

**CORE COURSE (THEORY)
SEMESTER II
KINESIOLOGY**

Max. Marks =100

Theory = 70 Marks + Internal Assessment = 30 Marks

BES-C204

Time allowed: 3Hrs

The Course learning outcomes (COs): On completion of the four years B.P.E.S, program, the students will be learning and able to do/performance the following.....

CO-1. Describe the definition and meaning of kinesiology.

CO-2. Discuss the aims and objectives of kinesiology.

CO-3. Explain the role of kinesiology in physical education.

CO-4. Interpret the fundamental concept of center of gravity, line of gravity, axis, and planes.

CO-5. Write about the composition, and classification of bones and Muscles.

UNIT-I

Definition & Meaning of Kinesiology

Aims & objectives of kinesiology

Scope of Kinesiology in physical Education and Sports

Role of Kinesiology in physical Education and Sports

UNIT-II

Fundamental concepts: Centre of gravity, line of gravity

Axis and planes

Fundamental movements of human body joints

Meaning & definition of motion around various joints

UNIT-III

Introduction of Bones

Composition of bones

Types of bones

Classification of bones

UNIT-IV

Introduction of Muscles

Types of muscles

Classification of muscles

Structure of Skeletal muscles

SUGGESTED BOOKS

Hamill, J. and Knutzen, K.M. (2003). Biomechanical Basis of Human Movement. Lippincott Williams and Wilkins, USA.

Hay (1993). The biomechanics of sports techniques prentice hall inc New Jersey.

McGinnis, P. (2004). Biomechanics of Sports & Exercise. Human Kinetics, USA.

Oatis, C.A. (2008). Kinesiology. 2nd Ed. Lippincott, Williams & Wilkins, USA.

Parmeswar ram P.(2001) Essentials of Kinesiology and Biomechanics New Delhi.

Rai Ramesh(2003) Biomechanics mechanical aspects of human motion, Agrim publication, Mohali.