

**Q P Code: 101516**

**Reg. No.:.....**

**D.M. (Paediatric Oncology) Degree Regular/Supplementary  
Examinations April 2025**

**Paper I – Basic and Applied Sciences as related to Pediatric Oncology**

**Time: 3 hrs**

**Max marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essay:**

**(20)**

1. Outline the molecular risk stratification of medulloblastoma. Comment on the prognosis and therapy of each subtype.

**Short essays:**

**(8x10=80)**

2. Tumor markers and their significance in clinical practice.
3. Elaborate the etiological factors and pathophysiology of Posterior Reversible Encephalopathy Syndrome (PRES).
4. Write short notes on:
  - Hazard ratio.
  - Forest plot.
5. Discuss in brief the role of radiotherapy in primary as well as adjuvant settings in the management of Ewing's sarcoma; cite the evidence from collaborative trials.
6. Describe Epstein-Barr Virus (EBV) driven malignancies in children.
7. Apoptosis.
8. Discuss pharmacogenomics of cisplatin induced ototoxicity and role of oto-protective agents during cisplatin therapy in pediatric oncology.
9. Cooperative clinical trials for pediatric cancers in India.

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