Candidate's Seat No:

### D.M. Examination

Branch IV: Medical Oncology

Paper-I

(Applied Basic Sciences)

Date: 02-07-2019, Tuesday]

[Time: 3 Hours

[Max. Marks: 100

20

20

- **Instructions**: (1) Figure to the right indicates marks.
  - (2) Draw diagram wherever necessary.
  - (3) Write legibly.
  - 1. Compare and contrast the Cancer Stem Cell Theory versus the Clonal Evolution Theory. Illustrate your answer with suitable examples.
  - 2. Discuss the utility of the knockout mouse model for the study of carcinogenesis. Give suitable examples.
  - 3. Discuss the cyclin dependent kinases. What is their role in the pathogenesis of cancer? 20
  - 4. What is the relationship between inflammation and cancer? Illustrate with examples. 20
  - Write short notes on:

 $5 \times 4 = 20$ 

- a. Mesenchymal to Epithelial Transition
- b. Peptide Receptor Radionuclide Therapy
- c. Role of thymus in immune regulation
- d. Cytochrome enzyme system and medication

# D.M. Examination Branch IV : Medical Oncology Paper-II

(Speciality)

Date: 05-07-2019, Friday] [Max. Marks: 100 [Time: 3 Hours **Instructions**: (1) Figure to the right indicates marks. (2) Draw diagram wherever necessary. (3) Write legibly. 1. Discuss drug-induced peripheral neuropathy in cancer, its prevention and management guide lines. 20 2. Discuss non-pharmacological interventions for metastatic bone disease. Discuss the management of hypercalcemia of cancer. 20 3. Discuss the presentation, risk stratification and principles management of soft tissue sarcomas in the paediatric age group. 20 4. What is Teen and Young Adult Oncology? Discuss the problems specific to this group. 20 5. Write short notes on:  $5 \times 4 = 20$ a. Daratuzumab b. Tisagenlecleucel c. Temozolomide versus dacarbazine

d. Surrogate markers for HPV infection

Candidate's	Seat	No	:	
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[Max. Marks: 100

#### D.M. Examination

Branch IV: Medical Oncology

Paper-III

Date: 08-07-2019, Monday]

(Speciality)

[Time: 3 Hours

- **Instructions**: (1) Figure to the right indicates marks.
  - (2) Draw diagram wherever necessary.
  - (3) Write legibly.
  - 1. Discuss the management of 16 year old boy with a mediastinal germ cell tumour. 20
  - 2. Discuss the role of adjuvant therapy in lung cancer. 20
  - 3. Discuss Geriatric Risk Assessment Scales, with suitable illustrations of their utility. 20
  - 4. Discuss the changing trends in cancer incidence in your cancer registry. Enumerate the possible causes. 20
  - 5. Write short notes on:

 $5 \times 4 = 20$ 

- a. Blinotumomab
- b. Compare and contrast radical radiotherapy versus prostatectomy
- c. Nimotuzumab
- d. Prophylactic neck dissection

Candidate's Seat No:

#### D.M. Examination

Branch IV : Medical Oncology (Modern Trends & Advances)

Paper-IV

Date: 10-07-2019, Wednesday)

[Time: 3 Hours

[Max. Marks: 100

- **Instructions**: (1) Figure to the right indicates marks.
  - (2) Draw diagram wherever necessary.
  - (3) Write legibly.
  - Formulate a working plan for all the schools in a district to educate high school children on cancer prevention.
  - 2. How would you integrate next generation sequencing into community oncology practice? 20
  - 3. What are the elements of a community based cervical cancer screening program? How would you organise into the existing framework?
  - 4. What is the impact of social media on oncology practice? What are the benefits and risks of such interaction?
  - 5. Write short notes on:

 $5 \times 4 = 20$ 

20

- a. gut microbiota and cancer
- b. generic drugs
- c. Molecular Tumour Board
- d. off label prescription