**Rajiv Gandhi University of Health Sciences, Karnataka**

**MBBS Phase I Degree Examination**

**Anatomy Paper I (RS4)**

**Model Question Paper**

**Time: 3 hours Maximum marks: 100**

**Instructions:**

* Your answers should be specific to the question asked
* Draw neat labelled diagrams wherever necessary.

**LONG ESSAYS: (2×10 marks each = 20 marks)**

1. Describe the origin, course, branches and area of distribution of the right and left coronary arteries. Add a note on its applied aspects. (8+2)
2. Describe the nasal septum under the following headings
   1. Components
   2. Blood supply
   3. Nerve supply
   4. Applied anatomy (3+3+2+2)

**SHORT ESSAYS: (10×5 marks each = 50 marks)**

1. A 25yr old male fractured his right tibia after an accident and a metal plate was surgically implanted to stabilize the fracture. He was advised a crutch for 3months. After using the crutch for 6 weeks, he experienced pain and altered sensation in the posterior aspect of forearm and dorsum of hand.
   1. Compression of which structure caused the pain and altered sensation in the posterior aspect of forearm and dorsum of hand.
   2. Explain the course, relations and branches of the involved structure in axilla (1+4)
2. Compare and contrast the attachments and actions of palmar and dorsal interossei of hand
3. Describe the lymphatic drainage of mammary gland.
4. Draw a neat labelled diagram of interior of the right atrium.
5. Explain the secretomotor pathway of lacrimal gland with the help of a neat labelled diagram.
6. A patient experiences dizziness whenever he wears a neck tie. He is diagnosed to have carotid sinus syndrome. What is carotid sinus? Where is it located? Describe its nerve supply and function. (1+1+1+2)
7. Name the nuclei of thalamus. Describe the connections and functions of ventral posterolateral nucleus of thalamus. (2+3)
8. Describe the formation and functional significance of circle of Willis. Add a note on Charcot’s artery (4+1)
9. A female child is born with sacrococcygeal teratoma. Which embryological structure is associated with it? Describe its development and fate. (1+4)
10. Compare and contrast the microscopic structure of serous and mucous salivary gland with the help of a neat labelled diagram

**SHORT ANSWERS: (10 × 3 marks each=30marks)**

1. Explain the anatomical basis for complete claw hand.
2. Describe the formation and termination of azygos vein. (2+1)
3. Draw a neat labelled diagram of typical intercostal nerve
4. Which muscle is referred to as the safety muscle of the tongue and why? (1+2)
5. Name the muscles of soft palate with nerve supply.
6. Mention the boundaries and contents of sub-occipital triangle. (1.5+1.5)
7. Enumerate nuclei of cerebellum.
8. Occlusion of central artery of the retina leads to blindness. Explain its anatomical basis.
9. Mention the blood supply of long bone.
10. Compare and contrast an early and a term placental barrier with the help of a neat labelled diagram