



**AMREF INTERNATIONAL UNIVERSITY  
SCHOOL OF MEDICAL SCIENCES  
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES  
END OF SEMESTER DECEMBER 2022 EXAMINATIONS**

**COURSE CODE AND TITLE: DOP 116 CANCER TREATMENT MODALITIES**

**DATE: 2<sup>nd</sup> DECEMBER 2022**

**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 A: Multiple Choice Questions (20 marks) Section B: Short Answer Questions (30 marks) and Section C: 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 A: MULTIPLE CHOICE QUESTIONS****(20 MARKS)**

1. The nurse should instruct the client on vincristine (Oncovin):
  - A. To use loperamide (Imodium)
  - B. That fluid restriction is recommended
  - C. To eat a low fiber, bland diet
  - D. About bowel regimen
  
2. The sign or symptom most reliable early indicator of infection in a client with neutropenia:
  - A. Fever
  - B. Chills
  - C. Dyspnoea
  - D. Diaphoresis
  
3. A female client is receiving radiation therapy to her chest wall for recurrent breast cancer. Her chart notes that she has also been diagnosed with esophagitis. Which of the following symptoms would this client most likely exhibit:
  - A. Painful, difficult swallowing and chest tightness
  - B. Burning and tightness in the chest
  - C. Painful ulcerations of the mouth
  - D. Nausea, vomiting, abdominal cramping
  
4. A female client with cancer is receiving chemotherapy and develops thrombocytopenia. The nurse identifies which intervention as the highest priority in the nursing plan of care:
  - A. Monitoring temperature
  - B. Ambulation three times daily
  - C. Monitoring the platelet count
  - D. Monitoring for pathological fractures
  
5. The removal of entire breast, pectoralis major and minor muscles and neck lymph nodes which is followed by skin grafting is a procedure called:
  - A. Simple mastectomy
  - B. Modified radical mastectomy
  - C. Radiation therapy
  - D. Radical mastectomy
  
6. Chemotherapy is one of the therapeutic modalities for cancer. This treatment is contraindicated to which of the following conditions:
  - A. Recent surgery
  - B. Pregnancy
  - C. Bone marrow depression
  - D. All of the above
  
7. Radiation protection is very important to implement when performing nursing procedures. When the nurse is not performing any nursing procedures what distance should be maintained from the client:
  - A. 1 feet
  - B. 2 feet
  - C. 2.5 feet
  - D. 3 feet

8. A female client is hospitalized for insertion of an internal cervical radiation implant. While giving care, the nurse finds the radiation implant in the bed. The initial action by the nurse is to:
- A. Call the physician
  - B. Reinsert the implant into the vagina immediately
  - C. Pick up the implant with gloved hands and flush it down the toilet
  - D. Pick up the implant with long-handled forceps and place it in a lead container
9. Nausea and vomiting is an expected side effect of chemotherapeutic drug use. Which of the following drug should be administered to a client on chemotherapy to prevent nausea and vomiting:
- A. Metochlopramide (Metozol)
  - B. Succimer (Chemet)
  - C. Anastrozole (Arimidex)
  - D. Busulfan (Myleran)
10. A client is taking Cyclophosphamide (Cytosan) for the treatment of lymphoma. The nurse is cautious in administering the medication because this drug poses the fatal side effect of:
- A. Alopecia
  - B. Myeloma
  - C. CNS toxicity
  - D. Hemorrhagic cystitis
11. Nurse Joy is caring for a client with an internal radiation implant. When caring for the client, the nurse should observe which of the following principles:
- A. Limit the time with the client to 1 hour per shift
  - B. Do not allow pregnant women into the client's room
  - C. Remove the dosimeter badge when entering the client's room
  - D. Individuals younger than 16 years old may be allowed to go in the room as long as they are 6 feet away from the client
12. When considering autologous HSC transplantation, which of the following factors is most likely to be a contraindication for this procedure:
- A. Age > 50 years
  - B. Previous HSC transplantation
  - C. Significant comorbidity
  - D. There are no contraindications
13. Immunotherapy is used to stimulate the body's immune system to fight against cancer. One type of immunotherapy uses experimentally produced antibodies to target specific proteins on the surface of cancer cells. This type of immunotherapy is called:
- A. Gene therapy
  - B. Vaccines composed of antigens
  - C. Monoclonal antibody therapy
  - D. Biologic response modifiers
14. Biologic response modifiers improve the immune system's ability to find and destroy cancer cells. One biologic response modifier, called interferon, is used to treat which of the following cancers?
- A. Breast cancer
  - B. Malignant melanoma
  - C. Prostate cancer
  - D. Colon cancer

15. Specifically, what part of the immune system does immunotherapy primarily use:
  - A. All WBCs
  - B. Cytotoxic T-lymphocytes
  - C. RBCs
  - D. None of the above
16. What is meant by targeted therapy:
  - A. Attack all cells
  - B. Attack or kill cancer cells
  - C. kill WBCs
  - D. A& C are correct
17. A client is receiving the cell cycle–nonspecific alkylating agent thiotepa (Thioplex), 60 mg weekly for 4 weeks as part of a chemotherapeutic regimen to treat bladder cancer. How does thiotepa exert its therapeutic effects:
  - A. It interferes with deoxyribonucleic acid (DNA) replication only
  - B. It interferes with ribonucleic acid (RNA) transcription only
  - C. It interferes with DNA replication and RNA transcription
  - D. It destroys the cell membrane, causing lysis
18. The client with leukemia is receiving busulfan (Myleran) and allopurinol (Zyloprim). The nurse tells the client that the purpose if the allopurinol is to prevent:
  - A. Nausea
  - B. Alopecia
  - C. Vomiting
  - D. Hyperuricemia
19. The nurse is caring for a female client experiencing neutropenia as a result of chemotherapy and develops a plan of care for the client. The nurse plans to:
  - A. Restrict all visitors
  - B. Restrict fluid intake
  - C. Teach the client and family about the need for hand hygiene
  - D. Insert an indwelling urinary catheter to prevent skin breakdown
20. The male client is receiving external radiation to the neck for cancer of the larynx. The most likely side effect to be expected is:
  - A. Dyspnea
  - B. Diarrhea
  - C. Sore throat
  - D. Constipation

**SECTION B: SHORT ANSWER QUESTIONS (30 MARKS)**

1. State the five (5) types of biological therapies used in cancer treatment (5 marks)
2. Your patient diagnosed with cervical cancer has been prescribed cisplatin at a dose of 80mg/m<sup>2</sup>. She weighs 52kg with a height of 157cm. Her serum creatinine is 68 micromol/L. Calculate the BSA and the appropriate dose of cisplatin  
.. (5 marks)
3. Outline six (6) types of chemotherapy wastes (6 marks)
4. Highlight the treatment process in radiation therapy (6 marks)
5. Describe the four (4) factors influencing the outcome of Hematopoietic Stem Cell Transplant (8 marks)

**SECTION C: LONG ANSWER QUESTION – (20 MARKS)**

1. Your patient is scheduled for laparotomy to rule out gastric cancer.
  - a) State the six (6) features of Surgical Intervention (6 marks)
  - b) Discuss the three (3) types of surgeries used in oncology (6 marks)
  - c) Discuss the nursing consideration for your patient until discharge (8 marks)

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