SURGICAL ONCOLOGY

PAPER – I

SURG. ONCO/D/15/47/I

Time : 3 hours

Max. Marks : 100

Important instructions:

- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts wherever appropriate.

Write short notes on:

1.	 Hallmarks of cancer: a) Enumerate all the hallmarks of cancer. b) Various constituent cell types of tumor microenvironment. c) Therapeutic Targeting of hallmarks of cancer. 	4 4 2
2.	 Molecular methods in cancer: a) Enumerate different molecular diagnostic technologies in Oncology. b) Fluorescence in situ hybridization (FISH). 	5 5
3.	 a) Oncogenic Viruses. b) Human Papilloma Virus – Mechanism of oncogenesis, Tumor and Viral types and prevention. 	3 2+2+3
4.	a) BRCA related cancers.b) Risk reducing surgeries in BRCA mutants.	5 5
5.	Aromatase Inhibitors: a) Classification & Mechanism of action b) Indications c) Toxicity and its prevention	 2+2 2 2+2
6.	Concurrent Chemoradiation: a) Rationale. b) Radiation Sensitizers. c) Current therapeutic applications.	2 4 4
7.	 Cervical Cancer Screening: a) Methods. b) Bethesda System. c) Atypical Squamous Cells. d) Screening Guidelines (ACS). 	2 3 2 3
		P.T.O.

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8.	Assessment of clinical response : a) Clinical Tools b) Imaging and Biomarkers c) Circulating Tumor Cells	3+3 2
9.	 Research Methodology: a) Classification of Epidemiological Study designs. b) Meta analysis. c) Randomized Phase –III studies with examples as applied to surgical oncology. 	2
10.	Genetics Counselinga) Indications.b) Components of counseling session.c) Issues in cancer genetic counseling.	2
