1. Inclusion of research ethics in the research methodology course work

BP305T: PROFESSIONAL ETHICS AND HUMAN VALUES

Scope of the Subject:

- 1. To bring awareness among pharmacy graduates on ethics and human values.
- 2. To understand and ethical theories and their application to work ethics.
- 3. To know various codes of ethics used by professional bodies.
- 4. To understand the concepts of corruption and its measures.
- 5. To learn about professional responsibility as a pharmacist.

Outcomes of the subject:

The student will be able to:

- a) Develop awareness on ethics and human values
- b) Become morally and socially responsible.
- c) Motivate others on moral values.

Course Outcome:

To remember and recall the human values and professional ethics.

To outline the ethical norms, anti corruption measures and central vigilance bodies.

To apply moral concepts and reasoning in pharmacy.

To discover ethical issues in clinical pharmacy practice and manufacturing of pharmaceutical products.

To appraise professional societies and various pharmaceutical associations.

To adapt social pharmacy and code of pharmaceutical ethics.

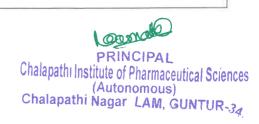
Course Content:

TOPIC	Duration (hrs)	References
UNIT-I Human Values: Morals, Values and ethics- Integrity-Work ethics-Service learning, Civic virtue, Respect for others, Living Peacefully-Caring, Sharing, Honesty, Courage, Valuing time, Co-	04	R.S.Naagarazan professional ethics and Human values edition I, New Age International Pvt. Ltd., edition -1, Chapter-1
operations, Commitment, Empathy, Self confidence, Character and Spirituality. UNIT-II	05	Joy Wingfield and David
Introduction to professional ethics, corruption and its measures: Need of ethics in pharmacy, changing times, RPSGB guidance, ethical norms, moral relativism, facts and values, ethical theories and concepts. Corruption in public life,		Badcott, Pharmacy ethics and decision making, Pharmaceutical press, Edition I, Chapter-I.
economic impact of corruption, payments that equate supply and demand; bribes as incentive payments, bribes to reduce costs,		A COR STANDARD STANDARD



organized crime and corruption. Anti- corruption measures – Anti corruption Bureau (ACB), Central Vigilance Commission (CVC), Central Bureau of Investigation (CBI), lokadalats, Ombudsman, Comptroller and auditor general (CAG) and right to information. UNIT-III Moral concepts and reasoning in Pharmacy: Moral issues, rational inquires, moral autonomy, moral reasoning and pharmacist, moral development theories, justice and human rights, trust and truthfulness and moral dilemmas	05	1.R.S.Naagarazan professional ethics and Human values edition I, New Age International Pvt. Ltd., edition -1, Chapter-2 2.Joy Wingfield and David Badcott, Pharmacy ethics and decision making, Pharmaceutical press, Edition I, Chapter-4.
UNIT-IV Professionalism and Industrial ethics: Pharmacy and professionalism, ethical basis in professionalism and accountability, industrial ethics, pharmacist in different clusters with different ethical issues – ethical issues in clinical pharmacy practice, community pharmacy and manufacturing of pharmaceutical products.	05	1. Joy Wingfield and David Badcott, Pharmacy ethics and decision making, Pharmaceutical press, Edition I, Chapter-4 2.R.S.Naagarazan professional ethics and Human values edition I, New Age International Pvt. Ltd., edition -1, Chapter-2
Professional societies and various pharmaceutical associations: Indian Pharmaceutical Congress Association, Indian Pharmaceutical Association, Indian Hospital Pharmacists Association, Indian Pharmacy Graduates Association, Association of Pharmaceutical Teachers of India, The All India Drug Control Officers Confederation, Indian Society for Technical Education, National Pharmaceutical Pricing Authority and other allied professional societies/associations.	06	1.Professional Pharmacy-M.L.Schroff 2. Harikishan Singh: History of Pharmacy in India and related aspects, Volume-I, II and III Pharmacopoeias and formularies, 1 st Edition, Vallabh Prakashan, 2005
UNIT-V Social Pharmacy and code of Pharmaceutical ethics: The Concept and context of social pharmacy, principles of ethics, Morality, ethical codes, Pharmaceutical Ethics in relation to job, trade, profession and medical profession. Pharmacist Oath.	05	1.N.K.Jain, Forensic Pharmacy, Eight edition, 2014, 484-492. 2.B.M.Mithal, A Text book of Forensic Pharmacy, Valla Prakasan, 10 th edition, Chapter-14





BP801T-BIOSTATISITCS AND RESEARCH METHODOLOGY

Scope: To understand the applications of Biostatics in Pharmacy. This subject deals with descriptive statistics, Graphics, Correlation, Regression, logistic regression Probability theory, Sampling technique, Parametric tests, Non Parametric tests, ANOVA, Introduction to Design of Experiments, Phases of Clinical trials and Observational and Experimental studies, SPSS, R and MINITAB statistical software's, analyzing the statistical data using Excel.

Objectives: Upon completion of the course the student shall be able to

- Know the operation of M.S. Excel, SPSS, R and MINITAB®, DoE (Design of Experiment)
- Know the various statistical techniques to solve statistical problems
- Appreciate statistical techniques in solving the problems.

Course Outcomes:

To understand the basic aspects of statistics such as central tendency, dispersion and correlation.

To make use of regression and probability while analyzing data by statistical methods.

To explain the need of research, research designs and their applications and to explain methodological designs.

To assess the need of regression modeling and to build up the ability to use various statistical problems.

To elaborate design and analysis of experiments and response surface methodology.

To build the ability to perform various parametric and non parametric statistical tests and to draw graphs and plots based on type of data.

Course content:

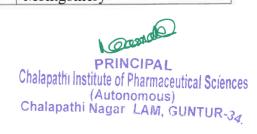
Chapter/Topic	Duration (hrs)	References
Unit-I Introduction: Statistics, Biostatistics, Frequency distribution Measures of central tendency: Mean, Median, Mode- Pharmaceutical examples Measures of dispersion: Dispersion, Range, standard deviation, Pharmaceutical problems Correlation: Definition, Karl Pearson's coefficient of correlation, Multiple correlation - Pharmaceuticals examples	10	1. Pharmaceutical statistics- Practical and clinical applications, Sanford Bolton, publisher Marcel Dekker Inc. NewYork. 2. Fundamental of Statistics — Himalaya Publishing House-S.C.Guptha
Unit-II Regression: Curve fitting by the method of least squares, fitting the lines $y=a+bx$ and $x=a+by$, Multiple regression, standard error of regression—Pharmaceutical Examples Probability: Definition of probability, Binomial distribution, Normal distribution, Poisson's distribution, properties—problems Sample, Population, large sample, small	10	1.Fundamental of Statistics – Himalaya Publishing House- S.C.Guptha



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sample, Null hypothesis, alternative hypothesis, sampling, essence of sampling, types of sampling, Error-I type, Error-II type, Standard error of mean (SEM) - Pharmaceutical examples Parametric test: t-test(Sample, Pooled or Unpaired and Paired), ANOVA, (One way and Two way), Least Significance difference		
Unit-III Non Parametric tests: Wilcoxon Rank Sum Test, Mann-Whitney U test, Kruskal-Wallis test, Friedman Test Introduction to Research: Need for research, Need for design of Experiments, Experiential Design Technique, plagiarism Graphs: Histogram, Pie Chart, Cubic Graph, response surface plot, Counter Plot graph Designing the methodology: Sample size determination and Power of a study, Report writing and presentation of data, Protocol, Cohorts studies, Observational studies, Experimental studies, Designing clinical trial, various phases.	10	1.Fundamental of Statistics – Himalaya Publishing House- S.C.Guptha
Unit-IV Blocking and confounding system for Two-level factorials Regression modeling: Hypothesis testing in Simple and Multiple regressionmodels Introduction to Practical components of Industrial and Clinical Trials Problems: Statistical Analysis Using Excel, SPSS, MINITAB®, DESIGN OF EXPERIMENTS, R - Online Statistical Software's to Industrial and Clinical trial approach	08	1.Pharmaceutical statistics- Practical and clinical applications, Sanford Bolton, publisher Marcel Dekker Inc. NewYork. 2.Fundamental of Statistics – Himalaya Publishing House- S.C.Guptha
Unit-V Design and Analysis of experiments: Factorial Design: Definition, 22, 23 design. Advantage of factorial design Response Surface methodology: Central composite design, Historical design, Optimization Techniques	07	1.Design and Analysis of Experiments –PHI Learning Private Limited, R. Pannerselvam, 2.Design and Analysis of Experiments – Wiley Students Edition, Douglas and C. Montgomery





MRM301T: RESEARCH METHODOLOGY & BIOSTATISTICS

- UNIT I: General Research Methodology: Research, objective, requirements, practical difficulties, review of literature, study design, types of studies, strategies to eliminate errors/bias, controls, randomization, crossover design, placebo, blinding techniques.
- UNIT II: Biostatistics: Definition, application, sample size, importance of sample size, factors influencing sample size, dropouts, statistical tests of significance, type of significance tests, parametric tests(students "t" test, ANOVA, Correlation coefficient, regression), nonparametric tests (wilcoxan rank tests, analysis of variance, correlation, chi square test), null hypothesis, P values, degree of freedom, interpretation of P values.
- **UNIT III:** Medical Research: History, values in medical ethics, autonomy, beneficence, non-maleficence, double effect, conflicts between autonomy and beneficence/nonmaleficence, euthanasia, informed consent, confidentiality, criticisms of orthodox medical ethics, importance of communication, control resolution, guidelines, ethics committees, cultural concerns, truth telling online business practices, conflicts of interest, referral, vendor relationships, treatment of family members, sexual relationships, fatality.
- UNIT IV: CPCSEA guidelines for laboratory animal facility: Goals, veterinary care, quarantine, surveillance, diagnosis, treatment and control of disease, personal hygiene, location of animal facilities to laboratories, anesthesia, euthanasia, physical facilities, environment, animal husbandry, record keeping, SOPs, personnel and training, transport of lab animals.
- UNIT V: Declaration of Helsinki: History, introduction, basic principles for all medical research, and additional principles for medical research combined with medical care.

4.4T: BIOSTATISTICS AND RESEARCH METHODOLOGY

- 1. Detailed syllabus and lecture wise schedule
- 1 Research Methodology
- Types of clinical study designs: a)

Case studies, observational studies, interventional studies,

- Designing the methodology b)
- Sample size determination and Power of a study Determination of sample size for c) simple comparative experiments, determination of sample size to obtain a confidence interval of specified width, power of a study
- d) Report writing and presentation of data
- Importance of plagiarism in research e)
- **Biostatistics**
- 2.1 a) Introduction
 - b) Types of data distribution
 - c) Measures describing the central tendency distributions- average, median, mode
 - d) Measurement of the spread of data-range, variation of mean, standard deviation, variance, coefficient of variation, standard error of mean.

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Chalapathi Nagar LAM



2.2 **Data graphics**

Construction and labeling of graphs, histogram, piecharts, scatter plots, semilogarthimic plots

- 2.3 Basics of testing hypothesis
 - a) Null hypothesis, level of significance, power of test, P value, statistical estimation of confidence intervals.
 - b) Level of significance (Parametric data)- students test (paired and unpaired), chi Square test, Analysis of Variance (one-way and two-way)
 - c) Level of significance (Non-parametric data)- Sign test, Wilcoxan's signed rank test, Wilcoxan rank sum test, Mann Whitney U test, Kruskal-Wall is test (one way ANOVA)
 - d) Linear regression and correlation- Introduction, Pearsonn's and Spearmann's correlation and correlation co-efficient.
 - e) Introduction to statistical software: SPSS, Epi Info, SAS.
- 2.4 Statistical methods in epidemiology

 Incidence and prevalence, relative risk, attributable risk
- 3. Computer applications in pharmacy <u>Computer System in Hospital</u>

 <u>Pharmacy</u>: Patterns of Computer use in Hospital Pharmacy –

 Patient record database management, Medication order entry Drug labels and list

 Intravenous solution and admixture, patient medication profiles, Inventory control, Management report & Statistics.

Computer in Community Pharmacy: Computerizing the Prescription Dispensing process Use of Computers for Pharmaceutical Care in community Pharmacy Accounting and General ledger system

Drug Information Retrieval & Storage: Introduction – Advantages of Computerized Literature Retrieval *Use of Computerized Retrieval*

Reference books:

- a. Pharmaceutical statistics- practical and clinical applications, Sanford Bolton 3rd edition, publisher Marcel Dekker Inc. New York.
- b. Drug Information- A Guide for Pharmacists, Patrick M Malone, Karen L Kier, John E Stanovich, 3rd edition, McGraw Hill Publications 2006
- 2. Presence of Ethics committee: Chalapathi Institute of Pharmaceutical Sciences is associated with Ethics committee under Guntur Medical College, Guntur, Andhra Pradesh approved by Drugs Controller General of India (DCGI). The ethics committee is responsible for the scientific, ethical and regulatory oversight of research conducted at Government General Hospital (GGH), Guntur, Andhra Pradesh and serves to protect the rights and welfare of human subjects.

In addition, institute also has **MoU** with **Government General Hospital (GGH)**, Guntur, Andhra Pradesh. The students of Pharm.D programme are actively involved in patient counseling at outpatient services. The projects undertook by the students as a part of their research are approved and regularly monitored by the ethics committee under experienced guides and reputed physicians of various specialties. Ethics committee framed guidelines for responsible and justified conduction of experiments/projects on human subjects. Adherence to these guidelines would help to promote and maintain the standards towards ethical conduct of research, and protect the rights and wellbeing of research participants and communities. A set of SOPs have been developed to maintain consistency in the process of review and continuous monitoring of research proposals by the EC.

Institutional Animal Ethics Committee: Institutional animal ethics committee of Chalapathi Institute of Pharmaceutical Sciences is a local body approved by CPCSEA, which has been empowered to permit experiments on small animals through an amendment in rules for breeding and experiments on animals. The IAEC is required to examine proposals for conducting experiments on small animals, which would chiefly examine the necessity of performing the experiment, and ensure that experiments are not performed in a routine manner. All decisions are to be taken with the approval of the Committee. The Standard Operating Procedures (SOP) for Institutional Animal Ethics Committee for experimentations on animals will help the Principal Investigators, Animal Ethics Committee members and scientific researchers, for better understanding of the ethical procedures involved in animal experimentations.

S. No	Name	Designation	
1	Dr.Vijay Kotra	CPCSEA Main Nominee	
2	Dr.K.Bhavani	CPCSEA Link Nominee	
3	Dr.K.Ammani	Non Scientific Socially aware member	
4	Dr.K.Sujana	Scientist from outside the Institute	
5	Prof.Rama Rao Nadendla	Biological Scientist Chair Person, IAEC	
6	Prof.A.Narendra Babu	Scientist from different discipline, member secretary	
7	Dr.R.Vinoo	IAEC Member/Veterinarian	
8	Mrs. P.Sharmila Nirojini	Scientist from different discipline	
9	Mr.D.Eswar Tony	Scientist I/C of Animal House Facility	



3. Plagiarism check through software: This Internal Quality Assurance Cell (IQAC) of the institution is committed to promoting and maintaining high standards of integrity and accountability in the conduct of academic research and is keen to embed and endorse the culture of honesty and transparency in all its institutional activities. The institute strives to preserve academic honor and integrity by repudiating all forms of academic and intellectual dishonesty, including plagiarism.

For ensuring originality of the content every thesis will be checked by anti-plagiarism software (Plagiarism checker X Pro). Every student who is preparing dissertation of project and who prepared manuscript for publication has to check his/her final content for plagiarism before submission. The thesis is allowed for submission only if the plagiarism checker shows similarity less than that prescribed by the institute norms.

4. Research Advisory Committee: The institute has a research advisory to monitor and address matters related to research promotion and ethics. The institution aims to support and promote research and research training within and outside the college. The committee comprises of faculty possessing doctoral degree that are research inclined, motivated and talented to train minds for research inclination. The committee will endeavor to foster research within the college and encourage members of staff to apply for research grants.

The committee identifies the thrust areas based on current trends of pharmaceutical industry / R&D. It also appoints research supervisors for major and minor research works / project works of students. It guides the faculty to apply for research grants to various funding bodies like UGC, AICTE, DBT, DST, SERB, ICMR etc., also encourages faculty to publish articles in peer reviewed indexed and reputed journals. The committee encourages students and faculty to participate in research related workshops, seminars in the national and international level, also to write and publish patents on their research work. It encourages faculty and students for inter-disciplinary and collaborative research. The committee educates and guide faculty members to apply for Ph.D registration in well recognized universities for their professional growth.

The research advisory committee comprised of the following experts:

Principal (Chairperson)	
Faculty - Pharmacology (Member)	
Faculty - Pharmaceutical Analysis (Member)	
Faculty - Pharmaceutics (Member)	
Faculty - Pharmacy Practice (Member)	
Research Scientist (Member)	
Industrial Expert (Member)	
IQAC Nominee (Member)	



CHALAPATHI INSTITUTE OF PHARMACEUTICAL SCIENCES (AUTONOMOUS)

RESEARCH POLICY

I. Research Policy (Approved by 6th Governing Body, dated-12/08/2020):

Introduction: Research policy established by the Chalapathi Institute of Pharmaceutical Sciences, Guntur, promote research, entrepreneurship and innovation and ensure that the outcomes benefit mankind.

Aim: To create and support the research culture among faculty, scholars and students which helps in enriching and enhancing the professional competence. To realize the vision and mission of the institute for contributing to national development with established standards and norms relating to safe and ethical conduct of research along with research collaborations with national and international universities, institutions, government agencies, R&D organization and funding agencies for sponsored and contractual research which further helps in building entrepreneurship skills among the students.

Scope: The policy applies to all the faculty/staff, research scholars and students of Chalapathi Institute of Pharmaceutical Sciences who are engaged in any form of research activity.

- 01. All faculty members of the institute are expected to undertake research activities in addition to their teaching and administrative responsibilities.
- 02. They should, as far as possible, seek external funding in support of research.
- 03. Building entrepreneurship skills among the students and help them for such establishments.

Objectives:

- 01. Build appropriate research facilities and infrastructure for advancement of research.
- 02. Maximize research capability of faculty members by actively engaging in research work.
- Motivate and encourage faculty members to improve their qualifications by registering for doctoral and post-doctoral programs.
- 04. Encourage and incentivize faculty for research publications in SCI and Scopus indexed or other equivalent peer-reviewed/reputed and indexed journals.



- Develop Annual Research Activity plans and provide seed money for minor research projects for Staff, Scholars and Students.
- 06. The necessary information sources supporting research (data bases, books and magazines) and the relevant library and information services are provided.
- Forge MoU's with Industries and R & D organizations for consultancy, collaboratiave research, sponsored projects, etc.
- 08. Motivate faculty, scholars, staff and students to apply for Patent to protect IPR and help to get the discoveries commercialized.
- Organize research promotion events like conferences, seminars, workshops and invited lectures and motivating them to present research papers in national and international conferences/ workshops, research competitions and exhibitions.
- 10. Organize brainstorming session through talks with eminent personalities from industry, R & D organizations and institutions of repute.
- Capture appropriate problems faced by the industry and find solutions thorugh R & D projects, consultancy work, etc. and to operate a separate bank account for research.

Rights and Responsibilities: The transmission to knowledge and conduct of scholarly investigations are Primary functions of the institute.

Rights of Faculty Members / Faculty to Students: To carry out the research mission effectively, Faculty and scholars are guaranteed certain freedoms. Faculties have the right to academic freedom in the pursuit and support of research as defined by the institute. Faculty has the right to disseminate the results and findings of his or her research without suppression or modification from external sponsors.

Each member has the right to know who is sponsoring the research and supporting his or her salary or stipend. The institute is committed to demonstrate support and appreciation for its faculty, scholars and students. To that end, faculty members are encouraged to provide development opportunities and, if possible, a mentor relationship for those in their group.



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Chalapathi Institute of Pharmaceutical Sciences
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Policy for research and innovation funding:

- 01. Funding will predictable and requires a stable funding base.
- Funding to promote the application, introduction and commercialization of research.

S.No.	Subject	Limit of Funding	
01	Financial support for the faculty for Ph.D., Registration (04 memebrs per year)	Rs. 10,000/-	
02	Seed money for Minor Research Projects to support chemicals, Glass ware, Animals, Animals Feed, Maintenance of equipment for research and publication in journal	Up to Rs. 5,000/-	
03	Financial support to Regular faculty members for Travel/Registration for attending National and international Conferences (05 members per year)	Upto Rs. 20,000/- (National and upto Rs. 50,000/- International)	
04	Financial support for using experimental facilities available at other Universities/	Upto Rs.5,000/-	
05	Filing and processing fee of patent applications (05 members per year)	Rs. 2,000/-	
06	Honorarium for the research projects	Upto Rs.10,000/-	
07	Support for publishing research papers in SCI and Scopus indexed journal Upto Rs.		
08	Additional increments for research and Ph.D., scholars		
09	Others (Provision of OD/Sabbatical Leave/Extramural Ph.D.,)		





CHALAPATHI INSTITUTE OF PHARMACEUTICAL SCIENCES

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30TH RESEARCH ADVISORY BOARD MEETING

S. No	Name of the Member	Designation	E-Mail ID/Contact Number
01	Prof. Rama Rao Nadendla	Principal, Chalapathi Institute of Pharmaceutical Sciences, Guntur	9440101685 principalclpt@gmail.com
02	Dr. K.Suresh Babu	Senior Scientist, Natural Products Chemistry Division, IICT, Hyderabad.	9963999220 suresh@iict.res.in
03	Dr. Prasanna Sagar	Director, Orbicular Pharmaceutical Technology Pvt Ltd, Hyderabad	7702964209 prasannasagar@rediff.com
04	Prof. A. Narendra Babu	Professor and HOD, Chalapathi Institute of Pharmaceutical Sciences, Guntur	9849010007 narendraankem@rediffmail.com
05	Dr. Vijay Pandy Pandi	Professor, Chalapathi Institute of Pharmaceutical Sciences, Guntur	9994357882 pandiphd@gmail.com
06	Dr. S.T.V.Raghavamma	Associate Professor, Chalapathi Institute of Pharmaceutical Sciences, Guntur	9885968197 stvraghavamma@gmail.com S.T.V.L. G. Y. G. 204
07	Dr. V.Pallavi	Associate Professor, Chalapathi Institute of Pharmaceutical Sciences, Guntur	8328289725 mailtopallu@gmail.com Pollowi. Voloni2021
08	Mr. D.Eswar Tony	Assistant Professor, Chalapathi Institute of Pharmaceutical Sciences, Guntur	9494585056 tonypharmacology@gmail.com





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30TH RESEARCH ADVISORY BOARD MEETING

Date: 04.08.2021

Time: 04.00PM

30th Research advisory board meeting will be held through zoom online platform to discuss the following agenda:

- 1. To confirm the minutes of the 29th Research advisory board meeting.
- 2. To review the status of DST-SERB Project interim report.
- 3. To approve the change of research scholar under the DST-SERB project by duly appointed committee.
- 4. To review the seed money grant for research provided to 05 teaching staff for the 2020-2021 academic year.
- To review the workshops, seminars conducted on research methodology, intellectual property rights, entrepreneurship and skill development.
- 6. To review the student projects, internships and field projects.
- To review the training of teaching and non-teaching staff for consultancy projects.
- 8. To review the publication of review and research papers in indexed journals.
- 9. To review the publication of patents.
- 10. Any other:
 - a. Consultancy projects
 - b. Corporate training
 - c. Sponsored research projects
 - d. Extension activities

PHARMAC (Autonomous)



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30TH RESEARCH ADVISORY BOARD MEETING (onlive)

Resolutions:

- 01. Board resolved to confirm the resolutions (07) of 29th Research advisory board meeting held on 01/11/2020.
- 02. Board resolved to review and submit 2nd interim report of DST-SERB project titled "Novel Drug discovery from natural products for the treatment of alcohol dependence and withdrawal" (CRG/2018/000813) by November 2021. Four research papers were published in Scopus, PubMed and SCI indexed journals and one book chapter was published in Elsevier academic press, Burlington, USA. (ANNEXURE-I)
- 03. Board resolved to approve the change of research scholar under DST-SERB project, since Mrs. B. Supraja resigned due to her personal reasons, Mrs. Asiya Begum who was qualified in GPAT was appointed as research scholar as per the guidelines of the SERB. (ANNEXURE-II)
- 04. Board reviewed the seed money grant provided for teaching staff for their research activity as per the research policy of the institution. Board further resolved that 04 faculty members were granted seed money of Rs.31075/during 2020-2021 academic year. (ANNEXURE-III)
- 05. Board resolved to continue with organizing workshops and seminars on research methodology, intellectual property rights, entrepreneurship and skill development programmes to support and encourage research activities. A total number of 19 workshops and seminars were organized during the academic year 2020-2021. (ANNEXURE-IV)
- 06. Board reviewed the student projects, practice school, internships, clericalship and field projects of B.Pharmacy, M.Pharmacy and Pharm.D programmes. (ANNEXURE-V)
- 07. Board resolved to further upgrade the research facilities and provide training for teaching and non-teaching staff for undertaking consultancy projects. A total number of 19 such training programmes were organized during the academic year 2020-2021. (ANNEXURE-VI)

- 08. Board resolved to publish research and review papers in Scopus/PubMed indexed journals to further promote the quality of the research publications. A total number of 28 research papers were published during the academic year 2020-2021 in indexed journals with a total impact factor of 17.997. (ANNEXURE-VII)
- 09. Board resolved to encourage publication of patents to strengthen and promote IPR activities in the institution. One patent was granted and a total number of 14 patents were published during the academic year 2020-2021. (ANNEXURE-VIII)
- 10. Board resolved that 24 number of consultancy projects were been undertaken by the institution and a revenue of Rs.24400/- was generated during the academic year 2020-2021. (ANNEXURE-IX)
- 11. Board resolved that 05 number of faculty members were been provided with corporate training and a revenue of Rs.15000/- was generated by the institution during the academic year 2020-2021. (ANNEXURE-X)
- 12. Board resolved that 05 number of sponsored research projects were been undertaken by the institution and a revenue of Rs.1,36,000/- was generated during the academic year 2020-2021. (ANNEXURE-XI)
- 13. Board resolved that around 70 numbers of awards, appreciations and recognitions were received by the institution, faculty members and students in extension activities during academic year 2020-2021. (ANNEXURE-XII)

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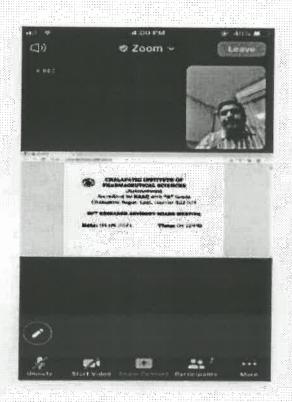
CHALAPATHI INSTITUTE OF PHARMACEUTICAL SCIENCES, LAM, GUNTUR (AUTONOMOUS)

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30TH RESEARCH ADVISORY BOARD MEETING

(ONLINE THROUGH ZOOM PLATFORM, MEETING ID: 734 5010 8637)

DATE: 04/08/2021, TIME: 04.00PM











CHALAPATHI INSTITUTE OF PHARMACEUTICAL SCIENCES, LAM, GUNTUR (AUTONOMOUS)

Accredited with "A" Grade by NAAC and Accredited by NBA (UG Programme)
30TH RESEARCH ADVISORY BOARD MEETING
(ONLINE THROUGH ZOOM PLATFORM, MEETING ID: 734 5010 8637)
DATE: 04/08/2021, TIME: 04.00PM

