

## AMREF INTERNATIONAL UNIVERSITY SCHOOL OF MEDICAL SCIENCES DEPARTMENT OF NURSING & MIDWIFERY SCIENCES END OF SEMESTER AUGUST 2024 EXAMINATIONS

# COURSE CODE AND TITLE: DOP 116-CANCER TREATMENT MODALITIES

DATE: Tuesday 6<sup>th</sup> August 2024

**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. Which of the following is the most common adverse reaction of carpecitabin?
  - A. Neurotoxicity
  - B. Nephrotoxicity
  - C. Nausea and vomiting
  - D. Myelosuppression
- 2. Which of the following group of drugs is **NOT** indicated in management of Chemotherapy induced Nausea and vomiting?
  - A. Corticosteroids
  - B. Serotonin antagonist
  - C. Serotonin protagonist
  - D. Dopamine antagonists
- 3. Which of the following is true about chemotherapy induced mucocitis?
  - A. Begins 10-15 days after initial treatment
  - B. May last for 15-20 days after treatment
  - C. Analgesics are not indicated in mucocitis
  - D. Begins 7-14 days after initial treatment
- 4. Letrozole:
  - A. Interferes with the action of oestrogen
  - B. Decreases concentration of oestrogen receptors
  - C. Causes change in shape of oestrogen receptors
  - D. Prevents formation of oestrogen
- 5. Chemotherapy destroys highly dividing cells by killing them with high energy beams
  - A. True
  - B. False
- 6. Radiation is used to:
  - A. Kill cells directly via induction of DNA damage and cell death
  - B. Prevent cancer growth by destroying nearby vessels
  - C. Force normal cell s to kill nearby cells
  - D. All of the above
- 7. Fulvestrant is a:
  - A. Chemotherapy
  - B. Targeted therapy
  - C. Hormonal therapy
  - D. Radiotherapy

- 8. Which one of the following is not one of the side effect of Filgastrim
  - A. Spleen rupture
  - B. Acute respiratory distress syndrome
  - C. Capillary leak syndrome
  - D. Mucocitis
- 9. Which of the following conditions is a contraindication for chemotherapy?
  - A. Pregnancy
  - B. Bone marrow depression
  - C. Recent surgery
  - D. All of the above
- 10. Which of the following measures should the nurse include in the plan of care of a client receiving

brachytheraphy?

- A. Plan to spend extra time with the client to provide emotional support
- B. Ensure that chemotherapy does not extravasate into patient tissues
- C. Keep the door to the clients' room closed
- D. Encourage family members to visit for at least one hour per day.
- 11. What is target therapy?
  - A. Kill all cell
  - B. Attack and kill cancer cells
  - C. Kill red blood cells
  - D. None of the above
- 12. Which of the following is **NOT** the role of surgery in cancer care?
  - A. Palliative
  - B. Curative
  - C. Diagnostic surgery
  - D. None of the above
- 13. Which of the following treatment modalities would be appropriate for the emergency management of a patient with stage four spinal cord compression ?
  - A. Chemotherapy
  - B. Hormonal therapy
  - C. Radiotherapy
  - D. Targeted therapy

- 14. All the following determine the amount of radiation to be given to a patient **EXCEPT** ?
  - A. Tumour radio sensitivity
  - B. Normal tissue tolerance
  - C. Volume of tissue to be radiated
  - D. The role radiation in the treatment plan

15. Which of the following chemotherapeutic agent is prepared and administered in 5% dextrose rather than normal saline?

- A. Oxaliplatin
- B. Carpecitabin
- C. Vincristine
- D. Vinblastine
- 16. What is the role of Mesna in chemotherapy administration?
  - A. Prevent nausea and vomiting
  - B. Prevent haemorrhagic cystitis
  - C. Increase the bioavailability of cyclophosphamide
  - D. Prevent neurotoxicity
- 17. Which of the following situations warrants avoidance of ADT?
  - A. With radiation therapy for low risk disease
  - B. Monotherapy for localized disease
  - C. Neoadjuvant therapy before prostatectomy
  - D. All of the above
- 18. Gynaecomacia is a side effect associated with:
  - A. ADT use
  - B. Chemotherapy
  - C. Targeted therapy
  - D. Cell cycle inhibitors
- 19. The removal of the breast tissue including nipple, areola and axillary lymph nodes, leaving the chest wall muscles intact is?
  - A. Modified radical mastectomy
  - B. Nipple sparing mastectomy
  - C. Skin sparing mastectomy
  - D. Simple total mastectomy

- 20. Which of the following is a symptom of osteoradionecrosis?
  - A. Limited range of motion of the jaw
  - B. Xerostomia
  - C. Facial and jaw swelling
  - D. Pain at rest

#### SECTION II: SHORT ANSWER QUESTIONS

### (30 MARKS)

(8mks)

(6mks)

(20 MARKS)

- 1. With use of example, briefly describe the classification of chemotherapeutic agents based on phase of the cell cycle that they act on. (8mks).
- 2. What are the advantages of Albumin bound paclitaxel over the conventional paclitaxel in cancer management? (2mks)
- 3. State four (4) therapeutic limitations of taxanes
- 4. Briefly outline common complications associated with Radiotherapy
- Outline six (6) important checklist information to consider before initiating Androgen deprivation therapy. (6mks).

### SECTION III: LONG ANSWER QUESTIONS

- 1. Mrs. Gabriela, a known breast cancer patient who has undergone both Radiotherapy and chemotherapy is admitted in your facility.
- a) Discuss the ten (10) nursing management Mrs. Gabriela while undergoing chemotherapy(10 mks)
- b) Discus the specific Nursing care of Mrs. Gabriela while on radiotherapy (10mks)