

National Board of Examinations

Question Paper Name : DrNB Medical Oncology Paper1

Is this Group for Examiner? : No

Enable Mark as Answered Mark for Review and Clear Response : Yes

Question Number : 1 Question Type : SUBJECTIVE

- a) Describe the anti-cancer class of drugs which can cause cardiac toxicity. [3]
- b) Compare and contrast cardiotoxicity caused by anthracyclines and Her2 targeted therapy. [4]
- c) Discuss the prevention and management of anthracycline induced cardiotoxicity. [3]

Question Number : 2 Question Type : SUBJECTIVE

- a) Enumerate the hallmarks of cancer. [3]
- b) Epithelial to mesenchymal transition. [3]
- c) Write in detail about the tumor microenvironment. [4]

Question Number : 3 Question Type : SUBJECTIVE

- a) What is the radiobiological principle behind fractionation in conventional Radiotherapy? [3]
- b) What are the indications of post mastectomy radiotherapy in breast cancer? [4]
- c) Discuss briefly about the radiation induced toxicities seen in breast cancer patients. [3]

Question Number : 4 Question Type : SUBJECTIVE

- a) Discuss the mechanism of action of Her2 targeted agents. [3]
- b) List the novel Her2 targeted agents. [3]
- c) Discuss the toxicities and the mechanism of resistance to Her2 targeted therapy. [4]

Question Number : 5 Question Type : SUBJECTIVE

- a) Discuss the molecular pathophysiology of cancer cachexia. [3]
- b) Nutritional assessment in cancer patients. [3]
- c) Discuss the management of cancer cachexia. [4]

Question Number : 6 Question Type : SUBJECTIVE

- a) What is microbiota? What is the role of microbiota in carcinogenesis? [3]
- b) Application of microbiota in cancer prevention and treatment. [4]
- c) Metagenomics. [3]

Question Number : 7 Question Type : SUBJECTIVE

- a) Enumerate the Oncogenic viruses. [3]
- b) Discuss HPV induced carcinogenesis. [3]
- c) Briefly describe the role of vaccines in cancer prevention. [4]

Question Number : 8 Question Type : SUBJECTIVE

- a) Outline the estrogen receptor pathway and mechanisms of resistance in breast cancer. [4]
- b) What are the therapeutic options to overcome the endocrine resistance? [3]
- c) Discuss briefly role of anti-estrogen therapy in tumors other than breast cancer. [3]

Question Number : 9 Question Type : SUBJECTIVE

- a) Rationale for using CART cell therapy. [4]
- b) Indications and side effects of CART cell therapy. [3]
- c) Bispecific T cell engagers. [3]

Question Number : 10 Question Type : SUBJECTIVE

- a) Proton therapy: advantages and disadvantages, and specific indications in current day practice. [3]
- b) Role of nuclear medicine in management of neuroendocrine tumors. [4]
- c) Radionuclide antibody drug conjugates. [3]