

**Bachelor of Physiotherapy (BPT)**  
**First Year Semester- II, June / July – 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 TCA cycle. Add a note on its energetics.
2. Explain sources, RDA, Function, Deficiency manifestation, Hypervitaminosis of vitamin D.
3. Define ketogenesis. Write the steps involved in the formation of ketone bodies.

**SHORT ESSAY (Answer any Six)**

**6X 5 = 30 Marks**

4. What is protein energy malnutrition (PEM)? Classify PEM. Write the clinical features of PEM.
5. Explain the digestion, absorption and transport of carbohydrates.
6. Add a note on Competitive inhibition.
7. Define SDA. What is its significance?
8. Write the steps involved in the urea cycle, write the enzyme defect in any two urea cycle disorders.
9. Explain the factors affecting enzyme activity.
10. What is Glycogenesis? Write the steps involved in glycogen synthesis.
11. What is the normal range of serum calcium? Explain the mechanism of regulation of serum calcium level in the body (Calcium homeostasis)

**SHORT ANSWER (Answer any Ten)**

**10 X 3 = 30 Marks**

12. Explain the difference between RNA and DNA.
13. Explain the function of vitamin C.
14. Add a note on Phenyl ketonuria.
15. Define Essential Amino Acids. Mention their names.
16. What are ketone bodies? Mention their names.
17. Define Balanced diet.
18. Explain the function of Iron.
19. Write any three hormones involved in blood glucose regulation.
20. Add a note on starch.
21. What are glucosaminoglycans? Give two examples.
22. Define Lipoprotein and mention their function.
23. What is cAMP? Mention any two biological functions of cAMP?

\* \* \*

**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 theories of learning with suitable examples.

**SHORT ESSAY (Answer any Three)**

**3 X 5 = 15 Marks**

2. Explain Freud's concept of personality.
3. Briefly explain the stages of thinking.
4. Explain the theories of emotion.
5. Explain the determinants of attention.

**SHORT ANSWER (Answer any Five)**

**5 X 3 =15 Marks**

6. Differentiate between authoritarian and democratic leadership.
7. Traits of leadership.
8. Factors that affect learning.
9. Explain observation method.
10. State the sources of frustration.
11. Enlist types of personalities and define any two of them.

**Section – B**

**Sociology**

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

*(Use separate answer booklet for section B)*

**LONG ESSAY**

**1X 10 = 10 Marks**

1. Define Sociology. Describe the importance of Sociology with special reference to health care professionals.

**SHORT ESSAY (Answer any Three)**

**3 X 5 = 15 Marks**

2. Explain the characteristics of the primary groups.
3. Distinguish between joint and nuclear family.
4. What are the causes of poverty?
5. Write a note on technological factor of social change.

**SHORT ANSWER (Answer any Five)**

**5 X 3 =15 Marks**

6. Define anticipatory socialization.
7. What is polygamy?
8. Expand the term SITA.
9. State the health consequences of alcoholism.
10. Mention the beliefs in Indian culture which have beneficial health effects.
11. Population explosion.

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

Time: 2.00 Hrs.

[Max. Marks: 50]

**First, AID, BLS and CPR**

*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. Define cardiac arrest. List out the causes of cardiac arrest and first aid management of cardiac arrest.
2. Define first aid management of electrocuted patient.

**SHORT ESSAY (Answer any Five)**

**5X 5 = 25 Marks**

3. Explain the first aid and mobilizing procedures for a 50 year old man who fall down during gait training in physiotherapy department.
4. Discuss the various tapes in first aid for cervical spine injured patient.
5. How do you resuscitate a two year old child with foreign body oropharynx?
6. Discuss the various mobilizing transfer techniques for patient in emergency situations.
7. Common positions used for patient comfort.
8. BLS cardiac arrest Algorithm for pediatric patient with a single rescuer.
9. Discuss about first aid management of drowning victim.

**SHORT ANSWER (Answer any Five)**

**5 X 3 = 15 Marks**

10. Indications of CPR.
11. Universal precautions.
12. First aid in burns.
13. What are the three types of cardiac arrest?
14. Steps in intubation and confirmation of endotracheal tube placement.
15. Reversible cause of cardiac arrest.

\* \* \*

**Bachelor of Physiotherapy (BPT)**

**First Year Semester- II, June / July – 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. Explain biomechanics of thorax and chest wall.
2. Describe in detail about the articulating structure, kinematics of tibiofemoral joint.
3. What is Muscle Tension? Classify it and explain in detail length, tension relationship and factors affecting Muscle Tension.

**SHORT ESSAY (Answer any Ten)**

**10X 5 = 50 Marks**

4. Scapulohumeral rhythm.
5. Describe joint lubrication mode.
6. Define posture, types of posture, explain about mechanism of posture.
7. Write the types of Newton law and explain about the law acceleration.
8. Write in detail about structure of menisci and its functions.
9. Explain the patellar motions, and patella femoral joint reaction force.
10. Describe about the muscle function during bilateral stance.
11. Write the types of walking aids and its advantages and disadvantages.
12. Describe the types of joints with example.
13. Discuss the types of pelvic motions and its importance.
14. Explain arches of foot and its functions.
15. Compare prehension and precision.

**SHORT ANSWER (Answer any Ten)**

**10 X 3 = 30 Marks**

16. Define metatarsal break.
17. Define torque with example.
18. Mechanical and anatomical axis.
19. Give the phases of gait.
20. What are the primary and accessory muscles respiration.
21. Define creep and hysteresis.
22. Weight bearing subtalar functions.
23. Define trabeculae system in hip joint.
24. Give few indications of using parallel bars.
25. Carrying angle.
26. What are the muscles used for locking and unlocking.
27. Concurrent force system.

\* \* \*

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

Time: 2.00 Hrs.

[Max. Marks: 50]

**First, AID, BLS and CPR**

*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. Define cardiac arrest. List out the causes of cardiac arrest and first aid management of cardiac arrest.
2. Define first aid management of electrocuted patient.

**SHORT ESSAY (Answer any Five)**

**5X 5 = 25 Marks**

3. Explain the first aid and mobilizing procedures for a 50 year old man who fall down during gait training in physiotherapy department.
4. Discuss the various tapes in first aid for cervical spine injured patient.
5. How do you resuscitate a two year old child with foreign body oropharynx?
6. Discuss the various mobilizing transfer techniques for patient in emergency situations.
7. Common positions used for patient comfort.
8. BLS cardiac arrest Algorithm for pediatric patient with a single rescuer.
9. Discuss about first aid management of drowning victim.

**SHORT ANSWER (Answer any Five)**

**5 X 3 = 15 Marks**

10. Indications of CPR.
11. Universal precautions.
12. First aid in burns.
13. What are the three types of cardiac arrest?
14. Steps in intubation and confirmation of endotracheal tube placement.
15. Reversible cause of cardiac arrest.

\* \* \*