

**THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY**

[MD 1223]

**DECEMBER 2023  
(OCTOBER 2023 EXAM SESSION)**

**Sub. Code: 2091**

**M.D. DEGREE EXAMINATION**

**BRANCH XXIII – ANATOMY**

**PAPER III – HISTOLOGY, NEURO ANATOMY AND MUSEUM TECHNIQUES**

*Q.P. Code: 202091*

**Time : Three Hours**

**Maximum : 100 Marks**

**I. Essay: (2 x 15 = 30)**

1. Trace the ultrastructure of the respiratory system from the external nares to the alveoli with functional correlation.
2. Describe the Hypothalamus and its connections.

**II. Short notes: (10 x 5 = 50)**

1. Fixatives.
2. Microanatomy of liver.
3. Connective tissue stains.
4. Trochlear nerve.
5. Third ventricle.
6. Circumventricular organs.
7. Histology of epiglottis.
8. Soft embalming.
9. Myelination of axons.
10. Histology of cardiac muscle.

**III. Reasoning Out: (4 x 5 = 20)**

**State whether each of the following statement is TRUE or FALSE and reason out.**

1. Microglia originate in the bone marrow.
2. Interstitial cells of Leydig form the blood testis barrier.
3. The gallbladder does not have muscularis mucosae.
4. The thalamic reticular nucleus belongs to the reticular activating system.

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