SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH (A DEEMED TO BE UNIVERSITY)

Bachelor of Physiotherapy (CBCS) First Year Semester-II, February-2020 Examination

Time: 3.00 Hrs. [Max. Marks: 100]

BIOMECHANICS Q.P Code: B2030

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

LONG ESSAY [Answer any two]

2X10=20MARKS

- 1. Explain about Shoulder Joint Structure Including Stability & Mobility factors.
- 2. Describe in detail about the articulating structure, kinematics of tibiofemoral joint.
- 3. What is the functional position of hand? Add note on power grips.

SHORT ESSAY [Answer any ten]

10X5=50MARKS

- 4. Biomechanics of cervical spine
- 5. Explain structure and functions of menisci.
- 6. Describe about sternoclavicular and acromioclavicular contributions in shoulder motion
- 7. Explain arches of foot & its functions.
- 8. Describe the type of joints with example.
- 9. Explain about patellofemoral joint reaction forces.
- 10. Define posture. Explain the kinetics of posture.
- 11. Write the types of Newton's law & explain about law of inertia.
- 12. Compare Lumbo pelvic rhythm with Scapula humeral rhythm.
- 13. Describe the order of levers with examples.
- 14. What is stress &strain? Write in detail about load/deformation curve.
- 15. Explain screw home mechanism.

SHORT ANSWERS [Answer any ten]

10X3=30 MARKS

- 16. Classification of muscles.
- 17. Passive insufficiency versus active insufficiency.
- 18. Accessory muscles of ventilation.
- 19. Muscles of shoulder joint and its action in detail.
- 20. Glenohumeral ligaments and its functions.
- 21. Define "Q" angle.
- 22. Articulations of ankle joint.
- 23. Carrying angle
- 24. Ulnar negative variance
- 25. Uses of walking aids
- 26. Define Myotendinous junction
- 27. Define joint play.

* * *

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH (A DEEMED TO BE UNIVERSITY)

Bachelor of Physiotherapy (CBCS)

First Year Semester-II, February-2020 Examination

Time -2.30 HRS Max Marks: 80

BICHEMISTRY

Q.P. CODE: B2040

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

LONG ESSAY (Answer any two)

2x10=20 Marks

- 1. Define Glycolysis. Write the reactions by which glucose is converted to lactate. Add a note on its energetics and regulation.
- 2. Explain the various factors affecting enzyme activity with Suitable Graphs.
- 3. Mention the dietary sources, Recommended Daily Allowance, biochemical functions and deficiency manifestations of Vitamin B12.

SHORT ESSAY (Answer any six)

6x5=30 Marks

- 4. Define lipoproteins. Classify lipoproteins with their functions.
- 5. What are Glycosaminoglycans? List any four Glycosaminoglycans with their biological significance.
- 6. Describe the Structure of B form of DNA with neat labeled diagram.
- 7. Name the Bile salts. Explain their role in lipid digestion and adsorption.
- 8. Define Specific dynamic action. Mention the values for carbohydrates, fats and proteins. Mention the causes for high SDA for proteins.
- 9. What is glutathione? Write the composition and write any 3 biological roles of Glutathione.
- 10. Define Fatty Liver. Mention the causes of fatty liver. Add a note on lipotropic factors.
- 11. Enumerate the biochemical functions of Vitamin C.

SHORT ANSWER (Answer any Ten)

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

- 12. What is the Normal Blood pH range? Mention the blood buffers that regulate the Blood pH
- 13. Name the three ketone bodies.
- 14. Name the 3 biologically important compounds derived from Tyrosine.
- 15. What is transamination reaction? Give one example.
- 16. Write the Biological Reference range of serum levels of a) Sodium b) Potassium c) Calcium
- 17. Name any three Biologically important nucleotides.
- 18. List the three essential fatty acids.
- 19. List any 3 functions of Calcium.
- 20. Write any three differences between DNA & RNA.
- 21. Write any three functions of Albumin.
- 22. List any three Group II Hormones (hormones that act through cell surface receptors)
- 23. Name the 3 Biologically important compounds derived from Cholesterol.

* * *

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH (A DEEMED TO BE UNIVERSITY)

Bachelor of Physiotherapy (CBCS)

First Year Semester-II, February-2020 Examination.

Time: 2.30 Hrs. [Max. Marks: 80]

Psychology and Sociology

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

Section - A

Psychology (40 marks) OP Code: B2055

(Use Separate answer booklet for Section A & B)

LONG ESSAY 1 X 10 = 10 Marks

1. Write the stages of human development? Describe middle age and Old age?

SHORT ESSAY (Answer any Three)

3X 5 = 15 Marks

- 2. Name the branches of Psychology? And describe any 2?
- 3. Describe the theories of motivation.
- 4. How is mental retardation classified based on the IQ levels? Name 3 tests of intelligence.
- 5. What is Conflicts? Describe multiple approach avoidance conflicts

SHORT ANSWER (Answer any Five)

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

- 6. Write the qualities of Leadership
- 7. Name three psychotic defense mechanisms
- 8. Name types of learning
- 9 Name the theories of motivation
- 10. Define a hallucination, name different types of hallucination.
- 11. What is Psychology? Write 2 definitions?

Section – B Sociology (40 Marks) QP Code : B2056

(Use separate answer booklet for section B)

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

1. Define Family? Describe the types and functions of family

SHORT ESSAY (Answer any Three)

3X5 = 15 Marks

- 2. Discuss the causes of population explosion? What are the effects on health?
- 3. Explain health problems of the rural community
- 4. Explain the Consequences of poverty
- 5. Write a note on Culture and health

SHORT ANSWER (Answer any Five)

5 X 3 = 15 Marks

- 6. Interview method
- 7. Social welfare programmes
- 8. Social work
- 9. Social change
- 10. Public opinion
- 11. Methods of study