Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T Degree Examination – APRIL 2015

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

ANATOMY (RS-3 & RS-4)

Q.P. CODE: 2701

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

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

1. Describe the boundaries, roof, floor & contents of femoral triangle.
2. Enumerate the Dural venous sinuses. Add a note on cavernous sinus.
3. Describe the hip joint under following heading.
   a) Articular surface
   b) Ligaments
   c) Movements
   d) Relation
   e) Applied anatomy

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

4. Broncho pulmonary segment
5. Thyroid gland
6. Lower end of femur
7. Spleen
8. External features of Stomach
9. Supports of uterus
10. Right atrium
11. Internal jugular vein
12. Hamstring muscles
13. Musculocutaneous nerve
14. Trapezius muscle
15. Corpus callosum
16. Basal ganglia
17. Intervertebral disc

SHORT ANSWERS   **10 x 2 = 20 Marks**
18. Classification of simple epithelium
19. Contents of Bicipital groove
20. Parts of pancreas
21. Name the sinuses of pericardium
22. Venous drainage of heart
23. Origin and termination of thoracic duct
24. Parts of mid brain
25. Branches of Posterior cord of Brachial plexus
26. Branches of Coeliac trunk
27. Contents of spermatic cord

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Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination – APRIL 2015

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

HUMAN PHYSIOLOGY (RS-3 & RS-4)

Q.P. CODE: 2702

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

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

1. Explain the sliding filament theory of contraction. State Starlings law of force of contraction.
2. Describe the cardio-vascular and respiratory changes during exercise.
3. Name the ascending pathways. Trace the pathway for pain and fine touch.

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

4. Explain the Wallerian degeneration
5. Define Anemia. Explain the clinical classification of Anemia
6. Explain the phases of cardiac cycle taking place during ventricular systole.
7. Draw a spirogram. Define the different lung volumes and write their normal values.
8. Functions of saliva
9. Differentiate between myelinated and non-myelinated nerve fibres
10. Define immunity. Briefly describe the types of immunity
11. Draw the structure of the Juxta glomerular apparatus. Write any three functions
12. Describe the body mechanisms by which it tolerates hot environment
13. List four methods of contraception in the males and females
14. Functions of cerebellum
15. Differentiate between Isotonic and Isometric contraction
16. Action of insulin
17. Explain the mechanism of impedence matching taking place in the middle ear

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

18. Define chronaxie and rheobase
19. Define Lymph. List two functions
20. Define secondary active transport mechanism
21. Trace the visual pathway
22. Action of ADH
23. Define chloride shift
24. Structure of muscle spindle
25. Define motor unit.
26. Source of energy for muscle contraction
27. Define arterial blood pressure. Write its normal value

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Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination – APRIL 2015

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. Answer all questions

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

1. Define enzymes. How enzymes are classified give examples for each class
2. Describe the chemistry, sources, RDA, metabolic functions and deficiency symptoms of vitamin C (Ascorbic acid)
3. Describe aerobic Glycolysis. Add a note on the bioenergetics of the pathway

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

4. Ketogenesis
5. Urea cycle
6. Classification of proteins based on functions
7. Basal metabolic rate
8. Mucopolysaccharides
9. Fluid mosaic model of cell membrane
10. Collagen
11. Structure and functions of DNA
12. Creatinine clearance test
13. Balanced diet

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

14. Essential fatty acids functions and deficiency
15. Kwashiorkar
16. **Essential amino acids**
17. Active site
18. Beri – beri
19. Functions of iron
20. Metabolic acidosis
21. Name the coenzymes of (A) Thiamine (B) Pyridoxine
22. Name any four physiological importance substances produced by tyrosine
23. Structure of tRNA

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Rajiv Gandhi University of Health Sciences, Karnataka
I Year B.P.T. Degree Examination – APRIL 2015

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

General Psychology
Q.P. Code : 2705

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

(Note : Both QP Codes 2705 and 2706 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 scope 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. Attitude change
6. Trial and error of learning theory
7. Types of learning

SHORT ANSWERS   **5 x 2 = 10Marks**
8. Introspective method
9. Attention
10. Genius
11. Incidental and intentional learning
12. Illusion

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Rajiv Gandhi University of Health Sciences, Karnataka
I Year B.P.T. Degree Examination – APRIL 2015

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

Sociology
Q.P. Code: 2706
Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary

(Note: Both QP Codes 2705 and 2706 are to be answered within total duration of 3 hours)

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

1. Define socialization and explain in detail about its types and agencies.

2. Define family and explain its influence on individual's health, family and Nutrition.

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

3. Explain the concept of culture and health.

4. Case study

5. Importance of sociology with reference to health care professionals

6. Define rural community and its health hazards.

7. Poverty and unemployment

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

8. Write any two features of urban community.

9. Social change and deviance

10. Nuclear family

11. Alcoholism

12. Difference between psychology and social psychology

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Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination – APRIL -2015

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

BIO-MECHANICS (Revised Scheme – 4)
Q.P. CODE: 2707

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 biomechanics of abduction of shoulder joint with factors contributing for its stability.
2. What are the ligaments of hip joint? Explain bilateral and unilateral stance with examples.
3. What is the functional position of hand? Add note on power grips.

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

4. Describe the structure of a vertebra. Add a note on curves in the vertebral column with its articulations and functions.
5. Compare Lumbo pelvic rhythm with Scapula humeral rhythm.
6. What is biarticular muscle? Explain their property of active in sufficiency with an example.
7. Describe the order of levers with examples.
8. Biomechanics of ankle joint
9. Movements of ribcage during breathing – add a note on muscles of breathing.
10. Explain locking and unlocking of knee joint.
11. Movement analysis – lifting
12. Describe the structure and function of intervertebral disc.
13. Define posture. Explain the kinetics of posture.
14. What is lubrication? Explain the types of lubrication of synovial joint.
15. Biomechanics of cervical spine
16. Pronation twist
17. What is gait cycle? Describe the Energy expenditure during normal gait

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

18. Agonists
19. What is thumb opposition?
20. What are the factors that affect muscle function?
21. Role of menisci at knee
22. What is the characteristic of gluteus medius gait?
23. Spondylolisthesis
24. Acetabular ante-version
25. Ligaments of ankle joint
26. Index plus minus foot
27. Annular pulleys

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