



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION AND RESEARCH
(A DEEMED TO BE UNIVERSITY)
Master of Physiotherapy (MPT)
First Year Semester-II November 2025 Examination

TIME – 3.00 HRS

MAX MARKS: 100

Basic Sciences – Part - II
QP CODE: T2032

Your answers should be specific to questions asked.
Draw neat labelled diagrams wherever necessary

Long essay

2 X 20 = 40 Marks

1. Effectively prescribe exercise for Type 2 diabetes mellitus with inactive Physical activity levels. Use the FITT principle to formulate a realistic PA programme.
2. Describe EMG and biofeedback. Explain the principles and techniques of EMG biofeedback.

Short essay

6 X 10 = 60 Marks

3. Describe the essential components of Physiotherapist - patient management documentation template.
4. Explain the regulation and safety considerations in choosing the dietary supplements for exercise and athletic performance.
5. Explain the aerobic system adaptations to training
6. Illustrate the normal ECG changes during exercise
7. Explain the Factors affecting Nerve conduction studies.
8. Explain evoked potentials. Add a note on EEG.

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Long essay

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1. Explain the general principles of exercise prescription. Describe FITT Principle of Prescribing Aerobic Exercise
2. Describe nerve muscle physiology. Discuss the clinical implications of diseases involved in nerve muscle physiology.

Short essay

6 X 10 = 60 Marks

3. Explain the types of exercise testing. List the contraindication of exercise testing
4. Explain ventilatory responses in steady state and non-steady state exercise
5. Describe the physiological adjustments during heat acclimatization
6. Discuss the selected and banned ingredients in dietary supplements for exercise and athletic
7. Describe evoked potential. Explain the clinical implications of BAER.
8. Compare and contrast the H Reflex and F Wave.



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Max Marks: 100

Physical & Functional Diagnosis

QP CODE: TA2040

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Long Essay

2 X 20 = 40 Marks

1. Explain the principles of clinical decision making in electrotherapeutics, integrating evidence-based components.
2. Define movement dysfunction. Explain the Clinical examination of movement with dysfunction in a specific condition with a relevant example.

Short Essay

6 X 10 = 60 Marks

3. Describe the following Investigation
 - a. Arterial Blood Gas analysis
 - b. Electrocardiography
 - c. Peak flow meter
4. Explain the assessment and training of orthotic gait. Discuss the application of ICF in relation to disability management.
5. Explain the Variations of Muscle Energy Technique.
6. Describe EMG and biofeedback. Explain the therapeutic application of EMG biofeedback.
7. Describe the Clinical significance of anthropometric measurement based on literature evidence.
8. Describe the fitness test components for a specific sport with an example.