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SANTHIRAM COLLEGE OF PHARMACY

Approved by AICTE & PCI, New Delhi - Affiliated to JNTUA, Anantapur
NH - 18, Nandyal, Kurnool District, Andhra Pradesh - 518501.

7.2(2) Maintenance of Coarse files in institution



Santhiram College of Pharmacy

Nerawada, NH-40, Nandyal-518 501, Andhra Pradesh, India.

COURSE FILE RECORD

Name of the Course & Code:

Year:

Academic Year:


Semester:

CONTENTS:

1. **Vision & Mission of the Institute**
2. **Academic calendar & List of holidays**
3. **Subject Allocation & Individual Time Table with Tutorials**
4. **Program Outcomes(PO) and Course Outcomes(CO)- Mapping**
5. **Course Syllabus and List of Text and Reference books**
6. **Lesson Plan**
7. **Unit wise Questions (Subjective & MCQs)**
8. **Course Structure& Test Schedules**
9. **Registered No of students**
10. **Old question papers of University examination**
11. **MID I exam: question paper, test key and sample answer scripts(highest & lowest) marks result analysis & continuous assessment mode**
12. **Remedial Measures: Timetable and Identification of Weak Students**
13. **MID II exam: question paper, test key and sample answer scripts(highest & lowest) marks result analysis & continuous assessment mode**
14. **Consolidated statement of attendance and Internal marks & CAM**
15. **Academic dairy**
16. **Topics Beyond syllabus and mapping with CO's**
17. **End Semester Result Analysis & Assessment**
18. **Subject material: Unit wise lecture notes**
19. **Innovative measures employed in teaching-learning process**

Course Instructor(s):




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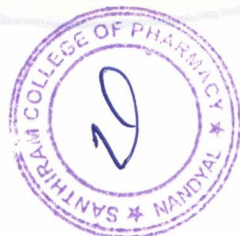
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Academic Calendar for B.Pharm III Year –II Semester (2021-22)

III Year II Semester B.Pharm (Working Days: 90 days)

1. Commencement of Classes : 14-03-2022
2. I Spell of instructions : 14-03-2022 to 07-05-2022
3. 1st Sessional Examinations : 09-05-2022 to 16-05-2022
4. II Spell of instructions : 17-05-2022 to 08-07-2022
5. 2nd Sessional Examinations : 11-07-2022 to 16-07-2022
6. End Practical Examinations : 18-07-2022 to 23-07-2022
7. Semester End Theory Examinations. : 25-07-2022 to 06-08-2022

Note: The lab internals are to be completed before the commencement of the II Mid examinations. The classes in charges are advised to plan for the same well in advance.




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III B.Pharmacy II Semester (2021-22)


Sub: BIOPHARMACEUTICS AND PHARMACOKINETICS (BP604T)

Subject Allocation

Name of the faculty: Designation:		
Course No	Year and Semester	Name of the Subject
604T	III B. Pharm II Semester	BIOPHARMACEUTICS AND PHARMACOKINETICS(Th)

Sub I/C




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III B. Pharmacy II Semester (2021-22)

Sub: BIOPHARMACEUTICS AND PHARMACOKINETICS (BP604T)

COURSE STRUCTURE

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP601T	Medicinal Chemistry III – Theory	3	1	4
BP602T	Pharmacology III – Theory	3	1	4
BP603T	Herbal Drug Technology – Theory	3	1	4
BP604T	Biopharmaceutics and Pharmacokinetics – Theory	3	1	4
BP605T	Pharmaceutical Biotechnology – Theory	3	1	4
BP606T	Quality Assurance – Theory	3	1	4
BP607P	Medicinal Chemistry III – Practical	4	-	2
BP608P	Pharmacology III – Practical	4	-	2
BP609P	Herbal Drug Technology – Practical	4	-	2
BP610CV	Comprehensive Viva Voce – VI	-	-	-
Total		30	6	30




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Course Outcomes (B.Pharm/M.Pharm/Pharm.D)

Name of the subject :

Department:

COURSE OUTCOMES (COs):

1. Acquire good knowledge of **INDUSTRIAL PHARMACY II**
2. Understand the process of technology transfer from lab to commercial batches
3. Understand the regulatory bodies and its role in manufacturing sector
4. To understand the various regulatory requirements for drug approval
5. Understand concepts and quality management systems and ISO 9000 series.
6. To know about Indian regulatory requirements like CDSCO COPPP.

PROGRAM OUTCOMES (POs):

PO1. To equip with the professional skills and to opt for higher education

PO2. To work as Associate Scientist in clinical pharmacokinetics.

PO3. To work in pharmaceutical industries with suitable needs

PO4. To work as Regulatory associate in CROs and data analysts.


PO5. To expertise in Regulatory bodies India and abroad.

Mapping of course outcomes (COs) to Program outcomes (POs) for Industrial Pharmacy II(BP702T)

Pos \ Cos	PO1	PO2	PO3	PO4	PO5
CO1	H	H			M
CO2	H	H	M	H	M
CO3	M	H	M		M
CO4	H		H		H
CO5	H		H	M	H

H > High M > Moderate L > Low




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Course Syllabus and List of Text and Reference books

Programme: B.Pharmacy

Title of Course & Course No: BIOPHARMACEUTICS AND PHARMACOKINETICS (604T)

Department: Pharmaceutics

Class: III B.Pharmacy – II Semester

Year: 2021-2022

Prerequisites: Basic knowledge on Biopharmaceutics and Pharmacokinetics concepts and applications of Pharmacokinetics in Pharmaceutical development.

Contact hours: 45 hrs

Unit-I Introduction to Biopharmaceutics

10hours

Absorption Mechanisms of drug absorption through GIT, factors influencing drug absorption through GIT, absorption of drug from Non per oral extra-vascular routes

Distribution Tissue permeability of drugs, binding of drugs, apparent, volume of drug distribution, plasma and tissue protein binding of drugs, factors affecting protein-drug binding. Kinetics of protein binding, Clinical significance of protein binding of drugs

UNIT-II

10hours

Elimination: Drug metabolism and basic understanding metabolic pathways renal excretion of drugs, factors affecting renal excretion of drugs, renal clearance, Non renal routes of drug excretion of drugs

Bioavailability and Bioequivalence: Definition and Objectives of bioavailability, absolute and relative bioavailability, measurement of bioavailability, in-vitro drug dissolution models, in-vitro-in-vivo correlations, bioequivalence studies, methods to enhance the dissolution rates and bioavailability of poorly soluble drugs.


UNIT-III

10hours

Pharmacokinetics: Definition and introduction to Pharmacokinetics, Compartment models, Non compartment models, physiological models, One compartment open model. (a) Intravenous Injection (Bolus) (b). Intravenous infusion and (c) Extra vascular administrations.

Pharmacokinetics parameters - KE , $t_{1/2}$, V_d , AUC , K_a , Cl_t and CLR - definitions methods of eliminations, understanding of their significance and application




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UNIT-IV

08hours

Multicompartment models: Two compartment open model. IV bolus Kinetics of multiple dosing, steady state drug levels, calculation of loading and maintenance doses and their significance in clinical settings.

UNIT-V

07hours

Nonlinear Pharmacokinetics: a. Introduction, b. Factors causing Non-linearity. c. Michaelis-menton method of estimating parameters, Explanation with example of drugs.

Sub&Code: BIOPHARMACEUTICS AND PHARMACOKINETICS (BP604T)

Recommended books:

- Biopharmaceutics and Pharmacokinetics-A Treatise, By D.M. Brahmankar and Sunil B.Jaiswal.
- Biopharmaceutics and Clinical Pharmacokinetics by, Milo Gibaldi.
- Applied biopharmaceutics and pharmacokinetics by Leon Shargel.
- Biopharmaceutics; By Swarbrick.
- Biopharmaceutics and pharmacokinetics by V. Venkateswarlu.

COURSE OBJECTIVES:


- ✓ Understand the basic concepts in biopharmaceutics, pharmacokinetics and their significance.
- ✓ Use of plasma drug concentration-time data to calculate the pharmacokinetic parameters to describe the kinetics of drug absorption, distribution, metabolism and excretion.
- ✓ To understand the concepts of bioavailability and bioequivalence of drug products and their significance.
- ✓ Understand various pharmacokinetic parameters, their significance and applications.

COURSE OUTCOMES:

At the End of this course the student should be able to

- Acquire good knowledge of Biopharmaceutics and Pharmacokinetics.
- Applications of Pharmacokinetics in Pharmaceutical development.
- Design and development of dose, dosage regimen and in solving the problems.




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Mid-1 QUESTION PAPER AS PER UNIV FORMAT

QUESTION PAPER TEXT KEY


sample answer scripts(highest & lowest)-ATTACHMENT(XEROX COPY)

marks result analysis-CATEGORIZE STUDENT PERFORMANCE

Grade	MARKS RANGE(M) for B.Pharm (Exclude CAM marks)	MARKS RANGE(M) for phrm D
WEAK	<8	<14
Average	8-10	15-20
Good	11-12	20-25
Excellent	13-15	26-30

CONTINUOUS ASSESSMENT(CAM)
AS PER UNIV FORMAT




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B. PHARMACY III YEAR II SEM- I MID EXAMINATION MAY-2022

SUBJECT: Biopharmaceutics and Pharmacokinetics **CODE:** BP604T

Date: 19/05/2022

Time: 120 MIN.

SESSION: AN

Max Marks: 30 Marks

PART – A

Answer All of the following

5X2= 10 M

1. a. Define Fick's first law of diffusion and write its equation?
- b. Define Phagocytosis and pinocytosis?
- c. What is Biotransformation?
- d. Define IVIVC? Write the levels of IVIVC.
- e. What is Bioequivalence

PART - B

Answer ANY ONE of the following

1x10 = 10 M

2. Write in detailed about factors affecting drug absorptions?
3. Define Bioavailability? Write the methods used to determine Bioavailability?

PART – C

Answer ANY TWO of the following

2x5 = 10 M

4. Write a short note on mechanism of drug absorption?
5. Define protein binding? write the factors affecting protein binding in detailed .
6. Define renal clearance? Write the factors affecting renal excretion of drugs?



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Remedial Measures: Timetable and Identification of Weak Students

Timetable and identification of Weak Students

TIME TABLE FOR WEAK STUDENTS BASED ON MID 1 RESULTS

IDENTIFICATION OF WEAK STUDENTS IN MID -I PERFORMANCE.

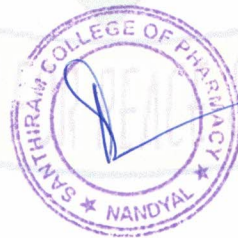
CRITERIA :


FOR B.PHARM (15 M)

<8MARKS /15 MARKS(EXCLUDE continuous assessment)- WEAKERS

FOR PHARM. D

<14 marks




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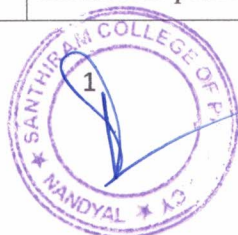
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Sub: BIOPHARMACEUTICS AND PHARMACOKINETICS (604T)

III B.Pharmacy II semester (2021-22)

Lesson Plan-Theory


S.No	Date		No of Hrs	Topic	Reference
	Sec A	Sec B			
				UNIT-I	
1	02-03-22	28-02-22	1	Introduction to Biopharmaceutics	R1
2	03-03-22	01-03-22	1	Absorption – Basics, Definitions	R1
3	05-03-22	04-03-22	1	Mechanisms of drug absorption through GIT	R1
4	07-03-22	04-03-22	1	Mechanisms of drug absorption	R3
5	09-03-22	05-03-22	1	Mechanisms of drug absorption	R2
6	10-03-22	10-03-22	1	factors influencing drug absorption	R1
7	12-03-22	11-03-22	1	factors influencing drug absorption though GIT	R2
8	14-03-22	12-03-22	1	absorption of drug from Non per oral extra-vascular routes	R1
9	14-03-22	14-03-22	1	Distribution - Introduction	R1
10	16-03-22	17-03-22	1	Tissue permeability of drugs	R1
11	17-03-22	19-03-22	1	binding of drugs to blood components	R1,R2
12	19-03-22	21-03-22	1	apparent volume of drug distribution	R2
13	21-03-22	24-03-22	1	plasma and tissue protein binding of drugs	R3
14	23-03-22	25-03-22	1	factors affecting protein-drug binding.	R1
15	24-03-22	26-03-22	1	Clinical significance of protein binding of drugs	R1,R4
16	26-03-22	28-03-22	1	Kinetics of protein binding	R1
				UNIT - II	
17	28-03-22	31-03-22	1	Elimination - Introduction	R4
18	04-04-22	01-04-22	1	Drug metabolism	R2
19	06-04-22	04-04-22	1	basic understanding metabolic pathways renal excretion of drugs	R1,R2
20	07-04-22	06-04-22	1	metabolic pathways	R1




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21	09-04-22	07-04-22	1	renal excretion of drugs	R1
22	11-04-22	08-04-22	1	factors affecting renal excretion of drugs	R2
23	13-04-22	09-04-22	1	renal clearance	R1,R2
24	16-04-22	11-04-22	1	Non renal routes of drug excretion of drugs	R1
25	18-04-22	16-04-22	1	Bioavailability and Bioequivalence - Basics	R1,R3
26	20-04-22	18-04-22	1	Definition and Objectives of bioavailability	R1
27	21-04-22	21-04-22	1	absolute and relative bioavailability	R4
28	23-04-22	22-04-22	1	measurement of bioavailability by pharmacokinetic models	R1,R2
29	25-04-22	23-04-22	1	measurement of bioavailability by pharmacodynamic models	R1,R2
30	27-04-22	25-04-22	1	in-vitro drug dissolution models	R1
31	28-04-22	26-04-22	1	in-vitro-in-vivo correlations	R1,R2
32	30-04-22	28-04-22	1	bioequivalence studies	R2,R3
33	30-04-22	29-04-22	1	methods to enhance the dissolution rates and bioavailability of poorly soluble drugs	R1,R4
UNIT - III					
34	02-05-22	30-04-22	1	Pharmacokinetics: Basic considerations	R1
35	04-05-22	02-05-22	1	Definition and introduction to Pharmacokinetics	R2
36	05-05-22	05-05-22	1	Compartment models	R1,R3
37	07-05-22	06-05-22	1	Pharmacokinetic models - classification	R1
38	09-05-22	07-05-22	1	Non compartment models	R1,R2
39	11-05-22	09-05-22	1	physiological models	R2
40	12-05-22	12-05-22	1	One compartment open model - a. Intravenous Injection (Bolus)	R1
41	14-05-22	13-05-22	1	b. Intravenous infusion	R2
42	16-05-22	14-05-22	1	c. Extra vascular administrations	R1
43	18-05-22	23-05-22	1	Pharmacokinetics parameters - K_E , $t_{1/2}$, V_d , AUC , K_a , Cl_T and Cl_R definitions	R1,R2
44	19-05-22	26-05-22	1	methods of eliminations	R3
45	21-05-22	27-05-22	1	Estimation of Pharmacokinetic parameters	R1,R2,R3
46	23-05-22	28-05-22	1	Calculations	R2
47	25-05-22	30-05-22	1	understanding of the significance of Pharmacokinetic parameters	R3
48	26-05-22	02-06-22	1	and applications	R3





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UNIT - IV					
49	28-05-22	03-06-22	1	Multicompartment models	R1,R2
50	30-05-22	04-06-22	1	Introduction	R3
51	01-06-22	06-06-22	1	Basic definitions	R1,R3
52	02-06-22	09-06-22	1	Assumptions for compartment models	R1,R2
53	04-06-22	10-06-22	1	Two compartment open model – i.v. bolus administration	R2,R3
54	06-06-22	13-06-22	1	Kinetics of multiple dosing	R2
55	08-06-22	16-06-22	1	steady state drug levels	R2
56	09-06-22	17-06-22	1	calculation of loading and maintenance doses	R2,R4
57	11-06-22	18-06-22	1	Their significance in clinical settings.	R4
UNIT - V					
58	13-06-22	20-06-22	1	Nonlinear Pharmacokinetics - Introduction	R1
59	15-06-22	23-06-22	1	Basic definitions	R1,R2
60	16-06-22	24-06-22	1	Zero order and first order kinetics	R1,R3
61	20-06-22	25-06-22	1	Linearity and Non-linearity	R1,R4
62	22-06-22	27-06-22	1	Factors causing Non-linearity.	R3
63	23-06-22	30-06-22	1	Michaelis-menten equation	R3
64	30-06-22	01-07-22	1	Estimating the parameters V_{max} and K_m	R4
65	02-07-22	02-07-22	1	Explanation with example of drugs.	R4

References:

1. Biopharmaceutics and Pharmacokinetics-A Treatise, By D.M. Brahmankar and Sunil B.Jaiswal.
2. Biopharmaceutics and pharmacokinetics by V. Venkateswarlu.
3. Applied biopharmaceutics and pharmacokinetics by Leon Shargel.
4. Biopharmaceutics and Clinical Pharmacokinetics by, Milo Gibaldi.




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Topics Beyond syllabus and mapping with CO's

1. Applications of Pharmacokinetics in Pharmaceutical development in industries.
2. To understand the plasma drug concentration-time data to calculate the pharmacokinetic parameters and use of this knowledge by applying in Bioavailability studies in pharma industries.
3. Design and development of dose, dosage regimen using knowledge of various pharmacokinetic parameters and bioavailability and bioequivalence studies.
4. Handling of various instruments related to disintegration, dissolution and diffusion studies.




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Consolidated statement of attendance, Internal marks & CAM (for b.phrm) (sent to univ)



End Result Analysis of students:

S.No	Reg .No	Name of the student	GRADE	
			CAP (CODE)	CAP (PRACTICAL)




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Unit Wise Questions

Question Bank

2M QUESTIONS


UNIT -1:

1. Define biopharmaceutics and write its applications
2. Explain Ficks first law of diffusion
3. Explain structure of GI membrane
4. Write a note on passive diffusion
5. What are the different routes of drug administration
6. What are the factors affecting drug absorption
7. What are the factors affecting drug distribution
8. Mention physiological barriers of drug distribution
9. Write about apparent volume of distribution
10. What is BBB and write its importance
11. Explain significance of protein binding
12. Define pharmacokinetics and write its applications
13. Explain kinetics of protein binding

UNIT -2:

1. Explain concept of Equivalents
2. What are various types of bioavailability?
3. What are various methods involved in measurement of bioavailability
4. What is the difference between bioavailability and bioequivalence
5. Write a note on IVIVC
6. Write the bioequivalence protocol
7. Explain concept of bioequivalence




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8. What is non renal excretion?
9. Notes on factors affecting urinary excretion of drugs?
10. Define drug metabolism and what are the pathways of metabolism
11. Write a note on phase-I pathways of drug metabolism
12. Write a note on phase-II pathways of drug metabolism
13. Write a note on enzyme induction
14. Write a note on enzyme inhibition
15. Explain hepatic clearance
16. Write a note on pharmacological activity of metabolites
17. Write a note on first pass effect
18. What is drug excretion and what are the steps involved in excretion

UNIT – 3:

1. What are the basic considerations of pharmacokinetics
2. Explain concept of compartment modeling
3. Write about biological half life
4. Explain AUC
5. What is the difference between AUC and ACMC
6. Explain MRT
7. Write about elimination rate constant
8. Assumptions for one compartment models


UNIT – 4:

1. Assumptions for multi/ two compartment models
2. What is loading dose and maintenance dose

UNIT - 5:

1. Write a note on non-linear kinetics
2. What are the reasons for non-linearity
3. Explain concept of linear kinetics
4. Write the difference between linear and nonlinear kinetics




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5. Explain significance of michaelis-menten equation

6. Write a note on michaelis-menten equation

5 & 10 M QUESTIONS

UNIT – 1

1. Write a note on mechanisms of GI absorption

2. Explain the factors affecting drug absorption

3. Explain the factors affecting drug distribution

4. What are the physiological barriers of drug distribution

5. Write a note on binding of drug to tissues, blood and proteins

6. a) Explain factors affecting protein binding

b) Explain significance and kinetics of protein binding

UNIT – 2

1. Write a note on phase-1 pathways of drug metabolism

2. Write a note on phase-2 pathways of drug metabolism

3. Explain the process of urinary/ renal drug excretion

4. a) Explain concept of clearance


b) Write a note excretion of drug through bile, feces, lungs and skin in brief

5. Explain the methods for the measurement of bioavailability ? Plasma level –time studies or urinary excretion studies?

6. Write in detail about IVIVC. Add notes on methods to enhance bioavailability of poorly soluble drugs?

7. Define bioequivalence. Write about bioequivalence study designs?




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UNIT – 3

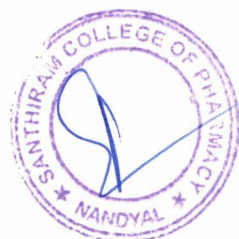
1. Explain one compartment open model-i.v.bolus administration and assessment of pk parameters?
2. Explain one compartment open model-i.v.infusion administration and assessment of pk parameters?
3. Explain one compartment open model-Extravascular administration and assessment of pk parameters?


UNIT – 4

1. Explain two compartment open model-i.v.bolus administration and assessment of pk parameters?
2. Explain method of residuals.
3. Explain loading dose and maintenance dose, calculations, their significance in clinical settings.

UNIT – 5

1. Explain factors/ reasons causing non-linearity?
2. Explain michaelis-menten equation and its significance. Write estimation of parameters V_{max} and K_m ?

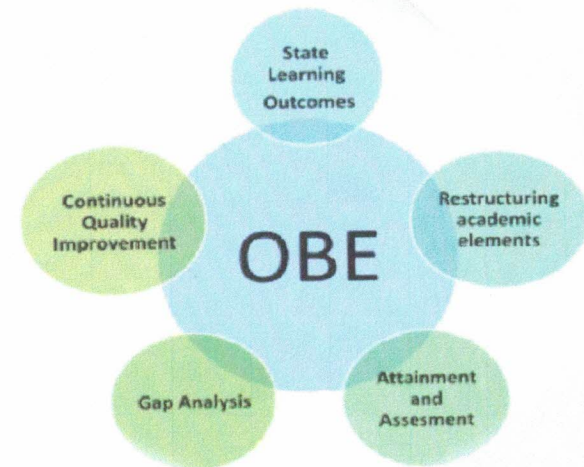
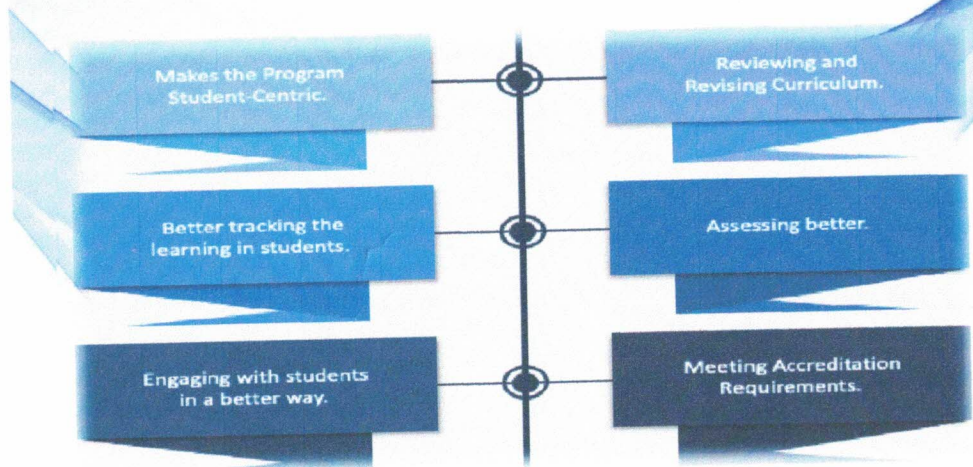



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Silent features of the conference:

1. Implementation of OBE
2. Characteristics of OBE Curricular
3. OBE Models
4. Program Education Objectives
5. Program Learning Outcomes
6. Course Learning out comes
7. Continual Quality Improvement

CREATING AWARENESS ON OUTCOME BASED EDUCATION & RESEARCH 04-12-2019



RESOURCE PERSON

Dr.R.E.Ugandhar

Professor

Dept. of Pharmacy practice, SRCP

CONVENOR

Dr.C. MADHUSUDHANA CHETTY

Principal, SRCP, NANDYAL

Principal
Santhiram College of Pharmacy
NH-18, NANDYAL

ORGANISED BY



**DEPARTMENT OF PHARMACEUTICS
SANTHIRAM COLLEGE OF PHARMACY**

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NH - 18, Nandyal, Kurnool District, Andhra Pradesh - 518501.

Date: 03/12/2019

CIRCULAR

This is inform to all staff members it is by inform that Department of Pharmaceutics is organising seminar "*Creating Awareness on Outcome Based Education & Research*" on 04/12/2019. The theme of the program is to implement the OBE in our institution. All faculties are requested to attend the program.

D. Reddy
Head of the Department

[Signature]
PRINCIPAL
Principal
Santhiram College of Pharmacy
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PROGRAM REPORT on CREATING AWARENESS ON OUTCOME BASED EDUCATION & RESEARCH

Date: 06/12/2019

Venue: Seminar Hall - Santhiram College of Pharmacy, Nandyal
Details of Resource person: Dr. R.E.Ugandhar, Head of the Department,
Department of Pharmacy practice,
Santhiram College of Pharmacy.

One day seminar on "*Creating Awareness On Outcome Based Education & Research*" was conducted to the srcp faculty to implement OBE programme to our students to increase the student performance and competency to the students by todays speaker Dr. R.E.Ugandhar, Professor SRCP.

This program was designed to with the following salient features and implement the same after completion of the program.

1. Implementation of OBE
2. Characteristics of OBE Curricular
3. OBE Models
4. Program Education Objectives
5. Program Learning Outcomes
6. Course learning out comes
7. Continual Quality Improvement

Outcome of Program:

1. Implementation of course files
2. Effective Program Educational Out comes
3. Effective Program Outcomes- Practical assessment Tools
4. Effective Assessment Planning
5. Robust Evaluation Planning

Head of the Department

PRINCIPAL

Santhiram College of Pharmacy
NH-18, NANDYAL



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Speaker-Dr.R..E.Ugandar deliver talk on OBE Implementation Dt:04-12-2019



Speaker-Dr.R.E.Ugandar deliver talk on OBE-models Dt: 04-12-2019


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One-day seminar on CREATING AWARENESS ON OUTCOME BASED EDUCATION & RESEARCH

List of Staff Participants

Date: 04/12/2019

S.No	Name of the Faculty	Signature
1	Mr. N. D.V.R. Saradhi	
2	Mr. N. Madana Gopal	
3	Mr. D. Maheswara Reddy	
4	Mr. R. Niranjana Kumar	
5	Mr. B. Venkata Ramana	
6	Mr. K. Pavan Kumar	
7	Mr. K. Sampath Kumar	
8	Mr. K. Bharath Kumar	
9	Mrs. C. Renuka Tejaswini	
10	Ms. K. Maheswari	
11	Mr. S. Venu	
12	Mrs. S. Gousia Begum	
13	Dr. C. Bharagava Reddy	
14	Ms. B. Mayuri	
15	Mrs. S. Parveen	
16	Mr. N. Srinivasa Reddy	
17	Dr. A. Sandeep	
18	Mrs. V. Saroja	
19	Ms. S. Susma Priya	
20	Mrs. S. Sumiya	
21	Ms. Anusha	

Head of the Department

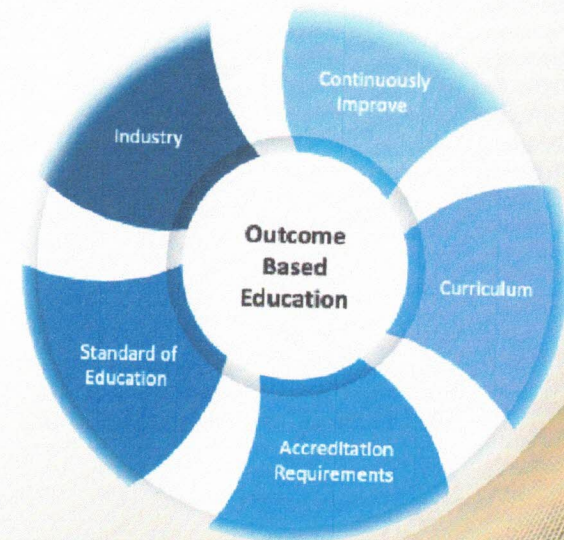
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Principal
Santhiram College of Pharmacy
NH-18, NANDYAL

Silent features of the conference:

1. Implementation of OBE
2. Characteristics of OBE Curricular
3. OBE Models
4. Program Education Objectives
5. Program Learning Outcomes
6. Course Learning out comes
7. Continual Quality Improvement



CREATING AWARENESS ON OUTCOME BASED EDUCATION & RESEARCH 10.02.2021



RESOURCE PERSON
Dr.P. PRAVEEN KUMAR

Professor

Dept. of Pharmacy practice, SRCP
CONVENOR

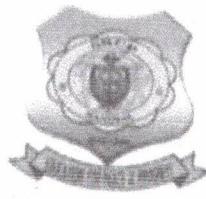
Dr.C. MADHUSUDHANA CHETTY
Principal, SRCP, NANDYAL

Principal
Santhiram College of Pharmacy
NH-18, NANDYAL

ORGANISED BY



DEPARTMENT OF PHARMACEUTICS
SANTHIRAM COLLEGE OF PHARMACY
NH-40, Nandyal – 518501, Kurnool Dist, A.P., INDIA



SANTHIRAM COLLEGE OF PHARMACY

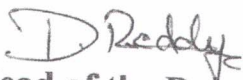
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Ref:SRCP/office/P.Ceutics /2020-21

Date: 08/02/2021

CIRCULAR

This is inform all staff members that Department of Pharmaceutics is organising **Creating Awareness on Outcome Based Education & Research** on 10/02/2021. All faculties are requested to attend the program and get benefited to improve the quality of educational standards.


Head of the Department


PRINCIPAL
Principal
Santhiram College of Pharmacy
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PROGRAM REPORT

Date: 12/02/2021

CREATING AWARENESS ON OUTCOME BASED EDUCATION & RESEARCH

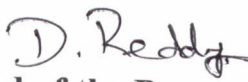
Venue: Seminar Hall -Santhiram College of Pharmacy, Nandyal


Speaker : Dr. P. Praveen Kumar, Professor & H.O.D.of Pharmacology,
Santhiram College of Pharmacy.

One Day seminar was conducted on “*Creating Awareness On Outcome Based Education & Research*” 10-02-2021 by Speaker Dr. P. Praveen Kumar, Professor, Dept. Of Pharmacology, This program was designed to update the existing program outcomes with Co & PO, to evaluate the students and effective assessment planning to meet out the quality of education.

Program Outcomes:

1. Update the subject files with CO & PO
2. Educational Out comes
3. Practical assessment Tools
4. Effective Assessment Planning
5. Robust Evaluation Planning


Head of the Department


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Santhiram College of Pharmacy
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Introductory session by Dr.P.Praveen Kumar on OBE programm-10-02-2021



Lecture Talk on Learning outcomes by speaker Dr.P.Praveen Kumar 10-02-2021



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CREATING AWARENESS ON OUTCOME BASED EDUCATION & RESEARCH ATTENDANCE STATEMENT

Date: 10/02/2021

S.No	Name of the Faculty	Signature
1	Mr. N. D.V.R. Saradhi	<i>N.D.V.R. Saradhi</i>
2	Mr. N. Madana Gopal	<i>N. Madana Gopal</i>
3	Mr. D. Maheswara Reddy	<i>D. Maheswara Reddy</i>
4	Mr. R. Niranjana Kumar	<i>R. Niranjana Kumar</i>
5	Mr. V. Vijay Kumar	<i>V. Vijay Kumar</i>
6	Mr. B. Venkata Ramana	<i>B. Venkata Ramana</i>
7	Mr. K. Pavan Kumar	<i>K. Pavan Kumar</i>
8	Mr. K. Sampath Kumar	<i>K. Sampath Kumar</i>
9	Mr. K. Bharath Kumar	<i>K. Bharath Kumar</i>
10	Ms. R. Renuka Devi	<i>R. Renuka Devi</i>
11	Ms. K. Maheswari	<i>K. Maheswari</i>
12	Mr. S. Venu	<i>S. Venu</i>
13	Mrs. S. Gousia Begum	<i>S. Gousia Begum</i>
14	Dr. C. Bharagava Reddy	<i>C. Bharagava Reddy</i>
15	Ms. B. Mayuri	<i>B. Mayuri</i>
16	Mrs. S. Parveen	<i>S. Parveen</i>
17	Mr. N. Srinivasa Reddy	<i>N. Srinivasa Reddy</i>
18	Dr. A. Sandeep	<i>A. Sandeep</i>
19	Mrs. V. Saroja	<i>V. Saroja</i>
20	Ms. S. Sushma Priya	<i>S. Sushma Priya</i>
21	Mrs. S. Sumiya	<i>S. Sumiya</i>
22	Ms. Anusha	<i>Anusha</i>
23	Dr. V. Chanukya	<i>V. Chanukya</i>
24	Ms. G. Naveena	<i>G. Naveena</i>
25	Mrs. C. Renuka Tejaswini	<i>C. Renuka Tejaswini</i>
26	Mr. S. Jagadeesh	<i>S. Jagadeesh</i>

D. Reddy
 Head of the Department

[Signature]
PRINCIPAL
 Principal,
 Santhiram College of Pharmacy
 NH-18, NANDYAL