



*(University of Choice)*

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS**

**2021/2022 ACADEMIC YEAR**

**2<sup>ND</sup> YEAR TRIMESTER 2 EXAMINATIONS**

**FOR THE DEGREE OF**

**BACHELOR OF SCIENCE IN PARAMEDICAL SCIENCES**

**COURSE CODE: NPP 221**

**COURSE TITLE: ABDOMINAL AND GASTROINTESTINAL  
EMERGENCIES**

**DATE: 20<sup>TH</sup> APRIL 2022**

**TIME: 11:30AM- 2:30PM**

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**INSTRUCTIONS TO CANDIDATES**

**ANSWER ALL QUESTIONS**

**TIME: 3 HOURS**

MMUST observes ZERO tolerance to examination cheating

Page 1 of 6

This Paper Consists of Printed Pages, Please Turn Over.  
NPP 221 Gastrointestinal and Abdominal emergencies



## MULTIPLE CHOICE QUESTIONS (20 MARKS)

1. In patients with abdominal pain, which of the following statements is MOST USEFUL in supporting a diagnosis of pancreatitis
  - A. An abdominal ultrasound showing cholelithiasis
  - B. Calculating a Ranson score of greater than 2
  - C. A history of colicky abdominal pain radiating to the back
  - D. The finding of a Cullen sign on examination
2. Which is the most important priority at the scene of an accident?
  - A. Safety for victims
  - B. Command
  - C. Safety of environment
  - D. Safety for rescue
3. Grey turner sign is seen in
  - A. Acute cholecystitis
  - B. Acute appendicitis
  - C. Acute pancreatitis
  - D. Acute hepatitis
4. While taking care of a 41-year-old client with a diagnosis of chronic pancreatitis, the laboratory result will likely indicate a serum amylase level of:
  - A. 45 units/L
  - B. 100 units/L
  - C. 300 units/L
  - D. 500 units/L
5. Using the "Look, listen and feel techniques on a patient you discover that there is no movement of air you should immediately.
  - A. Call for help.
  - B. Open airway
  - C. Begin ventilations.
  - D. Begin chest compressions
6. Which one of the following conditions is **NOT** a common reversible precipitant of Hepatic Encephalopathy?

- A. Alcohol
  - B. Large steak meal
  - C. Oral hypnotic
  - D. IV fluids
7. Focused Abdominal Sonogram in Trauma (FAST) assesses for blood in all of the following regions **EXCEPT**
- A. Pericardial sac
  - B. Pelvis
  - C. Hepatorenal pouch
  - D. Retroperitoneum
8. Which is the most common cause of lower GI bleed under 50 years of age?
- A. Anal fissures
  - B. Hemorrhoids
  - C. Inflammatory bowel disease
  - D. Diverticulosis
9. 14. Acute pain in epigastrium radiating to back after an alcohol binge in a 23-year male with severe vomiting. Which statement is true?
- A. Serum lipase is less helpful than serum amylase in making correct diagnosis
  - B. Serum lipase is more helpful than serum amylase in making correct diagnosis after 5 days
  - C. Serum amylase is never helpful in such cases
  - D. C reactive protein is not helpful in acute pancreatitis
10. A client is suspected of having hepatitis. Which diagnostic test result will assist in confirming this diagnosis?
- A. Elevated hemoglobin level
  - B. Elevated serum bilirubin level
  - C. Elevated blood urea nitrogen level
  - D. Decreased erythrocyte sedimentation rate
11. 23-year-old female came to emergency room with diffuse abdominal pain, abdominal distension, nausea, and vomiting for two days. Examination revealed presence of tachycardia, dehydration, abdominal rigidity and rebound tenderness. Best initial management would be
- A. IV fluids then send patient for CT scan
  - B. IV fluids then send patient for X ray abdomen
  - C. Directly CT scan

D. Only USG examination

12. GERD is a risk factor for the development of:

- A. Celiac disease
- B. Biliary Atresia
- C. Barrett's Esophagus
- D. Inguinal Hernia

13. Which of the following should be included in the immediate intervention plan for a patient with acute pancreatitis?

- A. Administration of vasopressin and insertion of a balloon tamponade
- B. Preparation for a paracentesis and administration of diuretics
- C. Maintenance of nothing-by-mouth status and insertion of nasogastric (NG) tube with low intermittent suction
- D. Dietary plan of a low-fat diet and increased fluid intake to 2,000 ml/day

14. A 40-year-old man who suffers from ulcerative colitis recently stopped his sulphasalazine medication and presents with generalized abdominal pain. He appears pale and dehydrated. On arrival: Temperature 39°C, HR 120/minute, BP 95/60. Expected lab findings with this condition include all the following EXCEPT:

- A. Leucocytosis
- B. Hypokalaemia
- C. Raised CRP
- D. Raised serum lipase

15. A 72-year-old man has had a sensation of retrosternal burning that is worse at night and after meals for the last 4 months. It partially responds to 'over the counter' antacid treatment. Which is the single most appropriate initial diagnostic investigation?

- A. Barium meal
- B. Barium swallow
- C. CT scan thorax
- D. Oesophagogastroduodenoscopy

16. A 50-year-old man has a 15-pack-year history of smoking and undergoes an OGD. There is a duodenal ulcer present. Gastric biopsies are taken and undergo a rapid urease test. Which single organism is most likely to be identified?

- A. Clostridium difficile
- B. Escherichia coli
- C. Enterobacter

D. *Helicobacter pylori*

17. A 28-year-old woman has dysphagia and low retrosternal "sticking" and an occasional sensation of choking. A video barium swallow shows an appearance of a "bird-beak" esophagus. Which is the single most likely diagnosis?

- A. Achalasia
- B. Carcinoma of the esophagus
- C. Diffuse esophageal spasm
- D. Foreign body ingestion

18. A 33-year-old client begins to complain of abdominal cramps during colostomy irrigation. What is the most appropriate action?

- A. Notify the physician
- B. Stop the irrigation temporarily
- C. Increase the height of the irrigation
- D. Medicate for pain and resume the irrigation

19. A patient presents with painless rectal bleeding for the last two hours. He has been otherwise well. His abdominal examination reveals no tenderness or masses. He has no fissures, polyps, or hemorrhoids noted on rectal examination. The remainder of his examination is unremarkable. Which of the following conditions is the MOST likely cause of his symptoms:

- A. Meckel's diverticulum
- B. Inflammatory bowel disease
- C. Bacterial gastroenteritis
- D. Allergic colitis

20. Which clinical manifestation would the paramedic expect a client diagnosed with acute cholecystitis to exhibit?

- A. Jaundice, dark urine, and steatorrhea
- B. Acute right lower quadrant (RLQ) pain, diarrhea, and dehydration
- C. Ecchymosis petechiae, and coffee-ground emesis
- D. Nausea, vomiting, and anorexia

## **SECTION B**

### **SHORT ANSWER QUESTIONS (40 MARKS)**

*ANSWER ALL QUESTIONS*

1. Explain four (4) clinical manifestations of rectal abscess (8 marks)
2. Outline the immediate emergency management of a patient with variceal bleeding (8 marks)
3. Explain four (4) complications of diverticulitis (8 marks)
4. Contrast chrons disease and ulcerative colitis (8 marks)
5. State the classification of hemorrhoids (8 marks)

## **SECTION C**

### **LONG ANSWER QUESTIONS (40 marks)**

*ANSWER ALL QUESTIONS*

1. Describe the immediate management of a 56-year-old male patient admitted with small bowel obstruction (20 marks)
2. Mrs. Zee is brought to the emergency department with complaints of severe right lower quadrant pain. A diagnosis of acute appendicitis is made (20marks)
  - a. State two causes of appendicitis (4 marks)
  - b. Describe the management of Mrs. Zee (12 marks)
  - c. Explain four complications of appendicitis (4 marks)