Pathology Exam 3

SECTION A: MCQs

1. A 44-year-old woman who has had multiple sexual partners for the past 30 years has an abnormal Pap smear with cytologic changes suggesting human papillomavirus (HPV) infection. Without treatment, she is most likely to develop which of the following lesions?
a. Squamous cell carcinoma
b. Non-Hodgkin's lymphoma
c. Kaposi sarcoma
d. Adenocarcinoma

2. A 14-year-old healthy girl has a 0.3 cm reddish, slightly raised nodule on the skin of the upper part of her chest found on a routine physical examination. She states that this lesion has been present for years and has not appreciably changed in size or color. Which of the following neoplasms is this nodule most likely to be?
a. Hemangioma
b. Melanoma
c. Carcinoma
d. Glioma

3. Which of the following is a mixed tumor?
a. Myxoma
b. Adenoma
c. Adenosquamous carcinoma
d. Liposarcoma

4. A 35-year-old woman had a firm nodule palpable on the dome of the uterus six years ago recorded on routine physical examination. The nodule has slowly increased in size and now appears to be about twice the size it was when first discovered. By ultrasound scan it is solid and circumscribed. She remains asymptomatic. Which of the following neoplasms is she most likely to have?
a. Adenocarcinoma
b. Leiomyosarcoma
c. Leiomyoma
d. Metastasis

5. The following are malignant tumors except which one?
a. Meningioma
b. Angiosarcoma
c. Neroblastoma
d. Leukemias

6. Characteristics of tumors may be described under the following except
a. Duration of the tumor
b. Rate of growth

c. Metastasis
d. Microscopic features

7. Which of the following is NOT true?
a. Anaplasia is lack of differentiation
b. Anaplasia is a characteristic of benign tumors
c. Pleomorphism is the variation in size and shape of the tumor cells
d. Differentiation is a characteristic of Neoplastic cells

8. Cancers may spread to distant sites by the following pathways except
a. Lymphatic spread
b. Haematogenous spread
c. Spread along body cavities
d. Spread by close physical contact to other body tissues

9. UV radiation may cause carcinogenesis in the following mechanism
a. Inhibition of cell division
b. Induce gene mutation
c. Cause cell death
d. All the above

10. The following viruses have been implicated in human tumors EXCEPT
a. Epstein Barr Virus (EBV)
b. Herpes Simplex Virus type 2, (HSV-2)
c. Human papilloma virus
d. Hepatitis – B virus, (HBV)

11. Steatosis (fatty change) is
a. Intracellular accumulation of neutral fat within parenchymal cells
b. Deposition of mature adipose cells in the stromal connective tissue
c. Pathologic accumulation of proteins in the cytoplasm of cells
d. None of the above

12. Albinism is caused by;
a. Reduced tyrosinase in melanocytes
b. Defective melanocytes
c. Defective tyrosinase
d. Defective melanin
13. The following are syndromes resulting from numerical aberrations of chromosomes EXCEPT
a. Down’s syndrome
b. Klinefelter’s syndrome
c. Turner’s syndrome
d. None of the above

14. Blastomas are
a. Benign tumor made of mature but disorganized cells of tissues indigenous to the organ
b. Group of malignant tumors which arise from embryonal cells
c. Name given to the ectopic islands of normal tissue
d. None of the above

15. Tumors of the following organs will frequently have secondaries in the liver EXCEPT;
a. Bowel
b. Spleen
c. Pancreas
d. Uterus

16. Which of the following is not a premalignant lesion?
a. Carcinoma in situ
b. Neurofibromatosis
c. Cirrhosis of the liver
d. Lymphoma

17. The following are modifiable risk factors of cancer except
a. Viruses
b. Ionization radiation exposure
c. Smoking
d. Extended exposure to UV light

18. Fine needle aspiration cytology is most often used for diagnosis of
a. Palpable mass lesions
b. Leukemia
c. Hemophilia
d. Impalpable mass lesions

19. Which of the following hormones have been shown to influence carcinogenesis?
a. Oestrogen
b. Contraceptive hormones
c. Anabolic steroids
d. All the above

20. An epidemiologic study is performed to find risk factors for development of malignant neoplasms. A statistical analysis of pre-existing medical conditions is done. Some pre-existing chronic medical conditions are observed to precede development of malignant neoplasms, while others do not. Which of the following conditions is most likely to be statistically related to development of a malignancy?
a. Essential hypertension
b. Coronary artery disease
c. Chronic bronchitis
d. Ulcerative colitis

SECTION B: SAQs
1. Explain the mode action of anti cancer drugs (4 marks)
2. Name five human cancers caused by viruses indicating the respective virus (5 marks).
3. Describe four complications and hazards of fine needle aspiration? (8 marks)
4. Explain the process of intracellular accumulation of proteins (6 marks)
5. Explain the difference exfoliative cytology and interventional cytology (10 marks)
6. Identify five treatment options for a client diagnosed with a tumor (7 marks)

SECTION C: LAQs

1. Identify five pathologic diagnosis of cancer (20 marks)
2. What are the contrasting features of benign and malignant tumors? (20 marks)