

**QP CODE: 107012**

**Reg. No: .....**

**First Year B.Sc MLT Degree Supplementary Examinations  
February 2020**

**(Anatomy and Physiology)**

**Physiology**

**(2015 Scheme)**

**Time: 2 Hours**

**Total Marks: 50**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essay**

**(10)**

1. What is the physiological basis of blood group systems. Describe the precautions to be taken before blood transfusion. Enumerate the hazards of mismatched transfusions. (2+4+4)

**Short notes**

**(5x5=25)**

2. Describe how the cardiac impulse originate and spread to entire heart.
3. List the composition of pancreatic juice and how it is regulated.
4. Resting membrane potential of a neuron and its ionic basis.
5. Explain the physiological actions of insulin.
6. Describe in detail the events occurring across a neuromuscular junction during impulse transmission.

**Answer briefly**

**(5x3=15)**

7. Enumerate the functions of basal ganglia
8. What are the hormones secreted from posterior pituitary. Mention two important functions of any of them.
9. What is the physiological basis of pregnancy test
10. Draw a normal spirogram. What is its significance.
11. Mention the different types of plasma proteins and their functions.

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