# Rajiv Gandhi University of Health Sciences, Karnataka I Year B.P.T. Degree Examination - 12-Jan-2022

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)

 $1 \times 10 = 10 \text{ Marks}$ 

- 1. Define learning. Explain the types of learning
- 2. Define attention. Explain the factors influencing attention

#### SHORT ESSAYS (Answer any Three)

 $3 \times 5 = 15 \text{ Marks}$ 

- 3. Stages of creative thinking
- 4. Types of conflicts
- 5. Experimental method in psychology
- 6. Sources of frustration

#### SHORT ANSWERS

 $5 \times 3 = 15 \text{ Marks}$ 

- 7. Define sensation
- 8. Repression
- 9. Authoritarian leader
- 10. Achievement motives
- 11. Concept formation

## Rajiv Gandhi University of Health Sciences, Karnataka I Year B.P.T. Degree Examination - 25-Jan-2021

**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)

 $2 \times 10 = 20 \text{ Marks}$ 

- 1. Define cardiac cycle. Explain the changes taking place during the phases of Cardiac cycle.
- 2. Name the hormones of anterior pituitary and describe the actions and disorder of any one hormone.

OR

With the help of a graph explain length-tension relationship of skeletal muscle contraction.

#### SHORT ESSAYS (Question No 3 & 12 choice)

 $10 \times 5 = 50 \text{ Marks}$ 

Functions of pancreatic juice

OR

Briefly describe the stages of erythropoiesis. Enumerate the non-dietary factors.

- 4. Explain the mechanism of triple response.
- 5. Give a brief account of chemical regulation of respiration.
- 6. Describe the immunological tests of pregnancy.
- 7. Define jaundice. Write the features of the different types of jaundice.
- 8. Enumerate the posterior pituitary hormones. Discuss the physiological action of each.
- 9. List the four functions of the middle ear. Explain any one.
- 10. What is a synapse? List the different types of synapses and discuss any four properties.
- 11. Enumerate the functions of basal ganglia.
- 12. Draw a schematic diagram to show the intrinsic pathway of coagulation.

OR

What is color vision? How do you test it clinically? Classify color blindness.

#### **SHORT ANSWERS**

 $10 \times 3 = 30 \text{ Marks}$ 

- 13. Define menopause. Write any four features.
- 14. Differentiate between exocytosis and endocytosis.
- 15. Define dead space. Define the types of dead space.
- 16. What is a motor unit? Draw a neat labeled diagram.
- 17. State All or None law.
- 18. Define peripheral resistance. Enumerate its factor.
- 19. Enumerate the functions of angiotensin II.
- 20. What is MCV? Give its normal value.
- 21. Define the mechanisms of neurocrine, autocrine and endocrine.
- 22. Define resting membrane potential.

### Rajiv Gandhi University of Health Sciences, Karnataka I Year B.P.T. Degree Examination - 03-Feb-2021

**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)

 $1 \times 10 = 10 \text{ Marks}$ 

- 1. Define Social Group and distinguish between Primary and Secondary Group.
- 2. Explain any one social problem in relation to its cause, effect and solution.

#### **SHORT ESSAYS (Answer any Three)**

 $3 \times 5 = 15$  Marks

- 3. Family and Nutrition.
- 4. Functions of Culture.
- 5. Social survey method.
- 6. Features of Rural community.

#### SHORT ANSWERS

 $5 \times 3 = 15 \text{ Marks}$ 

- 7. Causes for beggary
- 8. Immoral Traffic Act.
- 9. Social psychology.
- 10. Medical Social Work.
- 11. Psycho-somatic disorders.

## Rajiv Gandhi University of Health Sciences, Karnataka I Year B.P.T. Degree Examination - 03-Feb-2021

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)

 $1 \times 10 = 10 \text{ Marks}$ 

- Define personality. Explain Sigmund Freud's concept of personality.
- Define learning. Explain the factors that affect learning.

#### **SHORT ESSAYS (Answer any Three)**

 $3 \times 5 = 15$  Marks

- School of behaviourism
- 4. Difference between illusion and hallucination
- Distribution of intelligence
- 6. Steps involved in creative thinking

#### SHORT ANSWERS

5 x 3 = 15 Marks '

- 7. Attention
- 8. Motivational cycle
- 9. Conflict
- 10. Define twins
- 11. Repression

### Rajiv Gandhi University of Health Sciences, Karnataka I Year B.P.T. Degree Examination - 28-Jan-2021

Time: Three Hours

Max. Marks: 80 Marks

#### BIO-CHEMISTRY (RS-3 & RS-4) Q.P. CODE: 2703

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

#### LONG ESSAYS (Answer any One)

 $1 \times 10 = 10 \text{ Marks}$ 

- 1. Describe the Liver function tests
- 2. Describe Urea cycle. Name two inborn errors associated with this cycle

#### SHORT ESSAYS (Answer any Eight)

 $8 \times 5 = 40 \text{ Marks}$ 

- 3. Dietary fibres
- 4. Sources and absorption of calcium
- 5. Wald's visual cycle
- 6. Write a note on the structure of myosin
- 7. Factors affecting enzyme activity
- 8. Describe structure of DNA
- 9. Mucopolysaccharides
- 10. Explain the sliding filament theory of muscle contraction
- 11. Fluid mosaic model of cell membrane
- 12. Metabolic acidosis

#### **SHORT ANSWERS**

 $10 \times 3 = 30 \text{ Marks}$ 

- 13. Anion Gap
- 14. Balanced diet
- 15. Vitamin C
- 16. Gout
- 17. Functions of phospholipids
- 18. Name the hormones regulating blood glucose
- 19. Night blindness
- 20. Beri Beri
- 21. Starch
- 22. Specialized products formed from Glycine

## Rajiv Gandhi University of Health Sciences, Karnataka I Year B.P.T Degree Examination - 01-Feb-2021

**Time: Three Hours** 

Max. Marks: 100 Marks

#### BIO-MECHANICS (RS5) O.P. CODE: 2734

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

#### LONG ESSAYS (Second Question Choice)

 $2 \times 10 = 20 \text{ Marks}$ 

1. Name the structures which help in stability of lumbar vertebral column. Explain in detail the biomechanics of lumbar spine.

2. What structures comprises Extensor mechanism. Write in detail about the extensor mechanism of hand.

OR

Define Gait. Explain the determinants of gait in detail.

#### SHORT ESSAYS (Question No 3 & 12 choice)

 $10 \times 5 = 50 \text{ Marks}$ 

3. Write a note on the types of muscle fibers and its characteristic features.

OR

Describe the structure and function of intervertebral disc.

- 4. Explain briefly stability of radioulnar joint.
- 5. Explain open kinematic chain and closed kinematic chain with examples.
- 6. Define joint. Write a note on synovial joint.
- 7. Explain Gleno-humeral rhythm.
- 8. Explain the strategies to maintain postural balance.
- 9. Write a note on movements of temporomandibular joint.
- Describe the function of diaphragm during ventilation.
- 11. Discuss in brief about supination and pronation twist.
- 12. Add a note on knee joint burse.

OR

Write a note on trabecular system of hip joint.

#### SHORT ANSWERS

10 x 3 = 30 Marks

- 13. What is Q angle?
- 14. What is metatarsal break?
- 15. Write any two gait deviations.
- 16. What is mechanical advantage?
- 17. What are the movements of sacrum?
- 18. What is young's modulus?
- 19. What is Active insufficiency?
- 20. Name the types of muscle contraction
- 21. What is double support time?
- 22. Describe meniscus.

## Rajiv Gandhi University of Health Sciences, Karnataka I Year B.P.T. Degree Examination – 28-Jan-2021

**Time: Three Hours** 

Max. Marks: 80 Marks

#### BIOCHEMISTRY (RS5) 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

- Give an account of chemistry, sources, daily requirement, biochemical functions, deficiency manifestations of Vitamin A.
- 2. Describe in detail the types of diabetes mellitus. Add a note on glucose tolerana test.

#### **SHORT ESSAYS (Answer any Eight)**

8 x 5 = 40 Marks

- 3. Glycogenolysis.
- 4. Explain the structure and function of tRNA.
- 5. Transamination.
- 6. Biochemical mechanism of muscle contraction.
- 7. Dietary fibre.
- 8. Functions of Vitamin C.
- 9. Factors affecting enzyme activity.
- 10. Functions of proteins.
- 11. Metabolic acidosis.
- 12. Regulation of plasma calcium level.

#### **SHORT ANSWERS**

 $10 \times 3 = 30 \text{ Marks}$ 

- 13. Deficiency symptoms of niacin.
- 14. Name any two phospholipids with their functions.
- 15. Normal serum values of Blood urea and creatinine.
- 16. Essential fatty acids.
- 17. Mentions two enzymes of diagnostic importance in myocardial infarction.
- 18. Fluorosis.
- 19. Mitochondria.
- 20. Nucleotides of biological importance.
- 21. Name the coenzymes of niacin and riboflavin.
- 22. Define active transport.

# Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T Degree Examination - 21.01.2021

**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

Describe the shoulder joint under the following headings - types, bones forming joint, ligaments

Describe the boundaries, roof and floor, contents and applied anatomy of femoral triangle. 2.

OR

Describe cerebrum in detail.

### SHORT ESSAYS (Question No 3 & 12 choice)

 $10 \times 5 = 50 \text{ Marks}$ 

Biceps brachialis OR Liver

- Rectus abdominus 4.
- Popliteal fossa
- 6. Fertilization
- 7. Anatomy of right lung
- Thyroid gland 8.
- Cerebellum
- 10. Testis
- 11. Arches of foot
- Arch of aorta and its branches OR Stomach

#### SHORT ANSWERS

10 x 3 = 30 Marks .

- 13. Layers of wall of heart
- 14. Nephron
- 15. Draw labeled diagram of neuron
- Sesamoid bone
- 17. Name muscles that cause pronation and supination at forearm
- 18. Intervertebral disc
- 19. Histology of large artery
- 20. Types of cartilage
- 21. Ischeal tuberosity
- 22. Any four branches of external carotid artery

### Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination - <<>>

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)

 $2 \times 10 = 20 \text{ Marks}$ 

- Draw and label Sarcomere. Explain the sliding filament theory of skeletal muscle contraction.
- Draw and labeled diagram showing the conducting system of human heart with the help of diagram of action potential of sino-atrial node. Explain the ionic basis for its different phases.

With the help of diagram, discuss the corticospinal pathway under the headings: a) Origin b) Course c) Termination. Add a note on hemiplegia.

#### SHORT ESSAYS (Question No 3 & 12 choice)

 $10 \times 5 = 50 \text{ Marks}$ 

List the properties of nerve fibre and classify as proposed by Erlanger and Gasser.

Explain the intrinsic mechanism of blood coagulation.

- 4. Explain the baroreflex mechanism of blood pressure regulation,
- Draw a normal spirogram. Define and give normal values of the various lung volumes and 5. capacities.
- 6. Describe in brief the defecation reflex.
- 7. Briefly explain the renal handling of glucose
- Describe the major actions of cortisol.
- 9. Briefly explain parturition reflex. X
- Mention four properties of sensory receptors. Explain any two. 10.
- Describe the special characteristics of coronary circulation. 11.
- Define dark adaptation. Explain the mechanism of dark adaptation. 12.

Explain the major actions of calcitonin on bone and kidney, <

#### SHORT ANSWERS

 $10 \times 3 = 30 \text{ Marks}$ 

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- 13. List the factors determining the rate of diffusion across cell membrane.
- 14. Define the term "renal clearance". List the factors determining renal clearance.
- 15. List the functions of Plasma proteins.
- 16. Draw a neat labelled diagram of a Cystometrogram.
- 17. Write a note on enterohepatic recirculation.
- 18. List the functions of T lymphocytes and B lymphocyte.
- 19. Define and give one example each for a) Neurocrine b) Paracrine and c) Autocrine 2
- 20. List the functions of Sertoli cells.
- List differences between rods and cones. 21.
- Define the term 'referred pain". Give an example with its physiological basis.

### Rajiv Gandhi University of Health Sciences, Karnataka I Year B.P.T. Degree Examination - 03-Jan-2022

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)

 $2 \times 10 = 20 \text{ Marks}$ 

- Describe the origin, course, braches and distribution of Radial nerve. Add a note on its applied
- Describe the external features, blood supply and lymphatic drainage of stomach. Describe the articular surface, relations, ligaments, movements of Hip joint.

### SHORT ESSAYS (Question No.3 & 12 choice)

 $10 \times 5 = 50 \text{ Marks}$ 

- Sternomastoid muscle (Origin, insertion, nerve supply and action). Trapezius muscle.
- Boundaries and contents of popliteal fossa. 84.
- 15. Oogenesis.
- 6. Pancreas.
- 7. Fourth ventricle.
- 8. Azygos vein.
- ٠9. Femoral sheath.
- 10. Rectus sheath.
- 11. Histology of Cardiac muscle.
- Extrinsic muscle of Tongue.

Papillae of Tongue Biceps Brachi

#### SHORT ANSWERS

 $10 \times 3 = 30 \text{ Marks}$ 

dia.

- 13. Name the carpal bones.
- 14. Coronary artery.
- 15. Histology of Transitional epithelium.
- 16. Foramen magnum.
- 17. Name the four nuclei of cerebellum?
- 18. Neurulation.
- 19. Name any four muscles of larynx.
- 20. Foot drop.
- 21. Iliotibial tract.
- 22. Facial artery.