

VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM
(Deemed to be University)

FIRST MBBS DEGREE EXAMINATION – June 2021

HUMAN ANATOMY - II

SECTION A

Time: Twenty Minutes

Maximum: 20 marks

Register Number :

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Signature of the candidate

Signature of the Invigilator

Instructions to the candidates

1. Write your Register Number and sign at the place specified on the first page of this Question Booklet.
2. Do not open this question booklet until Invigilator announces the commencement of the examination.
3. Answer ALL the Twenty questions. They carry equal marks. No negative marking for wrong answers.
4. Answers should be marked legibly in the SHEET provided in capital letters.
5. THE QUESTION BOOKLET SHOULD NOT BE TAKEN OUT OF THE EXAMINATION HALL.
6. Questions should not be copied and taken out of the Examination Hall. Anyone found violating this rule shall not be permitted to write the examination and shall be sent out of the Hall.
7. At the end of 20 minutes, when the Invigilator announces 'STOP WRITING' you must stop writing immediately. If the candidate tries to attempt to answer the questions after the prescribed time, their answer script becomes invalid.
8. Hand over the questions booklet containing answer sheet to the invigilator when you finish answering or immediately after 20 minutes.
9. Section B to be answer in main answer booklet provided.

HUMAN ANATOMY - II
SECTION-A (20X1-20 MARKS)
Multiple choice questions (MCQ)

Time: Twenty Minutes

Maximum: 20 marks

Select the most appropriate answer and answer in the answer sheet attached:

1. Regarding Bell's palsy, which of the following statements is not correct?
 - A. It is a lower motor neuron type of paralysis of facial muscles
 - B. The upper facial muscles are not affected
 - C. It occurs due to compression of facial nerve in the facial canal
 - D. It leads to accumulation of food in the vestibule of mouth

2. Select the **INCORRECT** statement regarding the sternocleidomastoid muscle:
 - A. It tilts the occiput to the same side
 - B. It overlaps the carotid sheath
 - C. It is supplied by the spinal root of accessory nerve
 - D. It is crossed superficially by the external jugular vein

3. All of the following dural venous sinuses are paired **EXCEPT**:
 - A. Superior petrosal
 - B. Inferior petrosal
 - C. Inferior sagittal
 - D. Cavernous

4. All of the following arteries are present in the carotid triangle **EXCEPT**:
 - A. Ascending pharyngeal artery
 - B. Lingual artery
 - C. Sublingual artery
 - D. Facial artery

5. A 37-year-old man receives a direct blow to his head and is brought to an emergency department. His radiograph shows a fracture of the floor of the middle cranial fossa, causing severance of the greater petrosal nerve. Which of the following conditions could be produced by this injury?
 - A. Increased lacrimal gland secretion
 - B. Loss of taste sensation in the epiglottis
 - C. Dryness in the nose and palate
 - D. Decreased parotid gland secretion

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6. The thyroid venous plexus lies:
 - A. Between true and false capsules of thyroid gland
 - B. Deep to true capsule of thyroid gland
 - C. Outside the false capsule of the gland
 - D. Within the substance of the gland

7. All of the following arteries arise from the first part of subclavian artery **EXCEPT**:
 - A. Thyrocervical trunk
 - B. Dorsal scapular artery
 - C. Internal mammary artery
 - D. Vertebral artery

8. All of the following structures form nasal septum **EXCEPT**:
 - A. Perpendicular plate of ethmoid
 - B. Perpendicular plate of palatine
 - C. Vomer
 - D. Septal cartilage

9. A 71-year-old woman often visits an emergency department with swallowing difficulties and subsequent choking while eating food. Which of the following pairs of muscles is most instrumental in preventing food from entering the larynx and trachea during swallowing?
 - A. Sternohyoid and sternothyroid
 - B. Oblique arytenoid and aryepiglottic
 - C. Inferior pharyngeal constrictor and thyrohyoid
 - D. Levator veli palatini and tensor veli palatini

10. All of the following statements regarding suboccipital triangle are true **EXCEPT**:
 - A. Its roof is covered by semispinalis capitis and longissimus capitis
 - B. Its floor is formed by anterior arch of the atlas
 - C. It is bounded inferiorly by oblique capitis inferior
 - D. It is bounded superolaterally by obliquus capitis superior

11. All the statements about the sternal angle are correct **EXCEPT**:
 - A. It is formed by the articulation of the manubrium with the body of the sternum
 - B. It lies at the level of 2nd costal cartilage
 - C. It lies opposite the intervertebral disc between the T3 and T4 vertebrae
 - D. Ascending aorta ends at this level

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12. The angiogram of a 19-year-old man who came to the emergency department exhibited that he was bleeding from the vein that is accompanied by the posterior interventricular artery. Which of the following veins is most likely to be ruptured?
- A. Great cardiac vein
 - B. Middle cardiac vein
 - C. Anterior cardiac vein
 - D. Small cardiac vein
13. Select the **INCORRECT** statement about the parietal pleura:
- A. It develops from somatopleuric mesoderm
 - B. It is supplied by somatic nerves
 - C. It develops from splanchnopleuric mesoderm
 - D. It is sensitive to pain and touch
14. The lingula is a tongue-shaped projection from:
- A. Upper lobe of right lung
 - B. Upper lobe of left lung
 - C. Lower lobe of right lung
 - D. Lower lobe of left lung
15. Select the **INCORRECT** statement about the medial lemniscus:
- A. It consists of fibres arising from nucleus gracilis and nucleus cuneatus
 - B. It forms a part of the auditory pathway
 - C. It conducts conscious proprioceptive sensations from opposite half of the body
 - D. Its fibres terminate in the thalamus
16. Regarding Broca's area, which of the following statements is **NOT CORRECT** ?
- A. It is located in the inferior frontal gyrus of the left cerebral hemisphere
 - B. It is supplied by anterior cerebral artery
 - C. It is numbered as areas 45, 44
 - D. Its damage leads to motor aphasia
17. The Y-shaped sheet of white matter that divides thalamus into its three main parts (anterior, medial, and lateral) is called:
- A. Lamina terminalis
 - B. Stria medullaris thalami
 - C. Internal medullary lamina
 - D. Lamina cribrosa

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18. During examination at clinic, it was noted that the size of an infant's head was larger than normal expected for her age. Radiological examination indicated that there is obstruction of the median foramen draining the fourth ventricle. What is the name of this foramen?
- A. Cerebral aqueduct
 - B. Interventricular foramen
 - C. Foramen of Magendie
 - D. Foramen of Monro
19. Communication of the scala vestibuli and scala tympani occurs at the:
- A. Round window
 - B. Oval window
 - C. Helicotrema
 - D. Endolymphatic sac
20. Betz cells are found in:
- A. Cerebrum
 - B. Cerebellum
 - C. Spinal cord
 - D. Neurohypophysis

**VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM.
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MBBS DEGREE EXAMINATION – June 2021

First Year

HUMAN ANATOMY - II

Time : Three hours

Maximum : 100 marks

Answer ALL Questions

Answer Section A in the Answer Sheet attached for 20 marks

After 20 minutes to be handed over to the invigilator immediately Section A

Answer Section B in the main answer book provided

Time : 2 hours 40 minutes

SECTION – B

Maximum : 80 marks

I. Long Answer Questions :

(2 x 15 = 30)

1. A 50-year-old lady came to the OPD with history of swelling in the submandibular region. On investigation, it was diagnosed as a stone in the duct which opens in the floor of the mouth. Describe the involved gland under the following headings. a) morphology b) relations c) secretomotor pathway d) histology. Explain the reason for stone formation in this duct. (3+4+3+4+1=15)
2. Describe left lung under the following headings a) External features b) Relations c) Root d) Bronchopulmonary segments e) Applied anatomy.(3+4+2+3+3=15)

II. Short Answer Questions:

(6 x 5= 30)

3. Describe the origin, course, relations, branches and clinical importance of facial artery. (1+1+1+1+1)
4. Describe the nerve supply of tongue with diagram.
5. Describe the arch of aorta including its:
 - A. Origin B. Extent C. Relations D. Branches
 - F. Correlate anatomical basis of coarctation of aorta. (1+1+1+1+1)
6. Describe the blood supply of spinal cord with its clinical significance. (4+1)
7. Describe and draw the microscopic anatomy of serous salivary gland. (3+2)
8. Describe the development of interatrial septum. Add a note on its congenital anomalies. (3+2)

(p.t.o)

III. Brief Answer Questions :

(10 x 2 = 20)

9. Enumerate any four structures piercing the roof of posterior triangle.
10. Enumerate the contents of space of Burns.
11. Mention the attachments of suprapleural membrane. Mention its functional significance. (1+1)
12. Mention the modifications of pia mater covering the spinal cord.
13. Name any four internal features of midbrain.
14. Mention origin and termination of internal carotid artery. (1+1)
15. Draw and label the organ of Corti.
16. Draw and label microscopic anatomy of cerebrum.
17. Explain the embryological basis of thyroglossal cyst.
18. Describe the development of right atrium.

(Sl.No. M2342)