

Shri Vaishnav Institute of Science Department of Life Science Generic Elective (GE) Under Graduate Courses

SEMESTER IV

| COURSE CODE | Category | COURSE NAME | TEACHING & EVALUATION SCHEME | | | | | | | | |
|-------------|----------|---|-------------------------------|------------------|-------------------------|-------------------------------|-------------------------|----|---|---|---------|
| | | | THEORY | | | PRACTICAL | | | | | |
| | | | END SEM University Exam | Two Term Exam | Teachers Assessment* | END SEM University Exam | Teachers Assessment* | Th | Т | Р | CREDITS |
| BTUG401 | GE | Therapeutic Approaches in Cancer Treatment | 60 | 20 | 20 | 0 | 0 | 3 | 0 | 0 | 3 |

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit; *Teacher Assessment shall be based following components: Quiz / Assignment / Project/ Participation in Class, given that no component shall exceed more than 10 marks.

Course Objectives

- 1. Students will understand the basics of cancer.
- 2. Understand about the causes of cancer.
- 3. Knowledge about various therapeutic approaches of cancer

Course Outcomes:

- 4. Students will understand the basics of cell cycle and cell division stages of cancer.
- 5. Students will get insights into therapeutic approaches to cancer.

Unit 1:

UNDERSTANDING BASICS OF CANCER: Cell division: Mitosis and Meiosis, Cell Cycle and Check Points.

Unit 2:

DIFFERENT CAUSE OF CANCER: Physical factors, Chemical factors, biological factors

Chairperson Board of Studies Life Science Chairperson Faculty of Studies Science Controller of Examinations SVVV, Indore Joint Registrar SVVV, Indore



Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore

Shri Vaishnav Institute of Science Department of Life Science Generic Elective (GE) Under Graduate Courses

BTUG401 Therapeutic Approaches in Cancer Treatment

Unit 3:

DIFFERENT STAGES OF CANCER: Metastasis, Stage 0, Stage I, Stage II, Stage III, Stage IV.

Unit 4:

CONENTIONAL CANCER THERAPIES: Principles and limitations of Surgery for Cancer, Radiation Therapy for Cancer, Chemotherapy for Cancer.

Unit 5:

EMERGING THERAPIES OF CANCER: Immunotherapy of Cancer, Targeted therapy of Cancer, Hormone therapy of cancer, Bone marrow transplant for Cancer.

Books:

- 1. Molecular Biology of Cancer: Mechanism, Targets and Therapeutics by Lauren Pecorino. Oxford University Press.
- 2. Therapeutics approaches in cancer treatment. by Asma Saleem Qazi, Kanwal Tariq . 2023

Chairperson Board of Studies Life Science Chairperson Faculty of Studies Science Controller of Examinations SVVV, Indore Joint Registrar SVVV, Indore