Rajiv Gandhi University of Health Sciences, Karnataka
I Year B.P.T. Degree Examination – 26-May-2025

Time: Three Hours   **Max. Marks: 100 Marks**

BIO-MECHANICS (RS - 5)
Q.P. CODE: 2734
Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

LONG ESSAYS (Second Question choice)   **2 x 10 = 20 Marks**

1. Describe the structure of Hip Joint. Add a note on Kinetics and Kinematics of hip joint.

2. Describe in detail about mechanism of muscle contraction and explain the different types of muscle contraction with examples.
        Or
   Explain biomechanics of Thorax and Chest wall.

SHORT ESSAYS (Question No.3 & 12 choice)   **10 x 5 = 50 Marks**

3. Scapulo humeral rhythm.
        Or
   List out various gait deviations. Discuss any two in detail.

4. Postural changes in pregnancy.

5. Determinants of Gait.

6. Lumbo pelvic rhythm.

7. Different types of Grip.

8. Mention in brief about concurrent force system.

9. Enumerate the deviations occurring at ankle joint.

10. Describe in detail the classification of joints.

11. Length tension relationship of a muscle.

12. Explain levers in detail.
        Or
    Describe stress and strain curve.

SHORT ANSWERS   **10 x 3 = 30 Marks**

13. Scoliosis.

14. Stair climbing – briefly explain the muscle work.

15. Anteversion and retroversion.

16. Patella Plica.

17. Pes planus and Pes-cavus.

18. Define axis and planes.

19. Name the ligaments of Hip Joint.

20. Define moment arm of Force.

21. Palmar arches.

22. Open kinematic chain.

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Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination – 23-May-2025

Time: Three Hours   **Max. Marks: 80 Marks**

BIOCHEMISTRY (RS-5)
Q.P. CODE: 2733
Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any One)   **1 x 10 = 10 Marks**

1. Describe in detail the Tricarboxylic acid cycle and energy production. Add a note on its amphibolic role.

2. What is the normal blood pH? Explain the role of kidneys in maintaining acid base balance.

SHORT ESSAYS (Answer any Eight)   **8 x 5 = 40 Marks**

3. Digestion and absorption of lipids.

4. Muscle contraction.

5. Glycolysis.

6. Types of RNA and functions.

7. Describe the synthesis of ketone bodies and add a note on ketosis.

8. Factors affecting enzyme activity.

9. Renal function tests.

10. Deficiency features of Vitamin C

11. Atherosclerosis.

12. Describe the functional classification of proteins.

SHORT ANSWERS   **10 x 3 = 30 Marks**

13. Von-gierks disease.

14. Nucleotides.

15. Pellagra.

16. Nitrogen balance.

17. Perinicious anemia.

18. Rickets.

19. SDA.

20. Normal level of sodium, potassium and chloride.

21. Transamination.

22. Normal level of Calcium and Iron.

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Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination – 19-May-2025

Time: Three Hours   **Max. Marks: 100 Marks**

HUMAN ANATOMY (RS5)
Q.P. CODE: 2731

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

LONG ESSAYS (Second Question Choice)   **2 x 10 = 20 Marks**

1. Describe the knee joint in detail under the following headings:
    a) Articular surfaces
    b) Ligaments
    c) Movements
    d) Applied Anatomy
2. Describe the boundaries and contents of carotid triangle.
                          OR
    Describe in detail liver.

SHORT ESSAYS (Question No 3 & 12 choice)   **10 x 5 = 50 Marks**

3. Blood supply of thyroid gland
             OR
    Medulla oblongata
4. Great saphenous vein

5. Right atrium

6. Lymphatic drainage of mammary gland

7. Spleen

8. Gluteus maximus

9. Cubital fossa

10. Superficial palmar arch

11. Spermatogenesis

12. Histology of hyaline cartilage
             OR
    Corpus callossum

SHORT ANSWERS   **10 x 3 = 30 Marks**

13. Pterion

14. Foramen magnum

15. Tongue

16. Gall bladder

17. Tendo calcaneus

18. Carpal Tunnel syndrome

19. Draw and label a cardiac muscle

20. Muscles of mastication

21. Porta Hepatis

22. Any four supports of uterus

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Rajiv Gandhi University of Health Sciences, Karnataka
I Year B.P.T. Degree Examination – 21-May-2025

Time: Three Hours   **Max. Marks: 100 Marks**

HUMAN PHYSIOLOGY (RS5)
Q.P. CODE: 2732

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary.

LONG ESSAYS (Second Question Choice)   **2 x 10 = 20 Marks**

1. Define erythropoiesis. Explain the stages of erythropiesis. Add a note on factors affecting the erythropiesis.
2. What is the serum normal calcium level? Describe the hormones regulating the calcium metabolism.

OR

Define pain. Mention the types of pain. Trace the pain pathway. Add a note on referred pain.

SHORT ESSAYS (Question No 3 & 12 choice)   **10 x 5 = 50 Marks**

3. Mention the contents of middle ear and explain the functions of middle ear.

OR

Classify body fluid compartment. Give their normal values. Mention any one method to determine ECF.
4. Enumerate the functions of Plasma Proteins.

5. Explain the Conducting system of heart.

6. Draw a labeled spirogram. Mention the normal values of any lung volumes.

7. Define GFR. What is its normal value? Explain the forces acting the glomerulo Capillary membrane.
8. Movements of small intestine

9. Functions of bile

10. Cushing's syndrome

11. Explain the endometrial changes seen in menstrual cycle.

12. Explain the reflex arc with the help of a diagram.

OR

Difference between upper motor and lower motor neuron lesion

SHORT ANSWERS   **10 x 3 = 30 Marks**

13. What is surfactant?

14. Functions of mitochondria

15. Define hypoxia. Name the types of hypoxia.

16. Define Tone.

17. Define Jaundice. Name the three types of jaundice.

18. List 4 functions of stomach.

19. List the functions of saliva.

20. Enumerate difference between active and passive transport.

21. List the contraceptive methods used in females.

22. Define cyanosis and mention the types of cyanosis.

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Rajiv Gandhi University of Health Sciences, Karnataka
I Year B.P.T. Degree Examination - 28-May-2025

Time: 3 Hours   **Max. Marks: 40 Marks**

PSYCHOLOGY (RS5)
Q.P. Code: 2735
Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary
(Note: Both QP Codes 2735 and 2736 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One)   **1 x 10 = 10 Marks**

1. Define Intelligence. How do you Assess Intelligence explain with examples?

2. Define Motivation. Explain Primary and Secondary Motives.

SHORT ESSAYS (Answer any Three)   **3 x 5 = 15 Marks**

3. Define Personality. Freud's Psychoanalytic theory.

4. Define Emotions. Enumerate the changes that take place in Emotions.

5. Describe Projective techniques.

6. Define Learning. Effective methods of learning.

SHORT ANSWERS   **5 x 3 = 15 Marks**

7. Hallucinations.

8. List the branches of Psychology.

9. Adolescent Stage.

10. Motivational Cycle.

11. Rationalization.

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Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination − 28-May-2025

Time: 3 Hours   **Max. Marks: 40 Marks**

SOCIOLOGY (RS5)
Q.P. CODE: 2736

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.
(Note: Both QP Codes 2735 and 2736 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One)   **1 x 10 = 10 Marks**

1. Define socialization. Explain the stages and agencies of socialization.

2. Explain any one social problem in relation to its causes, effect and solution.

SHORT ESSAYS (Answer any Three)   **3 x 5 = 15 Marks**

3. Social survey method.

4. Medical social work.

5. Joint family.

6. Drug addiction.

SHORT ANSWERS   **5 x 3 = 15 Marks**

7. Ethnocentrism.

8. Primary group.

9. Health programmes in India.

10. Concept of health.

11. Child abuse.

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