## MCQs

1. A 4 year old girl presented with vomiting, diarrhea and failure to thrive. Biopsy was taken from duodenum that reveals villous flattening. All of the following statements are true except

- a. Biopsy will reveal crypt elongation
- b. Biopsy will reveal Increase intraepithelial lymphocytes
- c. lab diagnosis reveals anti Endomysial antibodies
- d. lab diagnosis reveals anti Tissue transglutaminase antibodies
- e. lab diagnosis reveals anti Mitochondrial antibodies

2. A 62 yr old male is suffering from upper epigastric discomfort and pain. He also complaint of unexplained weight lose. For workup of the patient gasrtroscopy is planned that revealed diffuse thickening of gastric wall. Biopsy of the mass revealed sheets of signet ring cells diffusely infiltrating in the wall. Which of the following gene get mutated in this case

- a) APC
- b) P53
- c) beta catenin
- d) CDH 1
- e) MLH1

3. While grossing the specimen of appendicectomy, it is essential to take section from tip of appendix. Why

- a) to see neutrophils within mucosa of tip
- b) not to miss carcinoid most common tumor of appendix
- c) to diagnose mucoappendix
- d) not to miss polyp of appendix
- e) to look for parasite within lumen

4. A 39-year-old man presents with bloody diarrhea. A barium examination of the patient's colon reveals a characteristic "string sign." A colonoscopy reveals the rectum and sigmoid portions of the colon to be unremarkable. Resection of the distal small intestines was done. Gross examination of this resected bowel reveals deep, long mucosal fissures extending deep into the muscle wall. Several transmural fistulas are also found. Which of the following is the most likely diagnosis?

- a. Ulcerative colitis
- b. Lymphocytic colitis
- c. Infectious colitis
- d. Eosinophilic colitis
- e. Crohn disease
- 5. Most common parasite involving appendix is
  - a) Entoemaba histolytica
  - b) Ascaris lumbricoides
  - c) Shistosoma
  - d) Entrobius vermicularis

e) Hook worm

6. A 51-year-old man presents with epigastric pain that is lessened whenever he eats. A gastroscopy is performed and solitary gastric ulcer is seen. In additional to necrotic debris and nonspecific acute inflammation, which one of the listed histologic findings is most likely to be present at the base of a healing benign gastric ulcer?

a. Caseating granulomas

- b. Granulation tissue
- c. Multinucleated giant cells
- d. PAS-positive macrophages
- e. Signet-ring cells

7. A biopsy of the antrum of the stomach of an adult who presents with epigastric pain reveals numerous lymphocytes and plasma cells within the lamina propria, which is of normal thickness. There are also scattered neutrophils within the glandular epithelial cells. A Steiner silver stain from this specimen is positive for a small, curved organism. These histologic changes are most consistent with infection by which one of the following organisms?

- a. Entero invasive Escherichia coli
- b. Entero toxigenic E coli
- c. Helicobacter pylori
- d. Salmonella typhi
- e. Mycobacterium

8. A salivary gland neoplasm variably composed of squamous cells intermediate cells and mucous cells is known as

- a. Pleomorphic Adenoma
- b. Adenoid cystic carcinoma
- c. Mucoepidermoid carcinoma
- d. Warthin tumor
- e. Acinic cell carcinoma

9. Which of the following is not a risk factors for colorectal CA

- a) Low fiber diet
- b) Sedentary life style
- c) Smoking and alcohal
- d) FAP & HNPCC
- e) High fiber diet

10. Long segment Barrett esophagus is defined as

- a. 3cm or more
- b. 1cm or more
- c. Entire GIT
- d. Involves stomach also
- e. Barretts with dysplasia

11. Smokers have increased risk of which salivary gland tumor

- a. Mucoepidermoid carcinoma
- b. Pleomorphic adenoma
- c. Warthin tumor
- d. Malignant mixed tumor
- e. Adenoid cystic carcinoma

12. Abscence of neural crest derived ganglion cells in colon is known as

- a. Hirschsprung disease
- b. Achalasia
- c. Ectopia
- d. Meckel diverticulum
- e. Hernia

13. A 62-year-old man presents with gastric pain and is found to have a 3.5cm mass located in the anterior wall of his stomach. This mass is resected and

histologic examination reveals a tumor composed of cells having elongated, spindle-shaped nuclei. Which of the following IHC is considered to be confirmatory marker to diagnose this tumor?

a. CD10

- b. CD15
- c. CD30
- d. CD95
- e. CD117 (c-kit )

14. During routine colonoscopy of a 65-year-old man, a 2-mm "dewdrop"-like polyp is found in the sigmoid colon. Histologic examination of a biopsy of this lesion reveals a serrated appearance that are confined to upper 3<sup>rd</sup> of mucosal surface with increased cytoplasmic mucin. Which of the following is the most likely diagnosis?

- a. Hamartomatous polyp
- b. Hyperplastic polyp
- c. Inflammatory polyp
- d. Tubular adenoma
- e. Villous adenoma

15. Dense accumulation of distended foamy macrophages in lamina propria of small intestine is indicative of which disease

- a. Celiac disease
- b. Crohn disease
- c. Ulcerative colitis
- d. Whipple disease
- e. E.coli disease

## SEQs:

Q1- A 7 year old girl presented with vomiting, diarrhea and failure to thrive. Biopsy was taken from duodenum that reveals crypt elongation and villous blunting.

- a. What is your most likely diagnosis?(1)
- b. Write the microscopic examination and lab diagnosis of this disease.(1+1)
- c. Write clinical, gross and microscopic features of Crohns disease (0.5+0.5+1)

Q2- Answer the followings:

- a. Tabulate difference between diffuse type and intestinal type gastric carcinoma. (2)
- b. Classify benign and malignant salivary gland tumors.(2)
- c. What is the other name of benign mixed tumor of salivary gland.(1)

Q3-

- a. Define Barrett's esophagus.(1)
- b. What are the complications and risk factors of Barrett's esophagitis?(1+2)
- c. What is Achalasia(1)

Q4-

- a. Describe etiology, pathogenesis and morphology of peptic ulcer.(2)
- b. Write lab investigations used to diagnose peptic H. Pylori(1)
- c. Define early gastric carcinoma.(1)

Q5-

- a. Draw molecular changes of serrated pathway of colonic carcinogenesis(2)
- b. Classify colorectal polyps. (2)
- c. Name the tumor marker of colorectal CA. (1)