BAE404 SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION

Unit I: Sports Medicine

Sports Medicine: Meaning, Definition, Aims, Objectives, Modern Concepts and Importance - Athletes Care and Rehabilitation: Contribution of Physical Education Teachers and Coaches - Need and Importance of the study of sports injuries in the field of Physical Education

Unit II: Preventive Measures and First Aid

Prevention of injuries in sports Common sports injuries Diagnosis - First Aid - Treatment - Laceration Blisters Contusion – Strain Sprain – Fracture Dislocation and Cramps Bandages Types of Bandages trapping and supports.

Unit III: Physiotherapy

Definition Guiding principles of physiotherapy - Importance of physiotherapy - Introduction and demonstration of treatments - Electrotherapy infra red rays - Short wave diathermy ultrasonic rays.

Unit IV: Hydrotherapy

Introduction and demonstration of treatments of Cry therapy, Thermo therapy, Contrast Bath, Whirlpool Bath, Steam Bath, Sauna Bath, Hot Water Fomentation Massage - History of Massage - Classification of Manipulation (Swedish System) physiological - Effect of Massage.

Unit V: Therapeutic Exercise

Definition and Scope Principles of Therapeutic Exercise Classification, Effects and uses of Therapeutic exercise passive Movements (Relaxed, Forced and passive stretching) active movements (concentric, Eccentric and static) application of the therapeutic exercise: Free Mobility Exercise Shoulder, Elbow Wrist and Finger Joints Hips, Knee, ankle and Foot joints Trunk. Head and Neck exercises.

References:

- 1. Christine, M. D., (1999). Physiology of sports and exercise. USA: Human Kinetics.
- 2. Conley, M. (2000). Bioenergetics of exercise training. In T.R. Baechle, and R.W. Earle, (Eds), Essentials of Strength Training and Conditioning (pp. 73-90). Champaign, IL: Human Kinetics.
- 3. David, R. M. (2005). Drugs in sports, (4th'Ed). Routledge Taylor and Francis Group.
- 4. Hunter, M. D. (1979). A dictionary for physical educators. In H. M. Borrow and R. McGee,(Eds.), A Practical approach to measurement in Physical Education (pp. 573-74) Philadelphia: Lea and Febiger.
- 5. Jeyaprakash, C. S., Sports Medicine, J.P. Brothers Pub., New Delhi, 2003.
- 6. Khanna, G.L., (1990). Exercise physiology and sports -medicine. Delhi : Lucky Enterprises
- 7. Mathew, D.K. and Fox, E.L, (1971). Physiological basis of physical education and athletics. Philadelphia: W.B. Saunders Co.

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