BACHELOR OF PHYSIOTHERAPY
THIRD SEMESTER (SPECIAL REPEAT)
HUMAN PHYSIOLOGY-I
BPT-103

(Use separate answer scripts for Objective & Descriptive)

Duration : 3 hrs. **Full Marks : 70**

(PART-A : Objective)

Time : 20 min. **Marks : 20**

Choose the correct answer from the following: ***1×20=20***

1. Total ABO blood group numbers are
   a. 2 b. 3
   c. 4 d. 6

2. The number of globin chains in Haemoglobin is
   a. 1 b. 4
   c. 2 d. 6

3. The cellular components of blood are all except
   a. WBC b. RBC
   c. Platelets d. Albumin

4. The long process of a Neuron is
   a. Axon b. Myelin sheath
   c. Glial fibre d. All the above

5. Blood group antigens are located on the surface of
   a. Lymphocyte b. Platelet
   c. Basophil d. RBC

6. The space between nerve terminal and muscle is known as
   a. Pre synaptic junction b. Post synaptic junction
   c. Synaptic cleft or gutter d. Acetylcholine

7. Wallerian degeneration occurs in which of the following?
   a. Fracture of bone b. Injury of muscle
   c. Nerve injury d. All of above

8. Anticoagulants are substances that
   a. Breaks down RBC b. Keeps blood in liquid form outside the body
   c. Helps blood clotting d. An enzyme

9. Parts of renal system are all except
   a. Kidneys b. Ureters
   c. Urinary bladder d. Testis

10. Ribosomes are present on the outer surface of
    a. Endoplasmic reticulum b. Golgi apparatus
    c. Mitochondria d. Nucleus

11. Thin filaments of sarcomere is known as
    a. Tropomyosin
    b. Troponin
    c. Myosin
    d. Actin

12. Hypotonia is _____ in muscle tone.
    a. Increase
    b. Remains same
    c. Decrease
    d. Slightly increased

13. Autorhytmicity is a property of
    a. Joints
    b. Muscles
    c. Cardiac mucles
    d. Nerves

14. Tachycardia is _____in heart rate.
    a. Decrease
    b. Increase
    c. Same
    d. None

15. Average systolic blood pressure is_____
    a. 80 mmHg
    b. 90mm Hg
    c. 110mm Hg
    d. 120 mm Hg

16. Korotkoff's sound is associated with
    a. Blood pressure
    b. Heart rate
    c. Pulse rate
    d. All

17. Normal cardiac cycle is
    a. 0.5 sec
    b. 0.7 sec
    c. 0.8 sec
    d. 0. 9 sec

18. Total leads in ECG is
    a. 8
    b. 9
    c. 10
    d. 12

19. The respiratory tract has _____generations.
    a. 10
    b. 15
    c. 23
    d. 40

20. Lambert Eaten syndrome is a disease of
    a. Liver
    b. Kidney
    c. Neuromuscular junction
    d. Small intestine

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(PART-B : Descriptive)

Time : 2 hrs. 40 min. Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. a. Explain properties of cardiac muscle. 6+4=10
   b. Explain Erythropoiesis.

2. a. Explain active and passive transport. 5+5=10
   b. Explain neuromuscular junction in details.

3. a. What are the different parts of a Digestive system? 5+5=10
   b. Explain the function of gastric juice.

4. a. Explain cardiac cycle. 6+4=10
   b. Explain the function of blood.

5. Define Anaemia. Classify types of Anaemia. Describe briefly laboratory diagnosis of Anaemia. 2+4+4=10

   Or

   What is a Neuron? Classify neurons. Describe the structure and functions of a neuron with a neat diagram. 1+3+6=10

6. a. Explain the various nerve injuries. 5+5=10
   b. Explain how the transport of Oxygen occurs in a human body.

7. a. Explain lung volumes and capacities in details. 5+5=10
   b. What is a dead space? Explain its types.

8. a. Explain conduction system of the heart in details. 6+4=10
   b. Explain the various method of examining blood pressure.

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