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University Examinations 2023/2024

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF CLINICAL MEDICINE AND COMMUNITY HEALTH

CCM 3334: SURGERY II

DATE: APRIL 2024

TIME: 3 HOURS

INSTRUCTIONS:

Answer *All* questions

Ensure that all your answers are properly numbered

Section A: Short Answer Questions – Answer questions following each other on the answer booklet

Section B: Long Answer Questions – Answer each question on new page

Section C: MCQs

SECTION A: SHORT ANSWER QUESTIONS (40 MARKS) [Briefly describe each of the following]

- a) Fluid resuscitation in burns
 - b) Triple assessment of the breast
 - c) Thyroid storm
 - d) Dysphagia types and causes
 - e) Abnormal scaring
 - f) Types of pneumothoraces
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- g) Wound closure
- h) Appendicitis

SECTION B: LONG ESSAY QUESTION (40 MARKS)

- i. Discuss the complications of burns in a chronological manner [10 marks]
- ii. Elaborate classification and management of different types of fractures citing fracture complications [10 marks]
- iii. Discuss intestinal obstruction (etiology, classification, pathophysiology and management) [10 marks]
- iv. Describe briefly how to perform circumcision [10 marks]

SECTION C: MULTIPLE CHOICE QUESTIONS (20 MARKS)

- 1) Which of the following statements are not true?
 - a. An elective hernia repair would have an infection rate of 1% or less
 - b. A contaminated operation is one in which there is presence of frank pus or gross soiling, e.g. perforated large bowel
 - c. A clean-contaminated operation has an infection rate of 15—20%
 - d. A dirty operation has an infection rate of > 40%
- 2) Which of the following are not true regarding the treatment of an abscess?
 - a. The definitive treatment of an abscess is by drainage
 - b. Antibiotics can be used alone to treat an abscess
 - c. An abscess can be successfully treated by injection of antibiotic into the abscess site
 - d. It is possible to drain a deep abscess using CT or ultrasound guidance
- 3) Which of the following is not characteristic of cancer of the oesophagus?
 - a. Usually occurs in the upper third
 - b. Is more common in females
 - c. Has a five-year cure rate of 20%
 - d. May be either adenocarcinoma or squamous cell carcinoma

- 4) Which of the following are not signs of a tension pneumothorax?
- Dyspnoea
 - Trachea displaced towards the affected lung
 - Tympanitic percussion note on the affected side
 - Absent breath sounds over the affected side
- 5) Which of the following organisms does not commonly cause empyema?
- Haemophilus influenzae
 - Pneumococcus
 - Streptococcus
 - Staphylococcus
- 6) The following is not true regarding Hydrocephalus:
- In infants is mostly congenital
 - Is always associated with increased intracranial pressure
 - In adults results from the obliteration of the subarachnoid pathways at the cisterns
 - In children may be caused by meningitis
- 7) Match Potential operative and postoperative risk factors for each patient described below.
- Difficult intubation
 - Aspiration
 - Poor wound healing
 - Postoperative infection
 - Increased need for postoperative admission to intensive care unit (ICU)
 - DVT/pulmonary embolism (PE)
 - Myocardial Infarction
- A 76-year-old female is scheduled to have an elective operation on her bowels. She is known to have severe and long-standing chronic obstructive pulmonary disease (COPD).
 - A 66-year-old male needs to have an urgent abdominal operation. He has had type 2 diabetes for the past 15 years and the control has been erratic

- iii. A 72-year-old male has had an MI 2 months ago. He has now been diagnosed to have cancer of the caecum which requires urgent surgery
- iv. A 70-year-old woman with long-standing rheumatoid arthritis and an unstable cervical spine needs to have an emergency laparotomy for a perforated peptic ulcer
- v. A 60-year-old obese female is scheduled to have an abdominal operation. She has a history of previous DVT and has not been mobile for the last 2 months
- vi. An 86-year-old male is scheduled to have an operation for his bowel carcinoma. He is malnourished and jaundiced
- vii. A 45-year-old obese male known to have a hiatus hernia presents with symptoms and signs of small bowel obstruction, for which he is due to have an operation

8) Which of the following statements are not true?

- A. Cells change from aerobic to anaerobic metabolism when perfusion to tissues is reduced.
- B. The product of aerobic respiration is carbon dioxide.
- C. The accumulation of lactic acid in the blood produces systemic respiratory acidosis.
- D. Lack of oxygen and glucose in the cell will eventually lead to failure of sodium/potassium pumps in the cell membrane and intracellular organelles.

9) Which of the following types of tumour seldom produce metastases?

- a. Tumours of the gastrointestinal tract
- b. Tumours of the urinary tract
- c. Skin tumours
- d. Tumours of the central nervous system
- e. Tumours of the lung

10) What is a tumour marker?

- a. These are blood chemicals produced by malignant cells
- b. These are receptors found on the surface of malignant cells
- c. These are hormones produced by malignant cells
- d. These are antibodies produced against malignant cells

- 11) Which of the following tumours is a-fetoprotein a marker for?
- Small cell carcinoma of the lung
 - Testicular teratoma
 - Bronchogenic carcinoma of the lung
 - Hodgkin's lymphoma
- 12) Which of the following statements are not true regarding imaging for acute abdomen?
- US is a good first-line investigation.
 - CT scan is the best investigation for acute diverticulitis.
 - Plain X-ray of KUB (kidney, ureter, and bladder) is the best imaging for suspected ureteric colic.
 - US and CT can diagnose the cause and site of bowel obstruction.
 - Plain X-ray is the first-line investigation for suspected perforation or obstruction
- 13) Which of the following are causes of cardiogenic shock?
- Acute ventriculoseptal defect
 - Acute cardiac tamponade
 - Tension pneumothorax
 - Aortic valve rupture
- 14) Which of the following statements are not true?
- The 'Phrygian cap' refers to the septum present in the gall bladder in approximately 2—6 per cent.
 - An accessory cholecystohepatic duct may be present, passing directly into the gall bladder from the liver.
 - Caroli's disease refers to the multiple saccular dilatations of the extrahepatic ducts.
 - Choledochal cyst increases the risk of Cholangiocarcinoma
- 15) In trauma imaging, which of the following statements are true?
- In a multiply injured patient, CT of head and spine should be the first line of imaging.
 - CT should be used when a patient is unstable.

- c. US is useful for diagnosing occult pneumothorax.
- d. Use of MRI in trauma is limited.

16) Which of the following conditions result in third spacing of water from the gastrointestinal tract?

- a. Diarrhoea
- b. Vomiting
- c. Ileostomy
- d. Enterocutaneous fistulae
- e. Intestinal obstruction

17) Match the following sources of pain to the site of radiation:

- a. Splenic rupture 1 Back
- b. Testicular pain 2 Umbilicus
- c. Ureteric colic 3 Lower angle of scapula
- d. Appendicitis 4 Loin
- e. Cholecystitis 5 Groin
- f. Pancreas 6 Left shoulder tip

18) The characteristic changes that follow a major operation or moderate to severe injury do not include the following:

- a. Hypermetabolism.
- b. Fever.
- c. Tachypnea.
- d. Hyperphagia.
- e. Negative nitrogen balance