

**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH**  
**(A DEEMED TO BE UNIVERSITY)**

**B.Sc. Allied Health Sciences Second Year Semester-III**  
**September 2021 Examination**

**B.Sc. Respiratory care Technology**

Time: 3 Hrs.

Paper – I

[Max. Marks: 100]

**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 :J3855**

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Define and Classify anemia ? Describe the etiology and laboratory findings in megaloblastic anemia?
2. Define and Classify hypertension? Describe the pathogenesis and effects of hypertension ?

**SHORT ESSAY (Answer any three)**

**3 X 5 = 15 Marks**

3. Describe the sequential gross and microscopy findings in myocardial infarction ?
4. Classify Congenital Heart diseases and describe the findings in Coarctation of Aorta
5. Describe the etiology, morphology and effects in Mitral Stenosis
6. Classify aneurysms and describe the morphology and effects of atherosclerotic aneurysm?
7. Describe the clinical features and laboratory findings in Chronic Myeloid leukemia

**SHORT ANSWERS (Answer any five)**

**5 X 3 = 15 Marks**

8. Define heart failure and list 02 causes of heart failure
9. Describe the laboratory findings in sickle cell anemia
10. Describe the laboratory findings in hemophilia
11. Classify cardiomyopathy
12. List 03 causes of hemopericardium
13. Describe the utility of reticulocyte count and list the normal range of reticulocyte count
14. List 03 causes of delayed prothrombin time ?

**Section – B**

**Applied Microbiology (50 Marks)**

**Q.P Code : J3856**

*(Use separate answer booklet for Section-B)*

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Define Ventilator associated pneumonia, its causative agents, risk factors and preventive measures (2+2+3+3)
2. Mention the various routes of transmission of infection in Health care workers. Discuss in detail blood borne infection in Health care workers, its risk factors and preventive measures (2+2+3+3)

**SHORT ESSAY (Answer any three)**

**3 X 5 = 15 Marks**

3. MRSA in hospital
4. Standard precautions
5. Enumerate the organisms and the infection control practices to prevent occupational exposure to health care workers through respiratory route
6. Screening of multidrug resistant organism
7. Linen management in health care setting

**SHORT ANSWERS (Answer any five)**

**5 X 3 = 15 Marks**

8. Mention the steps of hand hygiene
9. Mention three microbiological sampling methods
10. Name three vaccines recommended for health care worker
11. Colour coded bins used in biomedical waste management
12. Three infection transmitted to healthcare workers through feco-oral route
13. Three common organisms associated with catheter related urinary tract infection
14. Name three personal protective equipment

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

September 2021 Examination

**B.Sc. Respiratory Care Technology**

Time : 2 Hrs.

[Max. Marks : 40]

**Subject : Applied Pharmacology**

**Q.P Code : J3870**

*Your answers should be specific to the questions asked.*

*Draw neat labeled diagrams wherever necessary.*

**LONG ESSAY**

**1 X 10 = 10 Marks**

1. a. Classify drugs used in hypertension. Explain the mechanism of action, uses and adverse effects of enalapril (3+2+3+2)

**SHORT ESSAY (Answer any three)**

**3 X 5 = 15 Marks**

2. Explain the uses and adverse effects of anticholinergic drugs (3+2)

3. Explain the advantages and disadvantages of intravenous route and sublingual of drug administration (2.5+2.5)

4. Explain the mechanism of action, uses and adverse effects of low molecular weight heparins (1.5+2+ 1.5)

5. Explain enzyme induction and inhibition with examples (2.5+2.5)

**SHORT ANSWERS (Answer any five)**

**5 X 3 = 15 Marks**

6. Explain side effect, toxic effect and teratogenicity with examples

7. Mention three antiplatelet drugs and write three uses

8. Mention antifibrinolytics and write their uses

9. Write three uses and three adverse effects of frusemide

10. Mention three types of drug antagonism with examples

11. Mention three crystalloids and write three uses

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