

2025

SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION

Course : EC-301

Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

1. Define sports medicine and discuss its objectives. Elaborate the historical perspective of sports medicine in India. Discuss the scope of sports medicine. 7+3+5

Or

Describe the symptoms, management and prevention of two major injuries of knee joint. Discuss the adverse effects of doping. 10+5

2. Explain the role of physiotherapy in injury management and rehabilitation. Describe the various modalities of thermotherapy used to treat sports injuries. 8+7

Or

Write down the mechanism of cryotherapy in injury management. Explain TENS and Diathermy. 4+(5+6)

3. Discuss the indications and contraindications of massage therapy. Elaborate effleurage technique of massage and its application. Explain the principles of first aid. 6+5+4

Or

Discuss the importance of protective and supportive equipment in sports with suitable examples. Differentiate between taping and bandaging. What is the emergency care to be taken for drowning? 6+4+5

4. Write notes on the following (*any two*) : 7½×2

- (a) Classification of therapeutic exercises
- (b) Types of rehabilitation
- (c) Active and Passive movements
- (d) Use of mobility exercises in rehabilitation.

Please Turn Over

(3812)

5. Answer the following MCQs by choosing the correct option from the given alternatives for each question and write it on your answer script (*any ten*) : 1×10

- (a) Which of the following is the incorrect statement in reference to rehabilitation?
- (i) It involves improvement of general mobility.
 - (ii) It involves reduction in spasms and pains.
 - (iii) It involves reduction in functional independence.
 - (iv) It involves productive social participation.
- (b) Which of the following is a part of non-invasive injury management?
- (i) Injectable
 - (ii) Physiotherapy
 - (iii) Blood transfusion
 - (iv) Joint replacement.
- (c) Which of the following involves only watchful supervision of the physiotherapist?
- (i) Assisted range of motion exercise
 - (ii) Active assisted range of motion exercise
 - (iii) Passive range of motion exercise
 - (iv) Mobility exercise.
- (d) Match the information given in the following two columns and choose the correct answer code listed below :
- | | |
|--|---------------------------|
| I. Deep heat with high frequency currents | — A. Hydro-collator packs |
| II. Deep heat with electromagnetic radiation | — B. Short wave diathermy |
| III. Deep heat with high frequency sound | — C. Microwave diathermy |
| IV. Superficial heat application | — D. Ultra Sound |
- Answer Codes :
- (i) I-C, II-D, III-B, IV-A
 - (ii) I-D, II-A, III-B, IV-C
 - (iii) I-D, II-C, III-A, IV-B
 - (iv) I-B, II-C, III-D, IV- A.
- (e) Which of the following is a type of electrotherapy that involves deep tissue heating and circulation?
- (i) TENS
 - (ii) NMES
 - (iii) Ultrasound
 - (iv) Short wave diathermy.
- (f) Which of the following is the correct statement?
- (i) Physiotherapy is a part of rehabilitation.
 - (ii) Rehabilitation is part of physiotherapy.
 - (iii) Physiotherapy is not a part of therapeutic modalities.
 - (iv) Rehabilitation is not for children.
- (g) Paraffin bath is an example of
- (i) convection heating
 - (ii) conductive heating
 - (iii) conversion heating
 - (iv) radiation heating.

- (h) Movement disorders based on balance are treated through
- (i) Geriatric physiotherapy
 - (ii) Paediatric physiotherapy
 - (iii) Vestibular physiotherapy
 - (iv) Neuromuscular physiotherapy.
- (i) Which of the following is a contraindication of massage therapy?
- (i) Chronic back pain
 - (ii) Chronic constipation
 - (iii) Poor circulation
 - (iv) Blood disorders.
- (j) Kinseo tape is an example of _____.
- (i) compression
 - (ii) taping
 - (iii) bandaging
 - (iv) orthotics.
- (k) The golden rule of CPR (Cardio Pulmonary Resuscitation) is
- (i) to act fast
 - (ii) to act slowly
 - (iii) to compress
 - (iv) None of these.
- (l) Injury to the lateral side ligament of the elbow is called
- (i) Tennis elbow
 - (ii) Golfers' elbow
 - (iii) Olecranon Bursitis
 - (iv) None of these.
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