

## AMREF INTERNATIONAL UNIVERSITY SCHOOL OF MEDICAL SCIENCES DEPARTMENT OF NURSING & MIDWIFERY SCIENCES END OF SEMESTER AUGUST EXAMINATIONS

# COURSE CODE AND TITLE: DOP 112; FUNDAMENTALS OF ONCOLOGY AND PALLIATIVE CARE

DATE: 7<sup>th</sup> August 2023

Duration: 2 HOURS

Start: 9:00 AM

Finish: 11:00 AM

### INSTRUCTIONS

- 1. This exam is out of 70 marks
- **2.** This Examination comprises THREE Sections. Section I: Multiple Choice Questions (20 marks) Section II: Short Answer Questions (30 marks) and Section III: Long Answer Questions (20 marks)
- **3.** Answer ALL Questions.
- 4. Do Not write anything on the question paper -use the back of your booklet for rough work if need be.

### **SECTION I: MULTIPLE CHOICE QUESTIONS**

- 1. Cancer of B lymphocytes is called:-
  - A. Sarcoma
  - B. Melanoma
  - C. Carcinoma
  - D. Myeloma
- 2. Diethylstilboestrol (DEB) is a carcinogen. Which organ does it affect:-
  - A. Kidney
  - B. Vagina
  - C. Lungs
  - D. Heart
- 3. One of the following is true of carcinoma in situ:-
  - A. The tumour cells have not invaded neighbouring tissue.
  - B. The tumour has metastasized.
  - C. The tumour cells not invaded other systems in the body
  - D. The tumour cells only have one mutated gene
- 4. The kind of foods have been linked to colon cancer:-
  - A. Microwaved foods
  - B. Processed meats
  - C. Foods with salt substitutes
  - D. Shell fish
- 5. Cancer is caused by:-
  - A. Uncontrolled mitosis
  - B. Uncontrolled meiosis
  - C. Rupturing of cells
  - D. Loss of immunity of the cells
- 6. Migration of cancer cells form the site of origin to other sites is called:-
  - A. Diapedesis
  - B. Metastasis
  - C. Proliferation
  - D. Mutation

- 7. The following is a characteristic of the cancer cell:-
  - A. Density dependent inhibition
  - B. Contact inhibition
  - C. Loss of anchorage dependence
  - D. Apoptosis
- 8. Angiogenesis is:-
  - A. Differentiation process
  - B. Growth factors
  - C. Contact inhibition
  - D. Blood vessel formation
- 9. The genes that directly inhibit cell growth or promote cell death:-
  - A. Gatekeeper genes
  - B. Caretaker genes
  - C. Checkpoints
  - D. Transcription factors
- 10. In damaged DNA is the arrest gene cell cycle deployed is:-
  - A. Rb
  - B. p53
  - C. Hedgehog receptor
  - D. p16
- 11. The chemical carcinogen likely to causes prostate cancer is:-
  - A. Radon
  - B. Arsenic
  - C. Cadmium
  - D. Asbestos
- 12. The most common solid tumours breast, colon etc. arise in:-
  - A. epithelial cells
  - B. mesothelial cells
  - C. nerve cells
  - D. connective tissue

- 13. The test for detecting precancerous cells is:-
  - A. MRI
  - B. CT Scan
  - C. Pap smear
  - D. Endoscopy
- 14. In general, tumour antigens have:-
  - A. High immunogenicity
  - B. Low immunogenicity
  - C. Low allergenicity
  - D. High allargenicity
- 15. Cancer cells can produce immunosuppressive cytokines such as:-
  - A. IL-4 and IL-5
  - B. IL-10 and IL-13
  - C. IL-10 and TGB-
  - D. IL-5 and IL-13
- 17. With regards to the cancer burden:-
  - A. Cancer is the 3<sup>rd</sup> leading cause of death worldwide
  - B. Cancer is the leading cause of death in Kenya
  - C. Cancer incidence in sub-Saharan Africa, for example, is projected to increase more than 92% in 2020 and 2040
  - D. Around one-eighth of deaths from cancer are due to tobacco use
- 18. The highest cause of cancer death globally is:-
  - A. Lung cancer
  - B. Stomach cancer
  - C. Breast cancer
  - D. Liver cancer
- 19. The most effective response to a tumour:-
  - A. Antibodies
  - B. Cytotoxic T cells
  - C. Macrophages

### D. Natural killer cells

20 The aim of palliative care is to:-

- A. Provide comfort, support and relief of suffering
- B. Care for patients with cancer only
- C. Care for the dying patient only
- D. Prevent the patient from dying in hospital

# SECTION II:SHORT ANSWER QUESTIONS(30 MARKS)1. Outline five (5) competencies of an oncology nurse.(5 marks)2. Differentiate between benign and malignant tumours.(6 marks)3. State four (4) characteristics cancer cell.(4 marks)4. Describe the three (3) checkpoints that control normal human cell cycle.(6 marks)5. Outline four (4) psychosocial and spiritual care interventions in palliative care.(4 marks)6. Describe classification of cancers according to histological analysis.(5 marks)

### SECTION III: LONG ANSWER QUESTIONS

### (20 MARKS)

1. Carcinogenesis is an important process in the development of cancer.	
a) Define the term Carcinogenesis.	(2 marks)
b) State and explain 3 factors that influence carcinogenesis.	(6 marks)
c) Describe the 3 steps of carcinogenesis.	(12 marks)