

**First Year Bachelor of Occupational Therapy Supplementary
Examinations March 2026
Physiology
(Common for 2020 and 2024 Scheme)**

Time: 3 Hours**Total Marks: 100**

- *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**(2x20=40)**

1. Define blood pressure. What are the normal values of systolic blood pressure, diastolic blood pressure and pulse pressure. Enumerate the different mechanisms for regulating blood pressure. Explain short term regulation of blood pressure in detail.
2. Explain the molecular mechanism of contraction in skeletal muscle. Draw a sarcomere of skeletal muscle and explain the changes happening to sarcomere during muscle contraction.

Short Essays**(8x5=40)**

3. Intrinsic mechanism of coagulation.
4. Explain the actions of parathyroid hormone.
5. Explain the steps of spermatogenesis. What are the factors affecting it.
6. What are the functions of basal ganglia. Add a note on Parkinsonism.
7. Explain the mechanism and regulation of acid secretion from stomach.
8. Carbon dioxide transport in blood.
9. Explain five properties of synapse.
10. Trace dorsal column pathway.

Short Notes**(10x2=20)**

11. Taste bud.
12. Special features of pulmonary circulation.
13. Peristalsis.
14. Dark adaptation.
15. Static lung volumes.
16. Vestibular apparatus.
17. Physiological changes during pregnancy.
18. Composition of pancreatic juice.
19. Functions of thalamus.
20. Draw and label structure of neuron.
