



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

**Bachelor of Physiotherapy (BPT)**

**Second Year Semester – IV October 2023 Examination.**

**Time: 3 Hrs**

**Max Marks: 100 Marks**

**ELECTROTHERAPY**

**Q.P Code: B4090**

*Your answer should be specific to the question asked.*

*Draw neat labeled diagrams wherever necessary*

**LONG ESSAY (Answer any two)**

**2 X 10 = 20 Marks**

1. Describe production of microwave diathermy, its technique of application and dangers. (5+3+2=10)
2. Define heat and explain in detail about physical effects and transmission of heat. Add a note on apparatus, indications and contraindications, and technique of application of liquid paraffin wax bath (3+3+4=10)
3. Discuss in detail about production of ultrasound and explain its various physiological & therapeutic effects. Add a note on Phonophoresis. (2+5+3=10)

**SHORT ESSAY (Answer any Ten)**

**10X 5 = 50 Marks**

4. Write in detail about the Physiological and therapeutic uses of Contrast bath.
5. Explain the Properties of Waves in Ultrasound
6. Explain in detail the Production of Pulsed shortwave Diathermy.
7. Write in detail on the effects of Contrast bath
8. Explain the Types of SWD Electrode, Placement & Spacing Electrodes.
9. Enumerate the Indications and contraindications of IFT
10. Explain the Properties and techniques of LASER.
11. Write in detail about the surge, types of wave and pulse interval of faradic current
12. Explain the benefits of using micro currents.
13. Explain high and brief tens in details.
14. What is Iontophoresis? Give the importance of its use in physiotherapy.
15. Enumerate the theories of pain and explain in detail the pain gate theory.

**SHORT ANSWER (Answer any Ten)**

**10 X 3 = 30 Marks**

16. Define Erythema
17. What is Magnetron?
18. Define Lewis hunting reaction.
19. Enumerate the laws governing light radiation
20. What is Reverse piezo-electric effect?
21. What is faradic foot bath?
22. Define Wallerian degeneration.
23. Enumerate any three uses of transformers.
24. What is duty cycle?
25. What is Electro Motive Force EMF?
26. Define Attenuation
27. Mention any two anions and two cations producing drugs for Iontophoresis

\* \* \*



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

**Bachelor of Physiotherapy (BPT)**

**Second Year Semester – IV October 2023 Examination.**

**Time: 2 Hrs**

**Max Marks: 40 Marks**

**Pharmacology**

**Q.P Code: B4100**

*Your answer should be specific to the question asked.*

*Draw neat labeled diagrams wherever necessary*

**LONG ESSAY**

**1 X 10 = 10 Marks**

1. a. Classify anticholinergics (4)  
b. Explain the uses and adverse effects of atropine (3+3)

**SHORT ESSAY (Answer any Three )**

**3X 5 = 15 Marks**

2. Explain the mechanism of action, uses and adverse effects of nifedipine ( 1+2+2 )
3. Explain the mechanism of action, uses and adverse effects of amitriptyline (2+2+1)
4. Explain the mechanism of action, uses and adverse effects of methotrexate (1+2+2)
5. Explain the mechanism of action, uses and adverse effects of diclofenac ( 1+2+2 )

**SHORT ANSWERS (Answer any five)**

**5 X 3 = 15 Marks**

6. Explain the mechanism of action and **two** uses of succinylcholine
7. Explain the mechanism of action and write **one** use of metformin
8. Mention **three** drugs of different categories used in treatment of bronchial asthma
9. Mention **three** drugs of different categories used in treatment of parkinsonism
10. Mention **three** advantages and **three** disadvantages of intravenous route of drug administration
11. Mention **three** drugs to be avoided in geriatric patients and justify

**\* \* \***



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

**Bachelor of Physiotherapy (BPT)**

**Second Year Semester – IV October 2023 Examination.**

**Time: 2.30 Hrs**

**Max Marks: 80 Marks**

**General Medicine & Cardio-respiratory Conditions**

**Q.P Code: B4110**

*Your answer should be specific to the question asked.*

*Draw neat labeled diagrams wherever necessary*

**LONG ESSAY (Answer any Two)**

**2 X 10 = 20 Marks**

1. Explain the clinical features, complications and management of Pleural Effusion.
2. Explain in detail about causes, clinical features and management of Hypertension.
3. Explain the clinical feature, causes and management of GI Bleeding.

**SHORT ESSAY (Answer any Six)**

**6 X 5 = 30 Marks**

4. Discuss the clinical features and complications of obesity.
5. Discuss the clinical features and management of iron deficiency anemia.
6. Discuss the causes and management of psoriasis.
7. Discuss the clinical features and management of peptic ulcer.
8. Discuss the clinical features and management of endocarditis.
9. Write a short essay on Emphysema
10. Discuss the causes and management of coronary artery diseases.
11. Discuss the clinical features and management of Asthma.

**SHORT ANSWER (Answer any Ten)**

**10 X 3 = 30 Marks**

12. List the causes of liver tumors
13. Write a note on Exercise Stress testing
14. List the causes of Dermatitis
15. List the types of gall stones
16. List the causes of Pericarditis
17. List the causes of interstitial lung diseases
18. List the complications of blood transfusion
19. List the clinical features of Peritonitis
20. Write a note on Ulcerative Colitis
21. List the pharmaceutical agents misused
22. List the complications of Hemophilia
23. List the classification of Psychiatric disorders

\* \* \* \*

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



**Bachelor of Physiotherapy (BPT)**

**Second Year Semester – IV October 2023 Examination.**

Time: 2.30 Hrs.

Max Marks: 80 Marks

**General Surgery & Cardio Thoracic Conditions**

**Q.P Code: B4120**

*Your answer should be specific to the question asked.*

*Draw neat labeled diagrams wherever necessary*

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Describe the etiology, clinical features, cause, risk factors and management of coronary artery diseases.
2. What are the different types of Skin grafting? Describe the indications, contra-indications, advantages and complications of split skin grafting.
3. Describe definition, etiology, clinical features, complications and management of varicose veins.

**SHORT ESSAYS (Answer any Six)**

**6 x 5 = 30 Marks**

4. Classify burns and explain the management of thermal burns
5. Explain the phases and factors affecting wound healing
6. Explain the explain the indications, incisions and complications of ileostomy
7. Write a short note on Buerger's disease
8. Explain the clinical features and management of spontaneous pneumothorax
9. Explain the indications, physiological changes and complications of mastectomy
10. Definition thoracotomy and list the types of Incisions with emphasis to the site of incision and muscles cut.
11. List the difference between hypertrophic scar and keloid

**SHORT ANSWERS (Answer Any Ten)**

**10 x 3 = 30 Marks**

12. What are different suture materials
13. What is Cardiac tamponade?
14. List the different type of incisions on abdomen?
15. What is Pleurodesis
16. List the types of colostomy
17. List the type of embolism
18. List the indications of Bronchoscopy
19. List the factors affecting bleeding during surgery
20. What is thrombophlebitis
21. List the types of cardiac tumors
22. List the complications of blood transfusion
23. List the complications of total thyroidectomy

\* \* \* \*



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

**Bachelor of Physiotherapy (BPT)**

**Second Year Semester – IV October 2023 Examination.**

**Time: 2.30 Hrs**

**Max Marks: 80 Marks**

**ELECTROTHERAPY**

**Q.P Code: B4340**

*Your answer should be specific to the question asked.*

*Draw neat labeled diagrams wherever necessary*

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Describe the parameters, Types, and Contraindications of TENS (3+5+2=10)
2. Explain the methods of application and its therapeutic effects of cryotherapy. (3+5+2=10)

**SHORT ESSAY**

**6X 5 = 30 Marks**

3. Explain the Therapeutic effects and uses of moist heat.
4. Describe the Pulsed SWD and its application
5. Describe Pain Gate Theory.
6. Explain the physiological effects of IFT and give a note on its indications.
7. Explain physiological changes occurring in a nerve during electrical stimulation
8. Difference between high frequency and low frequency currents

**SHORT ANSWER**

**10 X 3 = 30 Marks**

9. Describe dynamic interference of IFT
10. Describe latent Heat in wax therapy
11. Enumerate any 6 contraindication of Wax therapy
12. Mention any two anions and two cations producing drugs for Iontophoresis
13. Define Resting Membrane potential
14. What is skin Impedance
15. List the Uses of Fuse
16. What is PUVA?
17. Define Chronaxie
18. What is Accommodation

\*\*\*\*\*



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

**Bachelor of Physiotherapy (BPT)**

**Second Year Semester – IV October 2023 Examination.**

**Time: 2 Hrs**

**Max Marks: 40 Marks**

**Pharmacology**

**Q.P Code: B4350**

*Your answer should be specific to the question asked.*

*Draw neat labeled diagrams wherever necessary*

**LONG ESSAY**

**1 X 10 = 10 Marks**

1. List drugs used in treatment of Parkinsonism. Explain the Mechanism of action, uses and adverse effects of each group of drugs

**SHORT ESSAY**

**3 X 5 = 15 Marks**

2. Explain the various routes of Drug excretion with examples
3. Explain the Pharmacological actions of Acetylcholine
4. Explain the Mechanism of action, adverse effects and Contraindications of glucocorticoids

**SHORT ANSWERS**

**5 X 3 = 15 Marks**

5. List the drugs used in prophylaxis of bronchial asthma
6. List the newer drug delivery systems with examples
7. List the types of receptor mediated drug action with examples
8. List the Angiotensin receptor blockers
9. List the differences between Physostigmine and Neostigmine



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

**Bachelor of Physiotherapy (BPT)**

**Second Year Semester – IV October 2023 Examination.**

**Time: 2.30 Hrs.**

**Max Marks: 80 Marks**

**General Medicine & Cardio Respiratory Conditions**

**Q.P Code: B4360**

*Your answer should be specific to the question asked.*

*Draw neat labeled diagrams wherever necessary*

**LONG ESSAYS**

**2 x 10 = 20 Marks**

1. Explain the causes, clinical features and management of Asthma.
2. Discuss the clinical features, complications and management of Peptic Ulcer

**SHORT ESSAYS**

**6 x 5 = 30 Marks**

3. Discuss the causes and management of viral hepatitis.
4. Discuss the clinical features and management of leprosy.
5. Discuss the clinical features and management of myocarditis.
6. Discuss the clinical features and management of pneumonia.
7. List the difference between marasmus and kwashiorkor
8. Discuss the clinical features and management of cystic fibrosis.

**SHORT ANSWERS**

**10 x 3 = 30 Marks**

9. List the causes of hypertension
10. Write a note on Wilson's Disease
11. List the types of Gall Stones
12. Mention the TNM stages of cancer
13. Write a note on Arterial Blood Gas analysis
14. List the causes of STD's
15. Write a note on Psoriasis
16. List the causes of upper respiratory tract infection
17. List the causes of malabsorption syndrome
18. List the complications of low-birth-weight infants



**SRI DEVRAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH**

**(A DEEMED TO BE UNIVERSITY)**

**Bachelor of Physiotherapy (BPT)**

**Second Year Semester – IV October 2023 Examination.**

Time: 2.30 Hrs.

Max Marks: 80 Marks

**General Surgery & Cardio Thoracic Conditions**

**Q.P Code: B4370**

*Your answer should be specific to the question asked.*

*Draw neat labeled diagrams wherever necessary*

**LONG ESSAYS**

**2 x 10 = 20 Marks**

1. Classify burns and explain the clinical features, complication and management of burns.
2. Describe the etiology, clinical features, investigations & treatment of carcinoma of breast?

**SHORT ESSAYS**

**6 x 5 = 30 Marks**

3. Explain the clinical features and management of Pneumothorax
4. Explain the indication and complications of cholecystectomy
5. Explain the clinical features and management of pulmonary tuberculosis.
6. Explain the causes and management of BUERGER'S Disease
7. Explain the clinical features and management of hernia
8. Explain few Post-operative Complications after major surgery

**SHORT ANSWERS**

**10 x 3 = 30 Marks**

9. Write a note on Raynaud's Disease
10. What is Esophageal Disruption
11. Write a note on Atherosclerosis
12. List the uses of upper GI Endoscopy
13. List the types and uses of skin grafts
14. List the muscles cut during lung surgeries
15. Write a note on Ventricular Septal Defect
16. List the types of Scars
17. List the causes of Otitis Media
18. Explain the factors affecting wound healing