the mechanism, uses and precautions to be taken while using dopamine (1.5+2+1.5)

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

6. Write the mechanism of action and two uses of streptokinase.

7. Explain tolerance and dependence with examples.

8. Mention the targets of drug action with examples.

9. Write three uses and three adverse effects of ramipril.

10. Write the mechanism of action and uses of clopidogrel.

11. Explain enzyme induction with examples.



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B.Sc. Allied Health Sciences Second Year (Semester-III)
March 2021 Examination

B.Sc. Cardiac care Technology (CCT)

Time : 2.30 Hrs.

[Max. Marks : 80]

PAPER-IV

Medicine Relevant to Cardiac care Technology

Q.P Code : J3780

Your answers should be specific to the questions asked.

Long Essay

2X10=20 Marks

1. Describe Ischemic heart disease in detail
2. Explain cardiomyopathy, types, causes, signs and symptoms, complication, diagnosis and treatment

Short Essay (Answer any Six)

6X5=30 Marks

3. Classification of Aortic aneurysm and its management
4. Causes of Rheumatic fever, Its signs and symptoms, investigations and treatment
5. Write clinical signs and symptoms of PVD & risk factors for PVD
6. Ventricular Septal defect
7. Define COPD with its pathophysiology.
8. Define Hypertension & classify it
9. Explain Left heart failure and its complications
10. Pulmonary function test and its interpretation

Short Answers (Answer any ten)

10X3=30 Marks

11. Define Acyanotic heart disease and enlist few conditions of Acyanotic heart disease
12. Enlist various bleeding disorders
13. Risk factors of hypertension
14. What is myocardial infarction & classify it
15. What is anaemia. write its sign & symptoms
16. Cyanotic congenital heart diseases
17. Pathophysiology of Hypertrophic Cardiomyopathy
18. Antithrombotic therapy
19. What is Atrial septal defect and its treatment
20. Draw a neat labelled diagram of Coronary artery and its branches
21. Haemophilia
22. What are the 4 defects in Tetralogy of Fallot

