JINNAH SINDH MEDICAL UNIVERSITY

Anatomy Curriculum

Ref# CURRICULUM MEETING/JSMU/2016-17/ 06

Dated: 08-06-17

Anatomy Curriculum for BDS

COURSE TOPIC: General anatomy and histology

S No.	LECTURE TOPICS	TOPIC OBJECTIVES
1	Introduction to Anatomy	Define anatomy; Differentiate its branches with their practical implications.
2	Terms of position and movements	Recognize the location and movement of different parts of body with respect to various terms of position and movement
3	Cell	Describe structural and functional details of cells and cell cycle
4	Epithelial Tissue	Differentiate among epithelia according to specific features, functions and locations
5	Connective Tissue	Classify different types and their component according to locations ,structures and functions
6	Bones	Differentiate among types of bone according to development, shape and histological features and blood supply.
7	Cartilages	Classify cartilage according to location , morphology ,histology and functions
8	Joints of Body	Relate structure of different types of joint with the movements and (general features of synovial joints with location).
9	Muscle	Discuss structural (gross& microscopic)& functional classification of muscles .
10	Introduction to Limbs	Recognize general arrangement of bones and muscles

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11	Development of Musculoskeletal system	Outline musculoskeletal system development
12	General organization of CVS	Discuss the organization of circulatory system
13	Histology of blood vessels	Differentiate different types of blood vessels histologically.
14	Microscopy and types of microscope	Demonstrate operational steps of microscope handling.
15	Lymphatic system	Define the immune system components.
16	Lymphoid tissue	Differentiate the lymphoid organs histologically and functionally
17	Skin and Fascia	Describe the structural details and distribution of skin and fascia throughout the body.
18	**Histology of skin**	Discuss the **Gross** & histological features of skin and its appendages.
19	Introduction to nervous system& nervous tissue	Define the structural and functional components of nervous system

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COURSE TOPIC: General Embryology

S NO	LECTURE TOPICS	TOPIC OBJECTIVES
20	Introduction & terminologies of embryology	Define Embryology and Embryological terms with clinical application.
21	Introduction to Male and Female reproductive parts	Identify parts of male and female reproductive system in relation to reproductive cycle
22	Uterine Cycle	
23	Cell division & Cell Cycle	Discuss different types of cell divisions and their clinical importance
24	Meiosis &Gametogenesis	Correlate meiosis with steps of gametogenesis.
25	Fertilization& Implantation	Discuss steps of fertilization &implantation
26	Development up to 3 weeks	Discuss the changes which occur in 3rd week
27	Embryonic Period	Describe the stages of embryogenesis.
28	Fetal Period	Discuss the events of fetal period according to timeline.
29	Fetal membranes and Placenta	Elaborate the formation of placenta and fetal membranes.
30	Role of Genes &Teratogens in birth defects	Discuss the role of teratogens in congenital anomalies.
31	Antenatal diagnostic techniques	Discuss the importance of antenatal diagnostic techniques.

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COURSE TOPIC: Neuroanatomy

S NO	LECTURE TOPICS	TOPIC OBJECTIVES
32	The cranial fossae	Identify important features of cranial cavity
33	Development of nervous system	Outline the basic steps of development of central nervous system.
34	Blood supply of brain and spinal cord	Discuss the clinical importance of blood supply of brain and spinal cord.
35	Meninges of the brain and spinal cord	Discuss the clinical importance of meninges of brain and spinal cord in relation with epidural, subdural and subarachnoid spaces.
36	Dural venous sinuses	Describe the location ,communications and clinical significance of dural venous sinuses
37	Ventricular system of brain	Describe the anatomy of ventricular system with clinical correlation of CSF disorders.
38	Brain stem (Medulla & pons & Midbrain **and spinal cord**	Describe the external features, attachment of cranial nerves with lesions
39	Cerebellum	Explain the parts & gross features of cerebellum, enumerate deep cerebellar nuclei
40	Diencephalon	**Name** the parts of Diencephalon & gross Features of Thalamus
41	Cerebrum	Identify functional cortical areas and general distribution of white matter in detail.
42	Cranial nerves I-XII	Name cranial nerve nuclei and their functional components.
43	Autonomic nervous system	Enumerate the structural and functional organization of autonomic nervous system.

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44	Imaging of Brain and spinal cord	Identify normal radiological anatomy of brain and spinal cord .

COURSE TOPIC: Head and Neck

S NO	LECTURE TOPICS	TOPIC OBJECTIVES
45	Introduction of head and neck structures	Outline main features of the head and neck region.
46	The 4 Normas of skull	Identify the features of different aspects of skull with their clinical relevance.
47	Osteology of mandible	Identify the feature and muscle attachments on mandible
48	The scalp	Describe the clinical importance of the structures arranged in the layers of the scalp.
49	Face	Discuss the blood supply, lymphatic drainage and nerve supply of muscles of facial expression and important clinical conditions related to them.
50	Development of Face	Discuss development and common congenital anomalies of face
51	Pharyngeal arches & its anomalies	Describe the development and anomalies of pharyngeal apparatus.
52	Orbital boundaries and contents	Describe the gross anatomy of orbital structures.
53	Gross anatomy of eye ball	Explain the anatomy of eye ball.

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54	Development of Eye	Explain the derivatives of Optic Cup
55	The External ,middle & Internal ear	Summarize the gross anatomy of ear with its clinical correlation.
56	Development of Ear	Explain the derivatives of Otic Vesicle
57	Temporal fossa	Identify the structures of temporal and infra temporal region.
58	Infratemporal fossa	
59	TMJ &Muscles of mastication	Discuss the articulation ,neurovascular supply and the muscles producing the movements on Temporomandibular joint
60	Gross anatomy & histology of Nose &Paranasal sinuses	Discuss gross& histology of nose and paranasal sinuses with its clinical application.
61	Development of nose & Paranasal sinuses	Outline development of nose and paranasal sinuses
62	Gross anatomy of oral cavity	Discuss the boundaries and gross features of oral cavity and its contents with innervation , blood supply &lymphatic's
63	Histology of oral cavity	Differentiate the histological features of contents of oral cavity
64	Gross & Histology of Tongue	Describe the gross feature, muscles, neurovascular supply & microscopic features of tongue

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65	Development of Tongue & Palate	Discuss development and common anomalies of oral structures
66	Development of Teeth	
67	Gross anatomy of Major salivary glands	Discuss the gross anatomy& important relations with clinical correlation of major salivary glands.
68	Histology of salivary glands	Relate the histological differentiation of salivary glands with their function.
69	Development of Major salivary glands	Discuss development of major salivary gland
70	Cervical vertebra	Identify the cervical vertebrae and appreciate their importance as land marks.
71	Skin, Fascia & muscles in neck	Identify the superficial structures of the neck with their neurovascular supply and surface land marks.
72	Triangles of neck, the anterior triangle& Posterior triangle	Explain the boundaries of the triangles and their contents.
73	Pituitary & Pineal gland &	Outline the gross anatomy, Development and histology of pituitary and pineal gland.
74	Gross & Histology of Thyroid & Parathyroid glands	Discuss location, relations ,gross feature ,neurovascular supply and clinical importance of thyroid and parathyroid glands
75	Development of Thyroid & Parathyroid glands	Discuss development and anomalies of thyroid and parathyroid gland

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76	Development of Pituitary gland	Trace the dual origin of pituitary gland
77	Gross anatomy of Pharynx	Describe the division of pharynx and structures within each division
78	Gross and histology of Larynx	Identify the boundaries, division, composite structures, neurovascular supply and histological features of Larynx.
79	Gross and histology of Trachea	Identify clinically important relations, gross and histological features of trachea
80	Cranial nerves 5,7,9,10&12	Predict the effects of cranial nerve injuries based on their anatomical course in the body
81	Major Vessels of neck.	Identify major arteries and their main branches in neck
82	Lymphatic drainage of head & neck	Summarize lymphatic drainage of head and neck.

Topic: Abdomen and Thorax

S NO	LECTURE TOPICS	TOPIC OBJECTIVES
83	Introduction to thoracic cavity	Outline the boundaries of thoracic cavity and and its contents
84	Mediastinum	Identify the boundaries and contents of mediastinum

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85	Gross and histology of thoracic part of respiratory tract	Identify the gross and microscopic feature of Lung.
86	Development of respiratory system	Enumerate derivatives of Lung Bud
87	Overview of Pericardium and Heart	Outline gross features and main vessels of heart and pericardium
88	Development of CVS	Enumerate parts of primitive heart tube & their derivatives
89	General Histological features of GIT	Differentiate histologically, parts of small & large intestine
90	Development of GIT	Enumerate Derivatives of foregut, Midgut & Hindgut