

First Year BPT Degree Regular/Supplementary Examinations
February 2022

Paper III – Biomechanics and Kinesiology
(2016 Scheme)

Time: 3 hrs**Max marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essays**(2x15=30)**

1. Define posture. Discuss kinetics and kinematics of posture and effects of posture on age, pregnancy, occupation and recreation.
2. Describe the functions of the shoulder joint. Explain the dynamic stability of the gleno- humeral joint.

Short Essays**(4x10=40)**

3. Prehension and Precision of Hand.
4. Describe elements of muscle structure. Discuss muscle fiber types.
5. Ligaments of the knee joint and their function.
6. Discuss in detail pelvic tilts and rotation

Short Answers**(10x3=30)**

7. Synovial joints
8. Define force. List its components
9. Pronation and supination movements of forearm
10. Pump handle motion.
11. Genu recurvatum
12. Angle of inclination in femur.
13. Second order lever with example.
14. Locking of knee
15. Pes Cavus
16. Carrying angle