

**Course Name:Ph.D.**

**Course Code: RCW-4-13**

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### COURSE OBJECTIVES

1. To know various research operations in pharmacy field.
2. To understand advancement in clinical trial research.
3. To know different pharmaceutical technology.
4. To know Nano particles technology used in cancer disease.
5. To understand pharmaceutical advancement in pharmaceuticals packaging

UNIT S	CONTENTS	Contact Hrs.
I	History and opportunities horizons of pharmacy, Next door healthcare, Brain machine interface, In hospital pharmacy Telemediation, Health and wellness technology, Med advisor medication management	8
II	Government organization pharma industry, Hospital pharmacy and clinical research, Pharma marketing research, pharma industry research and development formulation, Veterinary pharma industry research & development	8
III	Artificial intelligence in new drug development, Advancement in clinical trial research, Improvement in diagnosis of patient disease, Digital mobile health development, Gene specific drug discovery and research, 3D printing technology for drug formulation in industry	8
IV	3D Medical device development, Biological medical product development from biological source, clinical application of herbal nutraceuticals, Natural preservation development in pharma industry	8
V	Recent development in the usage of robotic in pharmacy, Bio inspired nano particles development in cancer disease therapy, pharmaceutical packaging development, Targeted drug delivery research and development, Indian traditional herbs research and development	8

### REFERENCE BOOKS:

1.	Introduction to general pharmacy	Gaurav Agarwal
2.	A text book of hospital and clinical pharmacy	Dr. Pratibha Nand
3.	Advances in pharmaceutical technology	S.C. Dinda
4.	3D Printing of pharmaceuticals	Abdul W. Basit
5.	Health care services in India	Dr. Shaila Parveen
6.	Recent Advances in Clinical Trail	Dr. Praveen Bansal
7.	Pharmaceutical marketing in India	Subba Rao Chaganti
8.	Introduction to Novel Drug Delivery System	N. K. Jain
9.	Hand Book of Pharmaceutical Technology	Poonam Kushwaha
10.	Nano Technology in Cancer	Anshu Mathur