

**PANINEEYA MAHAVIDYALAYA INSTITUTE OF DENTAL  
SCIENCES AND RESEARCH CENTER**

**HYDERABAD, TELANGANA**

**DEPARTMENT OF ANATOMY**

**MDS SYLLABUS**

**Gross anatomy**

1. Scalp & temple
2. Face – Muscles, facial artery, facial vein
3. Triangles of neck
4. Deep structures of neck –
  - a. Thyroid gland, parathyroid gland
  - b. Trachea & Oesophagus
  - c. Sympathetic chain
5. Blood supply of head and neck) Carotid system – carotid vessels, vertebral artery, subclavian artery
6. Venous drainage of head and neck (Jugular system – internal and external)
7. Autonomic nerve supply of head and neck
8. Lymphatic drainage of head and neck
9. Salivary glands –Parotid , Submandibular and sublingual
- 10.Temporal and infra temporal fossa
- 11.Temperomandibular joint & muscles of mastication
- 12.V<sup>th</sup>, VII<sup>th</sup>, IX<sup>th</sup>, XI<sup>th</sup>, XII<sup>th</sup> cranial nerves
- 13.Oral cavity & Tongue
- 14.Palate
- 15.Nasal cavity – nasal septum & lateral wall
- 16.Para nasal air sinuses

17. Pharynx
18. Larynx
19. Dural venous sinuses
20. Brain

## **Osteology**

1. Foetal and adult skull
2. Maxilla & Mandible – development, ossification, age changes and evolution of mandible in detail

## **Histology**

1. Microscopy
2. Epithelium
3. Glands
4. Connective tissue
5. Bone
6. Cartilage
7. Lymphatic system
8. Muscle
9. Neural tissue
10. Endocrine system
11. Tongue
12. Salivary glands
13. Skin

## **Embryology**

1. Development of face
2. Development of palate
3. Development of tongue
4. Development of teeth
5. Development of maxilla
6. Development of mandible
7. Development of salivary glands
8. Developmental anomalies of oral and maxillofacial region
9. Branchial arches

## **Genetics**

1. Modes of inheritance
2. Chromosomal anomalies of oral tissues
3. Single gene disorders
4. Genetic counseling
5. DNA extraction, PCR, Blotting techniques

**Basic medical sciences classes for MDS students (From July to September of every year)**

**Following topics would be covered**

<b>S.No</b>	<b>Topic</b>
<b>1</b>	Scalp & temple
<b>2</b>	Face – Muscles, facial artery, facial vein & Development of face Developmental anomalies of oral and maxillofacial region
<b>3</b>	Foetal and adult skull & Maxilla Branchial arches
<b>4</b>	Mandible – development, ossification, age changes and evolution of mandible in detail
<b>5</b>	Triangles of neck
<b>6</b>	Deep structures of neck – a. Thyroid gland, parathyroid gland (Including Histology) b. Trachea & Oesophagus
<b>7</b>	Blood supply of head and neck) Carotid system – carotid vessels, vertebral artery, subclavian artery
<b>8</b>	Venous drainage of head and neck (Jugular system – internal and external) Autonomic nerve supply of head and neck Lymphatic drainage of head and neck
<b>9</b>	Salivary glands –Parotid , (Including Histology & Development) Submandibular and sublingual(Including Histology & Development)
<b>10</b>	Temporal and infra temporal fossa
<b>11</b>	Temperomandibular joint & muscles of mastication
<b>12</b>	V <sup>th</sup> & VII <sup>th</sup> cranial nerves
<b>13</b>	IX <sup>th</sup> , XI <sup>th</sup> & XII <sup>th</sup> cranial nerves
<b>14</b>	Oral cavity & Tongue and its development
<b>15</b>	Palate & its Development
<b>16</b>	Nasal cavity – nasal septum & lateral wall
<b>17</b>	Para nasal air sinuses
<b>18</b>	Pharynx
<b>19</b>	Larynx
<b>20</b>	Dural venous sinuses
<b>21</b>	Pituitary gland – development & histology
<b>22</b>	Modes of inheritance
<b>23</b>	Chromosomal anomalies of oral tissues Single gene disorders
<b>24</b>	Brain
<b>25</b>	Epithelium & Connective tissue
<b>26</b>	Bone & Cartilage
<b>27</b>	Lymphatic system & Skin
<b>28</b>	Muscle & Neural tissue

