

Jamia Hamdard

Policy Number:	JH/IQAC/PD-16
Brief Description the Policy	Discipline, both in personal and professional matters, is essential for the success of an academician. Orderly behavior on campus will improve one's self-esteem and will help in having good inter-personal relations. The high level of discipline consistent with the superior standards of the Centers of Excellence in Higher Education shall be maintained on the campus.
Reason for the policy	UGC Maintenance of Standards & Code of Conduct for staff and students
Policy Applies To	All Academic, administrative, and managerial staff and students in the university
Effective Date From	September 2011
Approved By	Academic Council Board of Management
Responsible Authority	Vice Chancellor/Registrar/ Director, IQAC
Superseding Authority	Competent Authority/Body of the University,
Next Review	September 2023
References for the policy	UGC Regulations 2018 /University Service Book Guidelines
	Reason for the policy Policy Applies To Effective Date From Approved By Responsible Authority Superseding Authority Next Review

Policy Statement

Jamia Hamdard strives to uphold its core values and inculcate in students a culture of being honest and transparent in their personal and professional life, respectful of the opinions and beliefs of others, practicing their profession with conscience and dignity, and making their contributions to the society with accountability and commitment.

Rules and guidelines

- All students are expected to follow Courteous behavior, an essential ingredient of Professional Competence. Dishonesty, obscenity in word or act or any other acts of misconduct will invite disciplinary action.
- Students shall wear the ID cards while on the campus
- Students should not loiter in the corridors or on the campus during class hours. They should make use of their free time by using the Library, Computer facilities or other facilities for extra-curricular activities.
- Habitual negligence of class work, absence from internal examination, non-submission of assignments, frequent absence from classes, etc., will be reported to the parents and if not corrected, may lead to discontinuance from the program.
- Students, if they have any grievance and personal problems shall bring them to the notice of the Proctor/ Mentor or the University authorities individually; but should not have recourse to collective complaints or petitions to anybody within or outside the campus
- Students are forbidden from attending or organizing any meeting in the campus or collecting money for any purpose without the permission of the Management.
- Political activity in any form, under any banner is not permitted in the campus.
- Willful damages to property and equipment will have to be compensated for. Pasting of posters and notices on walls or disfiguring the building and campus, in any form are forbidden.
- Students organizing tours on their own accord without permission and teachers accompanying them is banned. Any act contrary to this rule will invite strict disciplinary action.

Breach of Code of Conduct

Breaches of the rules relating to the conduct of students shall be subject to preliminary investigation by the Proctor or a Disciplinary Committee. Based on the preliminary investigation the following actions could be taken:

- 1) Dismiss a complaint.
- 2) Impose any penalty permitted by the rules of the University.
- Refer the complaint to the Vice chancellor or College Council accompanied by a written report for further decision.
- 4) Issue a caution which shall not be recorded on the student's record.
- 5) Issue a reprimand which shall be noted against the student's record in the registry, and which shall include a formal written warning that treatment of any future misconduct within twelve months will take such reprimand into account.
- 6) Refer the matter to the police or other authorities.

Appeal

- The student has a right of appeal against the decision of the Committee.
- A student may appeal, in writing, to the Vice Chancellor against the decision of the Committee.
- The decision of the Vice Chancellor will be final in this regard.

Anti-ragging Committee and Anti-ragging Squad

In compliance with the AICTE regulations Anti-ragging Committee and Anti-ragging Squad have been constituted to prevent the menace of ragging. The squad conducts frequent patrolling in the common areas of the campus and maintains vigil to prevent the occurrence of ragging. The squad will also have the responsibility to investigate incidence of ragging if any

Sexual Harassment

Students should note that sexual misconduct or harassment encompasses a range of conduct, including but not limited to sexual assault, unwanted touching or persistent unwelcome comments, e-mails, or pictures of an insulting or degrading sexual nature, which may constitute harassment, which shall depend on the circumstances of each case.

Professional Ethics and Academic integrity

I. TEACHERS AND THEIR RESPONSIBILITIES:

Whoever adopts teaching as a profession assumes the obligation to conduct himself / herself in accordance with the ideal of the profession. A teacher is constantly under the scrutiny of his students and the society at large. Therefore, every teacher should see that there is no incompatibility between his precepts and practice. The national ideals of education which have already been set forth and which he/she should seek to inculcate among students must be his/her own ideals. The profession further requires that the teachers should be calm, patient and communicative by temperament and amiable in disposition.

Teachers should

- Adhere to a responsible pattern of conduct and demeanor expected of them by the community.
- Manage their private affairs in a manner consistent with the dignity of the profession; Seek to make professional growth continuous through study and research.
- Express free and frank opinion by participation at professional meetings, seminars, conferences etc. towards the contribution of knowledge.
- Maintain active membership of professional organizations and strive to improve education and profession through them.
- Perform their duties in the form of teaching, tutorial, practical, seminar and research work conscientiously and with dedication.
- Co-operate and assist in carrying out functions relating to the educational responsibilities of the college and the university such as: assisting in appraising applications for admission, advising and counseling students as well as assisting the conduct of university and college examinations, including supervision, invigilation, and evaluation; and
- Participate in extension, co-curricular and extra-curricular activities including community service.

II.TEACHERS AND THE STUDENTS

Teachers should:

- Respect the right and dignity of the student in expressing his/her opinion.
- Deal justly and impartially with students regardless of their political, economic, social and physical characteristics.
- Recognize the difference in aptitude and capabilities among students and strive to meet their individual needs.
- Encourage students to improve their attainments, develop their personalities and at the same time contribute to community welfare
- Inculcate among students' scientific outlook and respect for physical labor and ideals of democracy, patriotism, and peace.
- Be affectionate to the students and not behave in a vindictive manner towards any of them for any reason.
- Pay attention to only the attainment of the student in the assessment of merit;
- Aid students to develop an understanding of our national heritage and national goals; and
- Refrain from inciting students against other students, colleagues, or administration.

III. TEACHERS AND COLLEAGUES

Teachers should:

- Treat other members of the profession in the same manner as they themselves wish to be treated.
- Speak respectfully of other teachers and render assistance for professional betterment.
- Refrain from lodging unsubstantiated allegations against colleagues to higher authorities.
- Refrain from allowing considerations of caste, creed, religion, race or sex in their professional Endeavor.

IV. TEACHERS AND AUTHORITIES:

Teachers should:

- Discharge their professional responsibilities according to the existing rules and adhere to procedures and methods consistent with their profession in initiating steps through their own institutional bodies and/or professional organizations for change of any such rule detrimental to the professional interest
- Refrain from undertaking any other employment and commitment including private tuitions and coaching classes which are likely to interfere with their professional responsibilities
- Co-operate in the formulation of policies of the institution by accepting various offices and discharge responsibilities which such offices may demand
- Co-operate through their organizations in the formulation of policies of the other institutions and accept offices
- Co-operate with the authorities for the betterment of the institutions keeping in view the interest and in conformity with dignity of the profession
- Should adhere to the conditions of contract
- Give and expect due notice before a change of position is made
- Refrain from availing themselves of leave except on unavoidable grounds and as far as practicable with prior intimation, keeping in view their responsibility for completion of academic schedule.

V. TEACHERS AND NON-TEACHING STAFF:

- Teachers should treat the non-teaching staff as colleagues and equal partners in a cooperative undertaking, within every educational institution
- Teachers should help in the function of joint staff-councils covering both teachers and the non-teaching staff.

VI. TEACHERS AND GUARDIANS

Teachers should:

• Try to see through teachers' bodies and organizations, that institutions maintain contact with the guardians, their students, send reports of their performance to the guardians whenever necessary and meet the guardians in meetings convened for the purpose for mutual exchange of ideas and for the benefit of the institution.

VII. TEACHERS AND SOCIETY

Teachers should:

- Recognize that education is a public service and strive to keep the public informed of the educational programs which are being provided
- Work to improve education in the community and strengthen the community's moral and intellectual life
- Be aware of social problems and take part in such activities as would be conducive to the progress of society and hence the country as a whole
- Perform the duties of citizenship, participate in community activities and shoulder responsibilities of public offices
- Refrain from taking part in or subscribing to or assisting in any way activities, which tend to promote feeling of hatred or enmity among different communities, religions, or linguistic groups but actively work for National Integration.

Minutes of 73rd IAEC Meeting, Jamia Hamdard

Name and address of establishment: Jamia Hamdard, CAHF, Hamdard Nagar, New Delhi Registration number of establishment: 173/GO/Re/Bi/S/2000/CPCSEA, 28-1-2000 Date and Time of the IAEC Meeting: April 21, 2022 (Thursday), 10:30 AM onwards Venue: SCLS Dean office, hosted by the Central Animal House Facility (CAHF), Offline mode

Agenda: To consider fresh protocols for approval of IAEC and other routine matters as listed in the proceedings.

Minutes of the Meeting:

Item No. 1: Protocol nos. 1872, 1873, 1892, 1908, 1909, 1922, 1923, 1924, 1925, 1927, 1928, 1929, 1931, 1933, 1934, 1935, 1940, 1941, 1942, 1943, 1944, 1945 were submitted for clearance in IAEC 73rd meeting. Member Secretary, IAEC was instructed to communicate the queries/remarks of the committee on individual protocols to the respective investigators, and obtain a hard copy of revised Form B signed by the Chairman, IAEC.

Decision/ Recommendation of IAEC on New Research Protocols are as follows

SI. No	Title of protocol submitted for IAEC approval	Protocol no.	PI	Animal Number, species and gender	Total Housing capacity for the proposed species	No. of animals recomm ended by IAEC	Recommendation
1.	Cell death inducing targeted therapy enhanced by amphiphilic co-block polymeric nanoscale drug delivery tool for triple-negative breast cancer therapy	1872	Dr. Prashant Kesharwani I, SPER	49, Balb/c, 6- 8 Wks/ 22 g, F	49	49	Approved
2.	Biomimicking aptamer grafted cell membrane coated dendrimer as a next generation clinically targeted nanodrug delivery system against cancer stem cells EpCAM for triple negative breast cancer (TNBC) therapy		Dr. Prashant Kesharwani II, SPER	36, Wistar rats, 6-8 Wks/ 120-150g, F	36 (Balb/c)	36 (Balb/c)	Approved after revision* • Wistar rats should be replaced by Balb/c
3.	Design and development of Antithrombogenic small diameter electrospun vascular graft using indigenously developed nattokinase and sericin	1892	Dr. B.P. Panda-II, Pharmaceuti cal Edu. & Research	36, Sprague Dawley rats,9-10 Wks, M	36 (M/F)	36 (M/F)	Approved after revision* • Anesthesia procedure • Why only male Include Analgesics

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Page 1 of 6

4.	Self-assembled nano prodrug of Gemcitabine for enhanced anti-cancer activity & pharmacokinetic profile	1908	Dr. Asif, SPER	30, Sprague Dawley rats,190- 210g, F	30	30	Approved
5.	Macrotyloma uniflorum, an underutilized pulse as a nutraceutical – in vitro, in vivo and in silico approach	1909	Dr. Humaira, Biotech	162, BALB/c,4- 6wks, F	162	162	Approved -
6.	Nutraceutical potential of pumpkin seed bio actives and their application in the development of functional foods	1922	Dr. Khalid, Food Tech.	72, Albino mice,2-3wks, 55-65g, F	72	72	Approved Reysian of the loosing in ESSAI Note Regulation.
7.	Development of thermodynamically stable silver- nanoparticle based hydrogel of curcumin & thymoquinone with collagen for deep burn	1923	Dr. Ashif-I, CTCR	60, Wistar rats,3- 4m,200-250g, M/F	60	60	Approved after revision* • Preemptive analgesics should be included
8.	Development of a novel fixed dose combination based transfersomal gel of sulforaphane and apigenin for the amelioration of non- melanoma skin cancer	1924	Dr. Ashif-II, CTCR	54, Albino mice,6- 8wks,18-30g, M/F	54	54	Approved
9.	In Silico & in vivo exploration of physostigmine analogues To understand mechanistic crosstalk between klotho and targets for epilepsy	1925	Dr. Nidhi, CTCR	168, Albino mice,8- 12wks,25- 30g, M/F	168	168	Approved after revision* • 10 animals per group
10.	Role of cellular fibronectin containing alternatively spliced extra domain A in neutrophil infiltration following myocardial ischemia-reperfusion injury.		Dr. Prem Prakash, Mol. Medicine	312, Wistar rats,8-10wks, M/F	312	312	Approved Include vet Jassingery Include Analgesia regime.

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11.	Physiological and Pharmacological studies to evaluate the role of Nitric Oxide in post-traumatic stress disorder (PTSD) induced cardiovascular and immunological changes in rats	1928	Dr. A.Ray, HIMSR	176, Wistar rats,150- 200g, M/F	176	176	Approved
12.	Nanotechnology based targeting of Sodium glucose co-transport inhibitors on SIRT1 regulation against heart failure in-silico, in-vitro and in-vivo.	1929	Dr. A.K. Najmi, SPER	64, Wistar rats,16wks, 150-250g, M/F	64	64	Approved •
13.	To investigate the potential of saroglitazar against monosodium glutamate–induced obesity and associated comorbidities in Wistar rats.	1931	Dr. Uma Bandari, SPER	94, Wistar rats,1 day old,5-8g, M&F	94	94	Approved
14.	Formulation and evaluation of folic acid surface engineered nanoemulsion of Exemestane and Quercetin in combination to attain synergistic and targeted efficacy in breast cancer treatment.	1933	Prof. Asgar Ali, SPER	24, Wistar rats,10- 12wks,200- 250g, F	12	12	Approved after revision* • Revise the title
15.	To study the protective effect of Gokhru (Tribulus Terrestris) in the treatment & prevention of hypoxia- induced Pulmonary Hypertension.	1934	Prof. Iqbal Alam, HIMSR	128, Wistar rats,3- 6Mth,250- 300g, M/F	128	128	Approved
16.	To evaluate the efficacy of Metformin on L-NAME induced preeclampsia in animal model.	. 1935	Prof. Iqbal Alam-II, HÌMSR	72, Wistar rats,14- 20wks, 210- 230g, F	72	72	Approved

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17.	Deciphering the mechanistic role of Ephrin-Eph signaling pathways targeting Ischemic Stroke Model: An appraisal for the development of neuro-therapeutics.	1940	Dr. Suhel-I, SCLS	192, Wistar rats,10- 12wks,220- 250g, M	192	192	Approved
18.	Role of mitochondria in cognitive impairments and therapeutic strategies in a rodent model of traumatic brain injury	1941	Dr. Suhel- II, SCLS	80, Wistar rats,12- 14wks,220- 250g, M	80	80	Approved Analgoia Vet Prote
19.	"Repositioning of neurotherapeutic drugs against mitochondrial biogenesis by inhibiting ferroptosis: A strategy to combat cerebral ischemia disease"	1942	Dr. Suhel- III, SCLS	120,Wistar rats,12- 14wks,220- 250g, M	120	120 Herr	Approved Ars abore in 1941 protoco
20.	Bio-signal processing for identification of computational markers: Exploring novelty induced cognitive alteration in Ischemic Stroke.	1943	Dr. Suhel- IV, SCLS	85, Wistar rats,8- 10wks,180- 220g, M	85	85	Approved As Abore MIGNI Rota
21.	Hybridizing the pharmacophoric scaffolds of tranylcypromine and pyrimidine derivatives to design and synthesize novel dual acting (LSD1 & Topoisomerase- II) analogues as a therapeutic intervention to cancer in the form of a nano- formulation	1944	Dr. Shaquiquzz aman, SPER	102, Wistar rats,75-90 days,200- 250g, M	102	102	Approved after revision* • Revise methodology as per guidelines

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22.	synthesis and evaluation of pyrrolone derivatives and 2,4-	1945	Prof. Kalim, Dept. of Chemistry	90, Wistar rats,200- 210g,8Wks,	90	90	Approved
	thiazolidinediones containing biodynamic aryl sulfonylurea moieties as a new class			M/F			
	of hybrid molecules having both Anti- diabetic and Aldose Reductase inhibition Activity.						

*Approved after revision. PI will submit a revision of the Form B as indicated by the IAEC and get it signed by the Chairman, IAEC & Nominee. All approved projects will be signed by the Chairman and Nominee.

Item No 2: Committee further considered and approved the request of the investigator for the extension of 6 months.

S.No	Protocol No	Project Title	Remarks
1.	1750 Neuroprotective role of doxycycline and its comparison with developed chitosan Nano particulate intranasal formulation of doxycycline in MACO model of cerebral ischemia		Extension till 30 June 2022
2.	1566	Characterization of M.tbMDR, M. tb BCG, rBCG infected alveolar macrophages and ESAT-6 antigen	Extension till 30 July 2022
3.	1608	Evaluation of Archeosome based drug delivery system to target alveolar microenvironment using anti tuberculosis drugs in murine model	Extension till 31 July 2022
4.	1553	Design, development and dermatological evaluation of novel herbal formulation for potential remedy of postmenopausal syndrome	Extension till 30 June 2022
5.	1745	Role of Mitochondria in traumatic brain injury in rodent models.	Extension till 30 June 2022
6	1742	Deciphering Subarachnoid Haemorrhage mediated Mitochondrial Dysfunction.	Extension till 30 June 2022
7.	1584	Probiotic based nutraceutical for remission of Ulcerative colitis	Extension till 30 June 2022
8.	1601	1,2,4-triazole, 1,3,4-oxadiazole and 1,3,4-thiadiazole based topsentin analogues as dual inhibitors of COX-2/5-LOX acting antiinflammatory agents for cancer therapy	Extension till 31 December 2022
Э.	1751	Preclinical evaluation of icariin and icariin loaded nano lipid carriers in anthracycline-induced cardiac fibrosis and chronic heart failure in Wistar rats	Extension till 31 August 2022
0.	1689	Characterization of sterile inflammatory biomarkers for the development of pre-eclampsia and its pathogenesis.	Extension till 15 August 2022

Item No 3: A facility visit at Dr. M Iqbal Alam's lab, HIMSAR was conducted and decided that protocol no. 1858 should be approved for pilot study, and protocol no 1866 be approved.

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Attendance Sheet of the IAEC Members present in the meeting

S. No.	Name	Designation in IAEC	Signature with Date
1.	Prof. Nilanjan Saha	Chairman, IAEC	Anjan Var
2.	Dr. Vijay Pal Singh	CPCSEA Main Nominee	125 m
3.	Dr. HB Singh	CPCSEA Nominee (Scientist member)	AL.
4.	Prof. Javed Ali	Internal Member, IAEC	dawit ?
5.	Prof. Suhel Parvez	Internal Member, IAEC	53, 1
6.	Dr. MM Zehgeer	Veterinary Officer, CAHF	Mer
7.	Prof Shakir Ali	Sc. I/C, CAHF & Member Secretary, IAEC	Om
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Jamia Hamdard, New Delhi

	Po	licy Title- Quality Policy	
1	Policy Number	JH/IQAC/PD-13	
2	Brief Description the Policy	 Improvement in quality of teaching and research by regular inputs to all concerned based on feedback from its stakeholders. Providing inputs for best practices in administration for efficient resource utilization and better services to students and staff. Providing inputs for Academic and Administrative Audit and analysis of results for improvement in areas found weak. 	
3	Scope/Objectives	 To arrange for periodic assessment and accreditation of all academic and administrative units or specific academic programs or projects. To stimulate the academic environment for promotion of quality of teaching-learning and research in Jamia Hamdard. To encourage self-evaluation, accountability, autonomy, and innovations in Jamia Hamdard. To undertake quality-related research studies, consultancy, and training programs. To collaborate with other stakeholders of higher education for quality evaluation, promotion, and sustenance. 	
4	Policy Applies To (please tick)	All academics (teachers and students) Administrative Managerial processes in the university	
5	Effective From	December 2011 updated on 26-06-2022	
6	Next Review	September 2022	
7	Approved By	Academic Council Board of Management	
8	Responsible Authority for Implementation and Monitoring	Director, IQAC	
9	Superseding Authority	Competent Authority/Body of the University	
10	References for the policy (please tick)	NAAC accreditation	

POLICY STATEMENT

To make quality the defining element of Jamia Hamdard through a combination of self and external quality evaluation, promotion, and sustenance initiatives.

The 'quality statement' and 'quality framework' as stated under are the integral components of the Memorandum of Association (MoA) of Jamia Hamdard approved by the UGC and Registrar of Societies in 2021.

QUALITY STATEMENT

Jamia Hamdard is committed to strive for achieving and sustaining high quality standard in higher education leading to excellence and innovations in selected fields of knowledge and undertaking high quality research for the advancement of knowledge and its dissemination through various research programs undertaken in-house or in collaboration with premier national and international institutes.

QUALITY FRAMEWORK

Students: To ensure the quality of students, strict adherence to the intake norms of the students to be taken. Only candidates screened through national and state level tests to be selected in various study programs, wherever applicable. Once enrolled, students will be exposed to all realms of their curriculum with adequate knowledge and learning resources at their hands, which facilitates their all-round development as a responsible citizen and professionally competent individual.

Faculty: Faculty quality is core to the quality of students. Jamia Hamdard, while selecting a junior faculty, investigates him/her as a future leader (Professor). Therefore, highest level of quality parameters is applied for faculty recruitment and promotion. Jamia Hamdard also encourages faculty to undertake research in their selected areas of specialization and emphasizes participation in interdisciplinary and collaborative research.

Professional development: The University provides all avenues to its faculty for professional development and to recharge themselves with contemporary development in their fields of interest. Research, innovation, and generation of intellectual property are appropriately incentivized.

Diversity, inclusiveness, and equal opportunity: The University believes in diversity and therefore is open to all irrespective of their background. The diversity of students is not only ensured nationally but also internationally. It also promotes inclusiveness and equal opportunity with special focus on increasing enrollment of girls in its various study programs and providing opportunities to educationally marginalized sections of society such as Indian Muslims.

Innovations, best practices, and technological intervention: The University promotes innovation in teaching and research and lays emphasis on following best practices in administration, teaching, and research. It encourages technological intervention and adoption of newer tool and techniques of knowledge delivery and management.

Ethics: Jamia Hamdard follows high level of ethics in its conduct and ensures that research and teaching is conducted following international ethical standards and transparency.

Environmental consciousness: Jamia Hamdard emulates green technology such as water harvesting, solar energy, waste and water re-cycling and eco-friendly waste management.

INTERNAL QUALITY ASSURANCE CELL

Jamia Hamdard attempts to carve out the total quality through a persistent focus on imparting quality education, through its innovative, comprehensive, and flexible education policy. Its Internal Quality Assurance Cell (IQAC) carries out activities that encompass all aspects of the University's functioning.

The IQAC at Jamia Hamdard was constituted on 7th December 2011. Since its establishment it has been performing the following tasks which are based on the NAAC manual on a regular basis:

- 1. Designing and implementing Annual Plans for institution-level activities for quality enhancement.
- 2. Arrange for feedback response from students for quality-related institutional processes.
- 3. Development and application of quality benchmarks/parameters for the various academic and administrative activities of the institution.
- 4. Retrieval of information on various quality parameters of higher education and best practices followed by other institutions.
- 5. Organization of workshops and seminars on quality-related themes and promotion of quality circles and institution-wide dissemination of proceedings of such activities.
- 6. Development and application of innovative practices in various programs/activities leading to quality enhancement.
- 7. Participation in the creation of learning-centric environment conducive for quality education.
- 8. Work for the development of internalization and institutionalization of quality enhancement policies and practices.
- 9. Act as nodal unit of the institution for augmenting quality-related activities.
- 10. Prepare focused Annual Quality Assurance Reports (AQARs).

14/9/21

REGISTRAR'S SECRETARIAT JA!/IIA HAMDARD (Deemed to be University) Hamdard Nagar, New Delhi-110062

No.: AS/JH/12-(i)/2021/*G*18 13th September, 2021

The Competent Authority of Jamia Hamdard is pleased to constitute the Research Advisory Committee (RAC) Consisting of the following with immediate effect.

1.	Vice Chancellor, Jamia Hamdard	-	Chairman
2.	Prof. Sudhanshu Vrati, Director, Regional	-	External Member
	Centre for Biotechnology, Faridabad		
3.	Dr. Anil Wali, Managing Director, Foundation	-	External Member
	for Innovation & Technology Transfer, IIT – Delhi		
4.	Prof. S. M. Ishti aque, Department of Textile		External Member
r	and Fiber Engineering, IIT Delhi		
5.	Dr. Arshad Khuroo, Associate Vice President &	-	External Member
	Head, Bioavailability and Bioequivalence,		
6	Sun Pharmaceutical Industries Ltd., Gurgaon Prof. Faizan Ahmad, INSA Senior Scientist, Centre for		External Member
0.	Interdisciplinary Research in Basic Science,	-	External Wentber
	Jamia Millia Islamia, New Delhi		
7.	Prof. Athar Adil Hashmi, Department of Chemistry	-	External Member
	Jamia Millia Islamia, New Delhi		
8.	Dean, School of Pharmaceutical	-	Member (ex-officio)
	Education & Research (SPER)		
	Dean, School of Chemical & Life Sciences (SCLS)	-	Member (ex-officio)
10.	Prof. Javed Ali, In-charge, IP Management	-	Member
4.4	Cell, Jamia Hamdard		
11.	Dr. M. Shahar Yar, Department of Pharmaceutical		Member
12	Chemistry, Jamia Hamdard		Manahan
12.	Dr. Sameena Naaz, Associate Professor, Department of Computer Science, Jamia Hamdard	-	Member
13	Advisor (Research), Jamia Hamdard	· · ·	Member-Secretary
10.	nonoor (neocaron), varna nanuaru	-	Member-Secretary

The role of the RAC would be to advise Jamia Hamdard on matters related to research, innovation, technology transfer, intellectual property, collaboration with research institutes and industry and quality assurance in research. The tenure of the Committee will be three years.

Prof. S. Raisuddin Advisor (Research), Jamia Hamdard S. S/AKHTAR Registrar

Copy to:

- All Members
- All Deans of Schools
- Finance Officer
- Director, IQAC
- AR (Academic)
- AR (Purchase & Stores)
- Secretary to Vice Chancellor (for information)
- PA to Registrar (for information)
- Guard File

SCHOOL OF CHEMICAL AND LIFE SCIENCES

PH.D. COURSE WORK RESEARCH METHODOLOGY (COMPULSORY PAPER) Code - PHRM-001

SYLLABUS

Contact hours – 50 Credits – 04 Marks - 100

UNIT - I: INTRODUCTION TO CONCEPTS OF RESEARCH

- · Meaning of research, attributes and types of research.
- Steps of research: Identifying a research problem and framing of research hypothesis, research planning, execution, data acquisition, analysis, interpretation.
- · Research funding: Procurement of research grants and fellowships.

UNIT - II: RESEARCH DESIGN, DATA COLLECTION, ANALYSIS AND INTERPRETATION

- Types, sources, acquisition and interpretation of data
- · Concept of Variables, Quantitative and qualitative analysis of data
- Common statistical tools used in scientific research (sample size determination, power analysis, normal distribution, parametric tests such as Student's *t*-test, analysis of variance (ANOVA) and repeated measures ANOVA, Chi-square test, Regression analysis, Tukey test,)
- · Graphical representation and mapping of data

UNIT - III: RESEARCH COMMUNICATION AND APPLICATION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN RESEARCH

- · ICT: meaning, advantages, disadvantages and uses
- Literature survey of the previous works and searches for articles online and in the library and common research databases
- Art of scientific writing: Steps to better writing, flow method, organization of material and style, drawing figures, graphs, tables, footnotes, references etc. in a research paper.
- What are different types of research papers? Their formats of presentation and publication
- Thesis writing: its characteristics and format
- Reference management tools
- Scientific presentations (oral and poster)

UNIT - IV: INTELLECTUAL PROPERTY RIGHT (IPR) AND ETHICS OF RESEARCH AND PUBLICATION

- Introduction to IPR, patent laws, process of patenting a research finding, copyright, cyber laws
- Ethical issues in research: Ethics involving use of animal and human subjects (role of ethics committees), professional ethics, conflict of interests, publication ethics and plagiarism, ethical issues related to technology
- Protection of environment and biodiversity
- Biosafety issues in research: Biosafety levels; biohazards of chemical, radiation, genetically modified organisms, recombinant DNA; handling of infectious agents and hazardous material used in research; laboratory waste disposal

Suggesting readings

- 1. Research Methodology Methods & Techniques, C.R. Kothari New Age international Publishers, Reprint 2008.
- 2. Thesis and Assignment Writing, J. Anderson, Wiley Eastern Ltd., 1997.
- Research Methodology, Mukul Gupta, Deepa Gupta PHI Learning Private Ltd., New Delhi, 2011.
- Fundamentals of Mathematical Statistics, S.C. Gupta and V.K. Kapoor, Sultan Chand & Sons, New Delhi, 1999.
- Statistical Methods, G.W. Snedecor and W.G. Cochrans, Lowa State University Press, 1967.

SCHOOL OF INTERDISCIPLINARY SCIENCES & TECHNOLOGY

Ph.D. course work

PHC – 001 Compulsory Paper

Total credit: 4 (Minimum 48 h teaching, classroom or contact sessions in a Semester) Maximum marks: 100

Section A: Research Methodology

- Objectives: Definitions; Formulation of the research objectives.
- Research methodologies: Study population; Variables; Sampling; Sample size determination; Plan for data collection; Methods of data collection; Plan for data processing and analysis
- Work Plan; Outline of the phases in a research process; Summary of the major components of a research proposal; Writing a research report.
- Information and Communication Technology (ICT) in Research, Use of Internet in research works, Literature Search, Scientific presentations

Section B: Research Tools in Interdisciplinary Sciences

- Spectroscopy: Principle & Application, UV-VIS Spectroscopy, Atomic Spectrophotometry, NMR and IR Spectroscopy
- Chromatography: Basic principles, types, and applications, TLC, HPTLC, Column chromatography: GLC, HPLC
- Electrophoresis: Apparatus, Types; SDS PAGE, Agarose gel
- PCR: Types, Southern, Northern and Western Blot Analysis, Genetic Transformation Techniques, ELISA

Section C: Copyright and ethical issues

- Introduction to IPR patent laws, Process of patenting a research finding
- Ethical issues in research, Professional ethics, publication ethics, Ethics involving use of animal and human subjects, Law on Protection of environment and biodiversity
- Plagiarism

Section D: Basics of Statistics

- Arithmetic mean, median and mode; Measures of variation standard deviation, variance, coefficient of variation
- Correlation: Simple, Multiple, Linear and Non Linear correlation, Spearman's correlation, Rank correlation
- Regression: Linear and Curvilinear regression (for two variables X and Y), Regression lines by least square method; Regression equations, Sample size, Statistical Power

REGISTRAR'S SECRETARIAT JAMIA HAMDARD (Deemed to be University) Hamdard Nagar, New Delhi-110062

No.: AS/JH/UGC-05/2022/ June 14, 2022

NOTIFICATION

In pursuance of the UGC letter No. F.No.1-5/2021(NEP)/Desk-Parl.) dated 8th June 2022, it is hereby notified that the existing Office of the Advisor (Research) is being renamed as "*Research & Development Cell (RDC) of Jamia Hamdard*" with immediate effect and Prof. S. Raisuddin, Department of Medical Elementology & Toxicology, School of Chemical & Life Science^swill serve as # Director, Research & Development Cell till further order.

Director, Research & Development Cell will initiate further necessary action w.r.t. scope, objective, functioning and governance etc. of the 'RDC' in the light of UGCs guidelines for establishment of Research & Development Cell in Higher Education Institutions (HEIs).

Issued by the order of the Vice Chancellor.

REGISTRAR

Copy to:

- 1. All Deans of Schools,
- 2. Dean, HIMSR
- 3. Dean, Students Welfare
- 4. All Heads/Directors/Principal
- 5. Finance Officer
- 6. Controller of Examinations
- 7. Director, IQAC
- 8. Advisor (Research)
- 9. University Librarian, HMS Central Library
- 10. Foreign Students Advisor
- 11. Coordinator, PhD Programmes
- 12. Deputy Registrar
- 13. Secretary / A.R. to Vice-Chancellor
- 14. P.A. to Registrar
- 15. Guide File

(S.S. Akhtar) REGISTRA

No: 25/452/2009-AWD Government of India Ministry of Fisheries, Animal Husbandry and Dairying Department of Animal Husbandry and Dairying O/o Committee for the purpose of Control and Supervision of Experiments on Animals (CPCSEA) *****

Delhi Milk Scheme Complex, Shadipur, Delhi – 110008 Date: 18.04.2022

То

Prof. Nilanjan Saha, Chairperson, IAEC Jamia Hamdard (Hamdard University), Hamdard Nagar, New Delhi - 110062 Mobile: 9873013366 E-mail: nilanjan.saha@jamiahamdard.ac.in

Subject: Revision in IAEC / Change nominee- Regarding

Sir,

This is with reference to your request on the above mentioned subject; the IAEC of your establishment is being revised by including Dr. Masroor Anwar as Socially Aware Nominee in place of Shri Mahendra Yadav. Accordingly, new revised IAEC of your establishment would be as under:

S.No.	Name of the IAEC Members	Designation in IAEC
1	Prof. Nilanjan Saha	Biological Scientist, Chairperson
2	Prof. Shakir Ali	Scientist Incharge of Animal House Facility, Member Secretary
3	Prof. Suhel Parvez	Scientist from different biological discipline
4	Dr. Javed Ali	Scientist from different biological discipline
5	Dr. Mohammad Mateen Zehgeer	Veterinarian
6	Dr. Vijay Pal Singh	Main Nominee
7	Dr. Pravin Kumar Atul	Link Nominee
8	Dr. H.B.Singh	Scientist from outside the Institute
9	Dr. Masroor Anwar	Socially Aware Nominee

(* Revision)

2. It may be noted that only approved IAEC members can attend the IAEC meetings and are required to sign on the attendance sheet with date of the meeting.

Yours Sincerely,

Dr. S. K. Dutta) Member Secretary (CPCSEA)

Copy for information to Nominees of CPCSEA:

1	Dr. Vijay Pal Singh	Main Nominee
2	Dr. Pravin Kumar Atul	Link Nominee
3	Dr. H.B.Singh	Scientist from outside the Institute
4	Dr. Masroor Anwar	Socially Aware Nominee