

SS/MBBS-I/ANA-I/02-21**First Professional MBBS Examination****2021****(February)****ANATOMY****Paper-I****Full Marks: 100****Time: 3 hours****The figures in the margin indicate****full marks for the questions****Write the answers to the two Halves in separate books****Answer all questions****FIRST HALF**

1. For the following MCQ-type questions, choose and write the correct answers [(a), (b), (c) or (d)] against the questions in the answer booklet: [1 × 10 = 10]

(i) The outermost layer of thick skin is

(a) stratum corneum

(b) stratum granulosum

(c) stratum spinosum

(d) stratum basale

(ii) The root value of the median nerve is

(a) C_{5,6,7,8}, T₁

(b) C₈, T₁

(c) C_{5,6},

(d) C_{5,6,7,8}

(iii) The palatine tonsils are lined by

- (a) stratified squamous keratinized epithelium
- (b) stratified squamous non-keratinized epithelium
- (c) simple columnar epithelium
- (d) transitional epithelium

(iv) Phylogenetically the oldest cerebellum is

- (a) paleocerebellum
- (b) neocerebellum
- (c) pontocerebellum
- (d) archicerebellum

(v) Coracobrachialis is pierced by the

- (a) median nerve
- (b) musculocutaneous nerve
- (c) radial nerve
- (d) ulnar nerve

(vi) Bell's palsy is due to sudden paralysis of

- (a) vagus nerve
- (b) facial nerve
- (c) trigeminal nerve
- (d) optic nerve

(vii) Follicular antrum is present in all except

- (a) primordial follicle
- (b) secondary follicle
- (c) tertiary follicle
- (d) Graafian follicle

(viii) The lumen of Ductus (vas) Deferens is lined by

- (a) simple columnar epithelium
- (b) stratified squamous epithelium
- (c) pseudostratified columnar epithelium
- (d) transitional epithelium

(ix) The fourth (IV) cranial nerve is

- (a) trigeminal
- (b) vagus
- (c) hypoglossal
- (d) trochlear

(x) Hassall's corpuscles are characteristics of

- (a) spleen
- (b) thymus
- (c) lymph node
- (d) tonsil

2. (a) Describe the thyroid gland under the following headings: [2 + 4 + 4 + 5 = 15]

- (i) Location
- (ii) Blood supply
- (iii) Development
- (iv) Applied importance

(b) A Tennis player during the match suddenly developed pain and inability to raise his right arm, X-ray of shoulder joint confirmed dislocation. Applying your knowledge of shoulder joint, answer the following: [2 + 3 + 5 + 5 = 15]

- (i) Name the type and bony components of the joint.
- (ii) Enumerate the ligaments of the joint.
- (iii) What are rotator cuff muscles? Add a note on rotator cuff.
- (iv) Mobility is greater than its stability. Explain.

3. A female patient came to the surgery OPD having a nodular swelling in the right breast. Attending surgeon diagnosed it as breast tumour and advised surgery. With the knowledge of anatomy, answer the following with diagram: [5 + 5 = 10]

- (a) What are the axillary groups of lymph node?
- (b) How does the lymphatics from the breast go to the axillary and other lymph nodes?

SECOND HALF

4. Write short notes on (any seven): [5 × 7 = 35]

- (a) Lacrimal apparatus—its location, parts and nerve supply
- (b) Blood supply of a long bone
- (c) Synovial joint—subtypes with examples and characteristics and functions

- (d) Histology of transitional epithelium—locations, characteristics and functions
- (e) Corpus callosum—type of fibre, parts, boundaries
- (f) Histology of the cerebellum—labelled diagram of layers, cells components
- (g) Derivatives of 3rd pharyngeal pouch
- (h) Biceps brachii muscle—its origin, insertion, nerve supply and actions

5. Answer/Write on the following in short (any five): [$2 \times 5 = 10$]

- (a) Enumerate the types of epiphysis.
- (b) Terminal branches of internal carotid artery
- (c) Examples of limiting sulcus
- (d) Contents of the interpeduncular fossa
- (e) Subdivisions of cerebral peduncle
- (f) Structures forming the floor of the 4th ventricle

6. Cadavers are the first teacher of Anatomy. Explain. [5]
