1- The most common oncogene abnormality observed in association with colorectal cancer is which of the following?

a. Overexpression of the N-myc oncogene  
b. Amplification of the K-ras oncogene  
c. Suppression of the erbB oncogene  
d. Amplification of the L-myc oncogene

2- Which of the following types of colonic polyps is associated with the highest incidence of malignant degeneration?

a. Tubular adenoma  
b. Tubulovillous adenoma  
c. Villous adenoma  
d. Hamartomatous polyp

3- Which of the following statements regarding the pathology of esophageal carcinoma is/are correct?

A. Worldwide, adenocarcinoma is the most common esophageal malignancy.  
B. Squamous cell carcinoma is most common in the distal esophagus, whereas adenocarcinoma predominates in the middle third.  
C. Patients with Barrett's metaplasia are 40 times more likely than the general population to develop adenocarcinoma.  
D. Metastases from esophageal carcinoma are characteristically localized to regional mediastinal lymph nodes adjacent to the tumor.  
E. Achalasia, radiation esophagitis, caustic esophageal stricture, Barrett's mucosa, and Plummer-Vinson syndrome are all premalignant esophageal lesions that predispose to the development of squamous cell carcinoma.

4- The most serious long-term side effect of bleomycin therapy is which of the following?

a. Pulmonary fibrosis  
b. Cataract formation  
c. Cardiomyopathy  
d. Aplastic anemia

5- A 45-year-old woman undergoes excision of a 1 cm breast mass. Histologic examination reveals invasive ductal carcinoma. Flow cytometric analysis is also performed which determines that a fraction of the tumor cells are “aneuploid”. The patient asks for an explanation of this term. Which of the following is/are correct?

a. The cells have a DNA content 1 times the baseline content  
b. The cells have hyperchromatic nuclei  
c. The cells have a DNA content 2 times the baseline content  
d. The cells have squamous morphology  
e. The cells have a DNA content not an even multiple of baseline content

6- The most common complication that requires alteration of planned chemotherapy regimens is which of the following?
a. Pulmonary fibrosis
b. Gastrointestinal ulceration
c. Hematologic suppression
d. Hepatotoxicity

7- Resistance of tumors to multiple chemotherapeutic agents is often due to the MDR (Multiple Drug Resistance) gene. This gene encodes a protein that acts by which of the following mechanisms?

a. As a transmembrane efflux pump for chemotherapeutic agents
b. As a DNA repair molecule
c. As an isoform of superoxide dismutase
d. As a membrane stabilizer

8- Which of the following statements about the surgical treatment of esophageal carcinoma is/are correct?
A. The finding of severe dysphagia in association with Barrett's mucosa is an indication for an antireflux operation to prevent subsequent development of carcinoma.
B. Long-term survival is improved by radical en bloc resection of the esophagus with its contained tumor, adjacent mediastinal tissues, and regional lymph nodes.
C. The morbidity and mortality rates for cervical esophagogastric anastomotic leak are substantially less than those associated with intrathoracic esophagogastric anastomotic leak.
D. The leading complications of transthoracic esophagectomy and intrathoracic esophagogastric anastomosis are bleeding and wound infection.
E. Transhiatal esophagectomy without thoracotomy achieves better long-term survival than transthoracic esophagectomy.

9- All of the following statements about surgical management of gastric lymphomas are true except:
A. Stage I gastric lymphomas (small lesions confined to the stomach wall) can be cured completely with surgical therapy alone.
B. Extensive gastric lymphomas that initially are treated with radiation and/or chemotherapy occasionally perforate during treatment and require secondary resection.
C. Patients explored with a presumptive diagnosis of gastric lymphoma should undergo an attempt at curative resection when this is safe and feasible.
D. Without a preoperative diagnosis resection for gastric mass should not be attempted unless lymphoma can be excluded.
E. Appropriate staging for primary gastric lymphoma includes bone marrow biopsy.

10- In neonates with necrotizing enterocolitis, which of the following findings is an indication of significant bowel ischemia?
A. Increased gastric residuals.
B. Septic shock.
C. Cardiac failure due to a patent ductus arteriosus.
D. Elevated platelet count.
E. Erythema of the abdominal wall.

11- A 52-year-old man undergoes a right hemicolectomy for a carcinoma of the ascending colon. Pathological examination of the resected specimen reveals invasion of the tumor to the level of the muscularis propria. Three of 17 lymph nodes contain microscopic tumor. What is the correct Dukes classification (Aster-Coller modification) and associated 5-year survival for this lesion?

a. Dukes C2, 45% 5-year survival
b. Dukes B1, 75% 5-year survival
c. Dukes C1, 45% 5-year survival
d. Dukes B3, 65% 5-year survival

12- An asymptomatic 52-year-old man is undergoing screening sigmoidoscopy. In the rectum, at 6 cm from the anal verge, a 2 cm yellow, submucosal nodule is noted. Deep endoscopic biopsies are consistent with carcinoid. Appropriate management includes which of the following?

a. Observation
b. Transanal excision
c. Low anterior resection
d. Abdominoperineal resection

13- The Lynch Syndrome is also known as hereditary non-polyposis colorectal cancer. Which of the following is/are features of this syndrome?

a. Left sided colon cancers
b. Autosomal dominant inheritance
c. Multiple polyps beginning in adolescence
d. Multiple cutaneous nevi

14- A number of clinical factors have been noted to decrease sensitivity of tumors to the effects of ionizing radiation. Which of the following is most important in this regard?

a. Increased tissue vascularity
b. High tumor mitotic rate
c. Tissue hypoxia
d. Subcutaneous tumor location

15- Patients that have acquired immunodeficiency syndrome are at increased risk for which of the following neoplasms?

a. Colorectal cancer
b. Meningioma
c. Kaposi’s sarcoma
d. Hepatocellular carcinoma
e. Esophageal carcinoma

16- Numerous epidemiologic associations have been made between (1) environmental and dietary factors and (2) the incidence of gastric cancer,
including all except:
A. Dietary nitrites.
B. Dietary salt.
C. Helicobacter pylori infection.
D. Dietary ascorbic acid.

17- All of the following benign conditions are associated with increased rates of gastric cancer except:
A. Pernicious anemia.
B. Multiple endocrine neoplasia type I (MEN 1).
C. Adenomatous polyps.
D. Chronic atrophic gastritis.

18- Which of the following statements concerning the pathology of gastric cancer is true?
A. Distal gastric cancers are becoming more common.
B. Intestinal-type gastric tumors resemble colon carcinomas and have a better prognosis than diffuse type.
C. Early gastric cancers are confined to the mucosa and are lymph node negative.
D. Broders' histologic grading system correlates well with survival: patients with grade IV tumors have 5-year survival rates around 65%.

19- Which of the following measures of obesity correlates best with mortality?
B. Hydroimmersion measurements of body fat composition.
C. Body mass index (BMI).
D. Skinfold thickness.
E. Waist to hip ratios (WHR).

20- Which of the following is the most common liver tumor of childhood?

a. Hemangioma and hemangioendothelioma
b. Hepatoblastoma
c. Hepatocellular carcinoma
d. Mesenchymal hamartoma

21- The risk of biliary tract adenocarcinoma developing in a patient with a choledochal cyst left in situ is approximately which of the following?

a. Less than 1%
b. 3% to 5%
c. 10% to 15%
d. Greater than 25%

22- An infant is noted to have a left flank mass shortly after birth and an ultrasound examination demonstrates left hydronephrosis. The most common cause of this finding is which of the following?

a. Neonatal Wilm’s tumor
b. Congenital ureteropelvic junction obstruction
c. Multicystic dysplastic kidney
d. Vesicoureteral reflux
23- medullary carcinoma of thyroid arises from ?
   a- parafollicular cells
   b- cells lining the acini
   c- capsule of thyroid
   d- stroma of the gland
24- a patient undergoes thyroid surgery following which he develops perioral tingling
   his blood calcium is 8.9 meq/l. next step in the management is ?
   a- vitamin D orally
   b- oral calcium and vitamin D
   c- intravenous calcium gluconate and serial monitoring
   d- wait for calcium to decrease to less than 7 meq/l before taking further action
25- Carcinoma of the bladder:
   A. Is primarily of squamous cell origin.
   B. Is preferentially treated by radiation.
   C. May be treated conservatively by use of intravesical agents even if it invades
      the bladder muscle.
   D. May mimic an acute UTI with irritability and hematuria.
   E. Is preferentially treated by partial cystectomy.
26- Within the age group 10 to 35 years, the incidence of carcinoma of the testis in
   males with intra-abdominal testes is:
   A. Equal to that in the general population.
   B. Five times greater than that in the general population.
   C. Ten times greater than that in the general population.
   D. Twenty times greater than that in the general population.
27- Which of the following conditions is associated with increased risk of breast
   cancer?
   A. Fibrocystic mastopathy.
   B. Severe hyperplasia.
   C. Atypical hyperplasia.
   D. Papillomatosis.
28- Which of the following are the most important and clinically useful risk factors
   for breast cancer?
   A. Fibrocystic disease, age, and gender.
   B. Cysts, family history in immediate relatives, and gender.
   C. Age, gender, and family history in immediate relatives.
   D. Obesity, nulliparity, and alcohol use.
29- in post operative room after thyroid surgery , patient developed sudden respiratory
   distress , dressing was removed and it was found to be slightly blood stained and
   wound was bulging . what will be the first thing to be done ?
   a- tracheostomy
   b- cricothyroidectomy
   c- laryngoscopy and intubation
   d- remove the stitch and take the patient to O.T
30- Which of the following approaches is considered standard care for most Wilms’ tumor patients in the United States today?

a. Adriamycin and vincristine therapy followed by surgical resection  
b. Needle biopsy followed by either chemotherapy or resection depending upon the histology  
c. Primary surgical resection followed by chemotherapy  
d. Radiation therapy if judged unresectable on CT or MRI imaging

31- A one month old female infant is brought to you for evaluation of afriable polypoid mass prolapsing through the vaginal introitus. Your presumptive diagnosis is which of the following?

a. Ectopic ureterocele  
b. Rectal prolapse  
c. Congenital adrenal hyperplasia with ambiguous genitalia  
d. Embryonal rhabdomyosarcoma