

*Jan-26*

**BLDE (DEEMED TO BE UNIVERSITY)**  
**M.Sc. Allied Health Sciences (Medical Physiology)**

[Time: 3 Hours]

[Max.Marks:80]

**VI SEMESTER**  
**PAPER – I (Central Nervous System)**  
**QP CODE: 9046**

Your answer should be specific to the questions asked.  
Write Question No. in left side of margin.

**Long Questions**

**10X3 = 30 Marks**

1. Define and Classify receptors. Give examples for each. List the properties of receptors. Explain any THREE of them in detail
2. Enumerate the ascending tracts in the spinal cord. Describe the pathway for pain in detail. Add a note on referred pain.
3. List the nuclei of thalamus. Describe the connections and functions of thalamus. Add a note on thalamic syndrome

**Short Essays:**

**5 X 10 = 50 Marks**

4. Describe Brown – sequard syndrome.
5. Define Reflex. Discuss Reflex arc for Knee jerk
6. Describe functions of cerebellum
7. Describe excitatory and inhibitory postsynaptic potentials
8. Explain the impact of pranayama on respiratory physiology.
9. Explain the physiological basis of Parkinson's disease
10. Describe the physiological changes associated with ageing in the cardiovascular system
11. Write short notes on cerebrospinal fluid: formation, circulation, and functions.
12. Explain the physiological basis of Parkinson's disease.
13. Define synaptic transmission and outline the sequence of events at a chemical synapse

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**VI SEMESTER**  
**PAPER – II (Special Senses)**  
**QP CODE: 9047**

Your answer should be specific to the questions asked.

Write Question No. in left side of margin.

**Long Questions**

**10X3 = 30 Marks**

1. Describe the layers of retina, visual pathway and disorders of visual field.
2. Describe the organ of Corti and endocochlear potential. Trace the auditory pathway and add a note on theories of hearing.
3. List the Types of taste and describe taste receptors. Trace the taste pathway, and add a note on disorders of taste.

**Short Essays:**

**5 X 10 = 50 Marks**

4. Describe the Olfactory pathway, add a note a note on disorders of smell.
5. Describe the role of audiometry in assessing deafness and list its advantages over tuning fork tests.
6. List the errors of refraction and indicate diagrammatically how they can be corrected.
7. Define photopic and scotopic vision, describe the phenomenon of dark and light adaptation.
8. Describe pupillary reflexes. Add a note on Argyl Robertson's pupil.
9. Describe the role of tympanogram.
10. Describe the accommodation of eye and explain the mechanisms involved.
11. Describe impedance matching.
12. Describe the type of deafness and some common causes.
13. List the types of colour blindness and the methods used to test them. Explain theories of colour vision.

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**VI SEMESTER**  
**PAPER – III (Specialised Integrated)**  
**QP CODE: 9048**

Your answer should be specific to the questions asked.  
Write Question No. in left side of margin.

**Long Questions**

**10X3 = 30 Marks**

1. Describe the mechanism of regulation of body temperature. Add a note on heat stroke.
2. Describe growth curves and hormonal regulation of growth. Add a note on dwarfism.
3. Explain the theories of ageing. Describe the various physiological changes observed in elderly.

**Short Essays:**

**5 X 10 = 50 Marks**

4. Describe the physiological consequences of sedentary lifestyle
5. Differentiate fetal and adult hemoglobin
6. What are free radicals? Describe their formation and effects.
7. Describe the cardiorespiratory changes during exercise
8. Explain the respiratory adjustments after birth. Add a note on respiratory distress syndrome
9. What is physiological jaundice? Describe its physiological basis
10. Describe the mechanism of genesis of fever
11. Explain the functions of the placenta
12. Describe the mechanisms of heat loss and heat gain from the environment
13. Explain telomere shortening and its significance in ageing