

**Bachelor of Physiotherapy (BPT)
First Year (Semester-I) July-2017 Examination**

Time : 2.00 Hrs.

[Max. Marks : 50]

ANATOMY

Q.P Code : BPT-101

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

LONG ESSAY (Answer any two)

2 X 10 = 20 Marks

1. Describe the diaphragm under the following heading: origin, insertion, nerve supply and action, openings in the diaphragm, 2 applied aspects.
2. Describe the brachial plexus under the following heading: formation, division, branches and applied aspects.
3. Define cartilage, classify and explain giving examples.

SHORT ESSAY

3X 5 = 15 Marks

4. Middle mediastinum: Boundaries and contents.
5. Give the structure of a spermatozoa. What is spermatogenesis?
6. Gluteal muscles: name, attachments, action and nerve supply, applied aspect.

SHORT ANSWER

5 X 3 = 15 Marks

7. Write a note on cell membrane and mention any two of its functions.
8. Carpal bones.
9. Dorsal venous arch of the hand.
10. SA node.
11. Cells of connective tissue.

*** * ***

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

**Bachelor of Physiotherapy (BPT)
First Year (Semester-I) July-2017 Examination**

Time : 2.00 Hrs.

[Max. Marks : 50]

BIOCHEMISTRY

Q.P Code : BPT-103

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

LONG ESSAY (Answer any two)

2 X 10 = 20 Marks

1. Discuss source, absorption and transport, functions, RDA, deficiency and Toxicity of Vitamin D.
2. Classify amino acids with suitable examples. Add a note on isoelectric PH.
3. Describe the classification of carbohydrates with examples. Add a note on Muccopolysaccharides.

SHORT ESSAY

3X 5 = 15 Marks

4. Structure and functions of tRNA.
5. Discuss diagnostic significance of enzymes.
6. Phospholipids.

SHORT ANSWER

5 X 3 = 15 Marks

7. Endoplasmic reticulum.
8. Mention any three factors effecting enzyme activity.
9. What are essential fatty acids? Give examples.
10. Name any three isoenzymes. Mention their clinical significance.
11. Mention the deficiency of the following vitamins.
 - a) Vitamin C
 - b) Thiamin
 - c) Niacin

*** * ***

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

**Bachelor of Physiotherapy (BPT)
First Year (Semester-I) July-2017 Examination**

Time : 2.00 Hrs.

[Max. Marks : 50]

PHYSIOLOGY

Q.P Code : BPT-102

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

LONG ESSAY (Answer any two)

2 X 10 = 20 Marks

1. Explain cardiovascular and respiratory changes during exercise.
2. Define action potential. Explain ionic basis of nerve action potential with the help of a diagram.
3. Define erythropoiesis. Describe the changes occurring in the stages of erythropoiesis.

SHORT ESSAY

3X 5 = 15 Marks

4. Functions of plasma proteins.
5. Spirogram
6. Composition and functions of saliva.

SHORT ANSWER

5 X 3 = 15 Marks

7. Lung surfactant.
8. Functions of skin
9. Cystometrogram
10. Secondary active transport
11. Neat labeled diagram of lead II ECG.

*** * ***

**Bachelor of Physiotherapy (BPT)
First Year Semester-I, July – 2017 Examination**

Time : 2.00 Hrs.

Psychology and Sociology

[Max. Marks : 50]

Section-A

Psychology

Q.P Code : BPT-105A

Your answer should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

(Use separate answer booklet for section A & B)

SHORT ESSAY

5 X 5 = 25 Marks

1. Explain the application psychology in Physiotherapeutic clinic.
2. Write about the different stages of human development.
3. Write about illusions.
4. Write about Maslow's hierarchy.
5. What is conflict? Explain its types.

Section – B

Sociology

Q.P. Code : BPT-105B

(Use separate answer booklet for section B)

SHORT ESSAY

5 X 5 = 25 Marks

1. Define Sociology.
2. Role of social factors in health and illness.
3. Process of Socialization.
4. Primary groups in hospital settings.
5. Family and Nutrition.

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

**Bachelor of Physiotherapy (BPT)
First Year (Semester-I) July-2017 Examination**

Time : 2.00 Hrs.

[Max. Marks : 50]

BIOMECHANICS

Q.P Code : BPT-104

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

LONG ESSAY (Answer any two)

2 X 10 = 20 Marks

1. Describe the function of shoulder complex, including dynamic stability of glenohumeral joint?
2. Explain a typical synovial joint with mechanical properties.
3. Draw a diagram of skeletal muscle fiber. Describe various types of muscle contraction with examples of each of the contraction.

SHORT ESSAY

3X 5 = 15 Marks

4. Explain newton's laws of motion with examples for each laws?
5. What is the base of support? How is it related with mobility and stability of the body?
6. Enumerate the role of fixators & synergists with example.

SHORT ANSWER

5 X 3 = 15 Marks

7. Explain mechanical advantage.
8. Explain difference between closed and open kinematic chain.
9. Explain anatomical pulley with example.
10. Explain lumbo pelvic rhythm?
11. Define isometric and isotonic muscle contraction.

*** * ***