

**MANIPAL ACADEMY OF HIGHER EDUCATION
MELAKA MANIPAL MEDICAL COLLEGE (MANIPAL CAMPUS)
MBBS PHASE - I STAGE - I DEGREE EXAMINATION – NOVEMBER 2020
SUBJECT: ANATOMY – PART-II (ESSAY)**

Saturday, November 07, 2020

Duration : 120 minutes

Max. marks : 60

- ✓ **Answer all the questions**
- ✓ **Draw diagrams wherever appropriate**

- 1. Explain the external features of the heart. Give a detailed description of the internal features of the right atrium of heart.**

(8 marks)

- 2. Explain the white matter of cerebrum.**

(7 marks)

- 3. Explain the stages of spermatogenesis.**

(5 marks)

- 4. Write about the shoulder joint under the following headings:**
 - 4A. Type and subtype.**
 - 4B. Names of the ligaments.**
 - 4C. Movements and major muscles producing each of the movements.**

(5 marks)

- 5. Explain the stomach under the following headings:**
 - 5A. Location and parts**
 - 5B. Visceral relations**
 - 5C. Arterial supply**

(5 marks)

6. A 35-year-old man visited a physician for severe pain on the right side of his chest for the last 10 days and difficulty in breathing. He also complained that the pain radiated to the anterior abdominal wall. On examination, the physician noticed the absence of breath sounds over the lower lobe of his right lung. The PA radiograph of his chest revealed blunting of right costophrenic angle and line of fluid level. The physician told the patient that he had fluid in the chest cavity and it had to be drained.

6A. What is this clinical condition called?

6B. Name the recesses of the pleura.

6C. In which intercostal space will the physician insert the needle during the pleural tapping and why?

6D. What are the layers pierced by the needle during pleural tapping?

6E. What is the anatomical basis of radiation of pain to the anterior abdominal wall?

(5 marks)

7. A 70 year old man was admitted to the hospital as an emergency case. He had past history of having difficulty with micturition and had not passed urine for eight hours. On examination of the abdomen, it was noted that the bladder extended above the level of the umbilicus. Digital rectal examination revealed a large, firm, fixed swelling anterior to the lower part of the rectum. Catheterization was found to be impossible. The surgeon decided to relieve the condition by performing a suprapubic bladder puncture.

7A. What anatomical structure would likely to interfere with micturition?

7B. Will the catheter needle cross the peritoneal cavity before entering the bladder? Why?

7C. Explain the relations and blood supply of the interfering organ.

(5 marks)

8. Explain the relations and blood supply of the right suprarenal gland. Add a note on its development.

(5 marks)

9. A man involved in carrying heavy loads on the shoulder, experienced difficulty in raising the right arm vertically upwards. The examining physician asked the man to press his hands against the wall in front. The medial border and inferior angle of his right scapula became prominent while pressing the wall.

9A. Name the clinical condition seen in this patient.

9B. Name the nerve that is injured

9C. Name the muscle that was tested and explain its attachments.

(5 marks)

- 10. Name the types of cartilages. Explain the cartilage that contains cell nest arrangement of chondrocytes. (5 marks)**
- 11. Explain the visceral relations of inferior surface of the liver. Add a note on porta hepatis. (5 marks)**

