Q.P Code **Reg. No.**

D.M. (Oncopathology) Degree Regular/Supplementary Examinations

Paper IV – RECENT ADVANCES IN ONCOPATHOLOGY, MISCELLANEOUS TOPICS (EPIDEMIOLOGY, CANCER REGISTRY CREATION, RESEARCH METHODOLOGY, BIOETHICS, QUALITY CONTROL, ARTIFICIAL INTELLIGENCE IN ONCOPATHOLOGY AND PATHOLOGY INFORMATICS)

Time : Three Hours **Maximum : 100 Marks**

Essay: **(20)**

1. Role of next generation sequencing in central nervous systems tumours.

Short Essays **(8 x10 = 80)**

2. Antibody-drug conjugate (ADC) used in targeted cancer therapy with example.
3. Spatial transcriptomics in cancer therapy and research.
4. Cancer incidence and mortality in India – geographic trends.
5. Digital pathology in gene expression profiling of breast cancers.
6. Artificial intelligence in the early diagnosis of cervical cancer
7. A new monoclonal antibody is to be introduced for immunohistochemistry in your laboratory. Describe the steps you would implement before using it routinely in the diagnostic panel.
8. Participation for molecular pathology external quality assessment scheme has resulted in a major deviation. How will you address the issue?
9. When a 32-year-old lady comes to the OPD enquiring about HPV vaccination, how will you further guide her?

Model QP