

**Bachelor of Physiotherapy (BPT)**  
**First Year Semester- II, September– 2018 Examination**

Time: 2.30 Hrs.

[Max. Marks: 80]

**BIOCHEMISTRY**  
**Q.P Code: BPT-103**

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

**LONG ESSAY (Answer any Two)**

**2 X 10 = 20 Marks**

1. Explain the Hormonal regulation of glucose. Add a note on Glucosuria.
2. Explain the sources, RDA, absorption, metabolic function and deficiency of calcium.
3. What is the normal PH of blood? Describe different mechanisms in the maintenance of acid-base balance.

**SHORT ESSAY (Answer any Six)**

**6X 5 = 30 Marks**

4. Explain the function of lipoprotein.
5. Explain the allosteric regulation of enzymes.
6. Define BMR. Discuss the factors affecting BMR.
7. Explain the structure of DNA.
8. Define the classification of enzymes with examples.
9. Explain the mucopolysaccharides. Mention them.
10. Explain the urea cycle?
11. Explain the function of vitamin A.

**SHORT ANSWER (Answer any Ten)**

**10 X 3 = 30 Marks**

12. Define Essential fatty acids. Mention its functions.
13. Explain the function of Iron.
14. What is Nitrogen balance? Give one example each for positive and negative nitrogen balance.
15. Explain the Role of Aldosterone in electrolyte balance.
16. Define cyclic AMP.
17. Name any three important compounds produced from tyrosine.
18. Define epimer. Give one example.
19. Define trace elements with examples.
20. Explain Rothera's test and its significance.
21. Define metabolic acidosis. Write any two causes of metabolic acidosis.
22. Explain micelle formation.
23. Define cori cycle.

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**Bachelor of Physiotherapy (BPT)**

**First Year Semester- II, September – 2018 Examination**

**Time: 3.00 Hrs.**

**[Max. Marks: 100]**

**BIOMECHANICS**

**Q.P Code: BPT-104**

*Your answers should be specific to the questions asked.*

*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY (Answer any Two)**

**2 X 10 = 20 Marks**

1. Define gait. Explain in detail about phases of gait.
2. Describe the structure and function of hip joint.
3. Define levers, explain in detail about types of levers with suitable example from the human body.

**SHORT ESSAY (Answer any Ten)**

**10X 5 = 50 Marks**

4. Patello femoral joint reaction force.
5. Write the kinematics of temporomandibular joint.
6. Describe precision and its types.
7. Explain about muscle work during bilateral stance.
8. Describe joint lubrication of model.
9. Explain creep and stress relaxation and its application in connective tissues.
10. What is pronation and supination twist.
11. Discuss locking and unlocking mechanism of knee complex.
12. Define synovial joint and give its classifications with example.
13. Explain the kinetics and kinematics of elbow joint.
14. Compare closed and open kinematic chain movements.
15. Give the indications, types and uses of walking aids.

**SHORT ANSWER (Answer any Ten)**

**10 X 3 = 30 Marks**

16. Mechanical pulleys.
17. Attachment and functions of ACL.
18. Define ground reaction force and center of gravity.
19. Palmar arches and its uses.
20. Write two principles of goniometry.
21. Explain motor unit and coritactile unit.
22. Hip joint ligament and its functions.
23. Define active insufficiency.
24. Name some bursae around knee joint.
25. What are the properties of type I fibers.
26. Define bucket handle movement in thorax.
27. Define coupled motion.

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**Time : 2.30 Hrs.**

**[Max. Marks: 80]**

**Psychology and Sociology**

**Section-A**

**Psychology**

**Q.P Code : BPT-105A**

*Your answer should be specific to the questions asked.*

*Draw neat labeled diagrams wherever necessary.*

*(Use separate answer booklet for section A & B)*

**LONG ESSAY**

**1X 10 = 10 Marks**

1. Explain the principles of perception with suitable examples. List the factors that influence perception what are the types of perception. Give one example.

**SHORT ESSAY (Answer any Three)**

**3 X 5 = 15 Marks**

2. Explain intelligence tests.
3. Explain the steps in creative thinking.
4. Explain the traits of a leader.
5. Explain freuds theory of psychosexual development.

**SHORT ANSWER (Answer any Five)**

**5 X 3 =15 Marks**

6. Discuss the sources of frustration.
7. Define I.Q.
8. Define projection, sublimation and reaction formation.
9. Define attention.
10. Define fear.
11. State the factors that affect personality.

**Section – B**

**Sociology**

**Q.P. Code : BPT-105B**

*(Use separate answer booklet for section B)*

**LONG ESSAY**

**1X 10 = 10 Marks**

1. Define family. Explain the various types of family.

**SHORT ESSAY (Answer any Three)**

**3 X 5 = 15 Marks**

2. Write a note on the social survey method.
3. Differentiate between primary and secondary groups.
4. What are the health hazards of rural community?
5. Explain the social consequences of population explosion.

**SHORT ANSWER (Answer any Five)**

**5 X 3 =15 Marks**

6. Define matriarchal family.
7. Expand the term MSW.
8. Mention the characteristics of urban community.
9. State the health problems of prostitution.
10. Mention some food beliefs in Indian culture which have beneficial health effects.
11. What is juvenile delinquency?

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**[Max. Marks: 50]**

**ENGLISH AND COMMUNICATION SKILLS**

*Your answers should be specific to the questions asked.*

*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY (Answer any One)**

**1 X 10 = 10 Marks**

1. As a student how can you improve your speaking skills in English? Explain.
2. Prepare a suitable resume and covering letter (Job letter) for the post of B.P.T Lecturer with required details.

**SHORT ESSAY (Answer any Five)**

**5 X 5 = 25 Marks**

3. Write a note on tens forms.
4. How can you recognize the good listeners? Explain.
5. Explain the role of communication in medical fields.
6. What is reading? Explain the types of reading.
7. What is time? Explain.
8. Prepare an event report on teachers day which held in your college.
9. Prepare an oral presentation on the role of personality development.

**SHORT ANSWER (Answer any Five)**

**5 X 3 = 15 Marks**

10. What are the four basic communication skills?
11. What are the characteristics of Good observer?
12. What are the indefinite articles? Explain.
13. What are the common problems of English speaker?
14. What is dairy writing? Give an example.
15. What is dialogue writing? Give an example.

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