



## **A) Meninges and spinal cord**

### **Items:**

- 1- Spinal meninges and epidural space
- 2- Cranial meninges
- 3- Anatomical features of spinal cord (externally and in cross section)
- 4- Spinal cord segmentation
- 5- Spinal cord termination

## **B) Brain stem**

### **Items:**

Anatomical features of the following

- 1- Medulla oblongata
- 2- Pons and cerebellum
- 3- Mid brain
- 4- Diencephalon (epithalamus – thalamus – hypothalamus)
- 5- Superficial origin of cranial nerves.

## **C) The cerebrum**

### **Items:**

- 1- Cerebral hemispheres
  - External features
  - Cerebral gray matter
  - Cerebral white matter
- 2- Basal nuclei (basal ganglia)
- 3- Rhinencephalon
- 4- Brain ventricles and choroid plexuses.

## **D) Peripheral nervous system**

Items:

1. Types of fiber, distribution, and clinical importance of the trigeminal nerve.
2. Types of fiber, distribution, and clinical importance of the facial nerve.
3. Types of fiber, distribution, and clinical importance of the vagus nerve.
4. The visual pathway and associated cases
5. Branches of the typical spinal nerve

### **E) Autonomic nervous system**

Items:

1. Types Comparison between sympathetic and parasympathetic NS.
2. Comparison between paravertebral and prevertebral ganglia.
3. Ramus communicans
4. Sympathetic trunk and associated paravertebral ggl.
5. Parasympathetic distribution of cranial nerves.

### **F) Anatomical features of the eye**

- 1- Accessory ocular structures
- 2- Fibrous tunic
- 3- Vascular tunic
- 4- Nervous tunic
- 5- Eye chambers
- 6- Refractive media of the eye.
- 7- Development of the eye

### **G) Anatomical features of Ear and development of nervous system**

**Items:**

- 1- External ear
- 2- Middle ear
- 3- Inner ear
- 4- Development of ear
- 5- Neural tube
- 6- Neural crest

**H) Anatomy of the heart****Items:**

- 1- Pericardium
- 2- Anatomical description of heart (position, divisions, ...etc)
- 3- Openings of heart.
- 4- Valves of heart.
- 5- Blood supply of heart.

**I) Development of the blood vessels****Items:**

- 1- Early (primitive circulation of embryos
- 2- Aortic arches and its derivatives
- 3- Branches of dorsal aorta.
- 4- Derivatives of vitelline, umbilical and cardinal veins.
- 5- Changes in the fetal circulation after birth

**J) Development of the heart****Items:**

- 1- Cardiac primordium
- 2- The external morphogenesis of the heart
  - Rotation of cardiac tube
  - Formation of U-shaped cardiac loop

### 3- Internal morphogenesis of the heart

- Partitioning of atrioventricular canal
- Partitioning of the common atrium
- Partitioning of the common ventricle
- Final form of the atrium
- Partitioning of the bulbus cordis and truncus arteriosus