Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination – SEP-2017

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

HUMAN ANATOMY (RS - 5)
Q.P. CODE: 2731

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

LONG ESSAYS (Answer any Two)　　　　　　　　　　　　　**2 x 10 = 20 Marks**

1. Describe the carotid triangle under the following headings: boundaries, roof, floor, contents and applied anatomy.
2. Describe the origin, course, relations, branches and applied anatomy of sciatic nerve.
3. Describe the origin, termination, relations, branches and applied anatomy of axillary artery.

SHORT ESSAYS (Answer any Twelve)　　　　　　　　　　　**12 x 5 = 60 Marks**

4. Parotid gland
5. Musculocutaneous nerve of arm
6. Lateral ventricle
7. Superior mediastinum
8. Stomach bed
9. Broncho pulmonary segment
10. Supports of uterus
11. Adductor canal
12. Sternal angle
13. Cubital fossa – boundaries, contents and applied anatomy
14. Blood supply of heart
15. External features of liver
16. Pituitary gland
17. Classify muscles with examples.

SHORT ANSWERS　　　　　　　　　　　　　　　　　　　**10 x 2 = 20 Marks**

18. Mention the joints where inversion and eversion takes place.
19. Name the ear ossicles.
20. Draw the structure of neuron.
21. Waldeyer's ring
22. What is Morsion's and Dougla's pouch?
23. Name the nuclei present in cerebellum.
24. Name the layers of scrotum.
25. Name the muscles of anterior abdominal wall.
26. Name the bones forming ankle joint.
27. Draw the transverse section of spinal cord.

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Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination – SEP-2017

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

HUMAN PHYSIOLOGY (RS - 5)
Q.P. CODE: 2732

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

LONG ESSAYS (Answer any Two)   **2 x 10 = 20 Marks**

1. Draw a labeled diagram of a synapse. Discuss the properties of a synapse.

2. Define arterial blood pressure. Explain the immediate and long term regulation of blood pressure.

3. Define a triad. Explain its role in muscle contraction.

SHORT ESSAYS (Answer any Twelve)   **12 x 5 = 60 Marks**

4. Describe the body mechanisms by which it tolerates warm environment.

5. Outline the neural regulation of respiration.

6. State Landsteiner's law. Add a note on erythroblastosis foetalis.

7. Describe the functions of bile juice.

8. Tabulate the differences between I and II heart sounds.

9. Discuss the counter-current mechanism taking place in Juxta medullary nephrons.

10. Describe the cardio-vascular changes during muscular exercise.

11. Describe the events and hormonal basis of the different phases of menstrual cycle.

12. Explain accommodation reflex.

13. Describe in detail the structure and functioning of the muscle spindle.

14. Functions of cerebellum

15. Trace the dorsal column tracts and mention its functions.

16. Enumerate the hormones of calcium metabolism. Write the functions of each.

17. Functions of saliva

SHORT ANSWERS   **10 x 2 = 20 Marks**

18. Differentiate between simple and facilitated diffusion.

19. What is GFR? Give its normal value.

20. Define dyspnoea.

21. List the functions of pulmonary surfactant.

22. Define sex determination.

23. Define compliance and give its normal value.

24. Define intrapleural pressure. Give its normal values and the values during respiratory cycle.

25. Differentiate between fast and slow muscles (any three).

26. Define immunity. Mention the types of immunity.

27. Enumerate any four clinical features of Parkinson's disease.

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Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination – SEP-2017

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 Two) **2 x 10 = 20 Marks**

1. Describe the chemistry, source, absorption, daily requirement, deficiency disorders and biochemical role of vitamin D.
2. What is the normal PH of blood? Discuss the mechanism involved in its regulation.
3. Define enzyme, its structure and functions. Explain the mechanism of enzyme action. Add a note on inhibition of enzymes.

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

4. Bicarbonate buffer system of blood
5. Substrate level Phosphorylation
6. Functions of Niacin (Vitamin B3)
7. General mechanism of action of steroid hormones
8. What are co-enzymes? Illustrate their role in metabolism with four examples.
9. Biological active peptides
10. Mitochondrial structure and function
11. Chemical properties of carbohydrates
12. Describe the properties of lipids.
13. Name five enzymes of diagnostic significance with their normal serum level.

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Transamination reactions
15. Name the metabolic products of Tyrosine.
16. Name the ketone bodies. Mention two causes of ketosis.
17. Kwarshiorkar
18. What are epimors? Give example.
19. Invert sugar
20. Distinguish between DNA and RNA
21. Write the coenzyme form of: 1. Thymine, 2. Riboflavin
22. Peptide bond
23. Chori's cycle

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Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T Degree Examination – SEP-2017

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 (Answer any Two)   **2 x 10 = 20 Marks**

1. Describe the structure of hip joint. Add a note on kinetics and kinematics.
2. Write in detail of Analysis of posture.
3. Explain biomechanics of thorax and chest wall.

SHORT ESSAYS (Answer any Twelve)   **12 x 5 = 60 Marks**

4. Scapulo humeral rhythm
5. Locking and unlocking mechanism
6. Explain levers in detail.
7. Describe the types of joints.
8. Explain the parts of goniometric and its types.
9. Describe stress and strain.
10. Explain Newton law of motion.
11. Lumbo-pelvic rhythm
12. Properties of connective tissues
13. Compare and contrast different muscle contractions
14. Sitting to standing – movement analysis
15. Determinants of gait
16. Different types of grip
17. Describe joint lubrication model.

SHORT ANSWERS   **10 x 2 = 20 Marks**

18. Carrying angle
19. Scoliosis
20. Concurrent force systems
21. Stair climbing
22. Patella Plica
23. Visco elasticity
24. Pes Planus and Pes Cavus
25. Pulleys
26. Open Kinematic chain
27. Palmar arches

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Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination - SEP-2017

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

PSYCHOLOGY (RS – 5)
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. What is personality? Explain the assessment of personality.

2. What is psychology? Explain the methods of psychology.

SHORT ESSAYS (Answer any Four)   **4 x 5 = 20 Marks**

3. Abraham Maslow's theory of need hierarchy

4. Distribution of intelligence

5. Formation of attitude

6. Trial and error of learning theory

7. Types of reasoning

SHORT ANSWERS   **5 x 2 = 10 Marks**

8. Social psychology

9. Division attention

10. Genius

11. Incidental and intentional learning

12. Hallucination

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I Year B.P.T. Degree Examination – SEP-2017

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 family. Describe the role of family in health and disease of an individual.

2.   Write in detail about the social factors responsible for health and disease.

SHORT ESSAYS (Answer any Four)   **4 x 5 = 20 Marks**

3.   Unemployment

4.   Difference between rural and urban community

5.   Difference between anthropology and sociology

6.   Anticipatory socialization

7.   In group and out group

SHORT ANSWERS   **5 x 2 = 10Marks**

8.   Crowd

9.   Social rehabilitation

10.   Juvenile home

11.   Cultural lag

12.   Medical social worker

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