



**All India Institute of Medical Sciences, Kalyani**  
**First Professional MBBS Examination, October, 2023**

**Time: 3 Hrs.**

**Anatomy (Paper-I)**

**Marks: 100**

**INSTRUCTIONS:**

- Answer all questions.
- Illustrate your answers with well labelled diagram wherever necessary.
- Answer each section in a separate answer book.

**SECTION - A (50 MARKS)**

**Long answer question:**

**[10]**

1. A 24-year-old pregnant female was admitted urgently to the hospital after her baby had begun to appear at the introitus. The mother had difficult labour necessitating undue traction to complete the delivery. The newborn presented with adducted arm with medial rotation, extended elbow with forearm pronated. (2+3+5)
  - a. Mention the structure that was injured by the trauma of the childbirth.
  - b. Explain the anatomical basis of such a deformity.
  - c. Draw a neat labelled diagram of Brachial plexus.

**Write Short notes on:**

**[5×5=25]**

2. Classification of synovial joints with examples.
3. Karyotyping.
4. Fertilisation.
5. Draw a neat labelled diagram and explain the microscopic structure of transverse section of compact bone.
6. Medial longitudinal arch of foot.

**Answer in brief:**

**[5×3=15]**

7. Sesamoid bone.
8. A middle aged female (46 years) gave birth to a baby who is found to have a rounded face, epicanthic folds, and characteristic single palmar crease (Simian crease) on the palm. Explain the genetic cause of events.
9. Locking mechanism of knee joint.
10. Saturday night palsy
11. Trendelenberg sign.

**SECTION - B (50 MARKS)**

**Long answer question:**

[10]

1. A 65-year-old man presented to OPD with complaints of loss of appetite, weight loss, and discomfort in the abdomen. History revealed vomiting of large quantities of undigested food. On examination, the doctors made the following observations, wasting and pallor, a palpable left supraclavicular node (often called Virchow's node), epigastric tenderness, and epigastric mass (on deep palpation at full respiration). He was diagnosed as a case of "gastric cancer" (carcinoma of the stomach). [3+(3+1)+3]
- a. Describe the external features of the stomach.
  - b. Briefly describe the lymphatic drainage of the stomach. How do the cancer cells reach the left supraclavicular node?
  - c. Enumerate the structures forming the stomach bed.

**Write Short notes on:**

[5×5=25]

2. Why is the ischio-rectal abscess very painful when abscess is superficial? Describe the boundaries and contents of the fossa.
3. Supports of uterus.
4. Draw a neat labelled diagram and explain the microscopic structure of Ovary.
5. Porto-caval anastomoses.
6. Descent of testis and its applied importance.

**Answer in brief:**

[5×3=15]

7. Internal trigone of urinary bladder.
  8. Explain the role of shutter mechanism in the prevention of inguinal hernia.
  9. McBurney's point.
  10. Peritoneal ligaments are not regarded as true ligaments.
  11. Explain the anatomical basis for advising X-ray of lumbosacral vertebrae in prostatic carcinoma.
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