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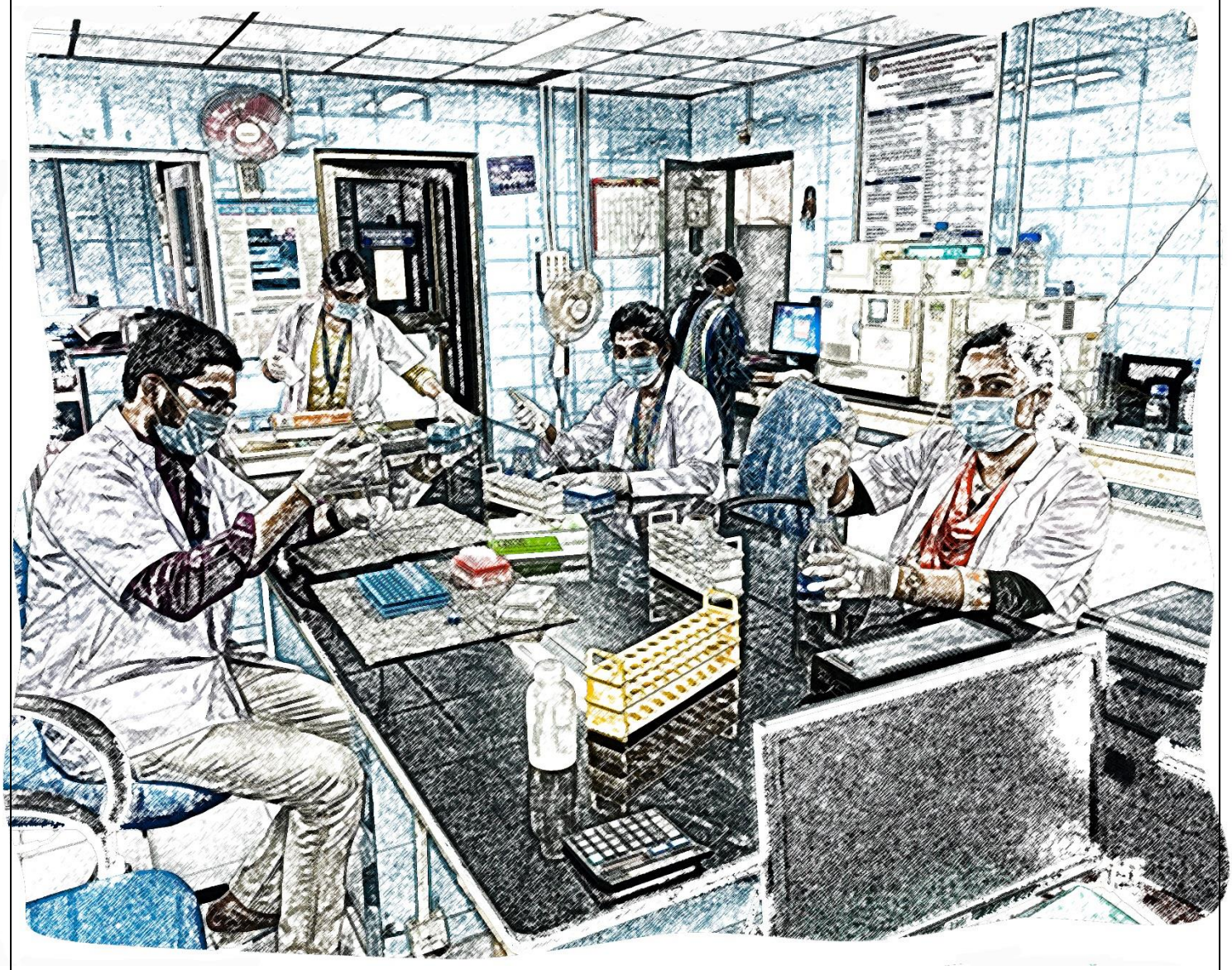
JAWAHARLAL INSTITUTE OF POSTGRADUATE MEDICAL EDUCATION & RESEARCH

An Institution of National Importance

Under Ministry of Health & Family Welfare, Government of India



Postgraduate Dissertation Guidelines 2020

(Approved in the 15th SAC meeting held on 25th July 2020)

PG Dissertation Guidelines 2020

Dean (Research) office

JIPMER

Puducherry

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Disclaimer

These guidelines are to help the postgraduate students and the guides in JIPMER to carry out dissertation work. Due care has been taken to ensure that the information and guidance provided in this document is up to date and in sync with relevant global best practices at the time of publication of this document. However, in view of ongoing changes in government regulations and the constant flux of new information, the reader is urged to check for the latest notifications/rules/ regulations provided by MCI and ICMR.

Contents

1. Preamble

The students of postgraduate and super-specialty courses (PGs) are required to submit a dissertation as a partial fulfillment of their course curriculum. Dissertation work involves carrying out an original research project by a PG student under the guidance/supervision of a faculty member within the course period and submitting a report in the form of a book. The course will not be complete, and the degrees will not be awarded without the submission of dissertation books.

2. Why dissertation?

Research competency is one of the requirements of postgraduate medical education and hence dissertation work is made mandatory for postgraduate students. The objective is to train the students in various aspects of research and enable them to acquire skills of planning, execution, analysis and reporting which will be useful to him/her carry out research independently in his/her career. Further, the dissertation apart from providing a chance for the PG student to equip himself with the knowledge of (a) research methodology, (b) statistical analysis, and (c) ethical principles of experimentation, helps him/her develop a scientific attitude, study his/her topic of interest in depth, acquire creative and critical thinking skills, gain new information and publish his/her research work. It is also expected to change his/her attitude towards biomedical research which coupled with the knowledge and skills he/she acquired in the process of carrying out dissertation will be expected to help him/her become a full-fledged researcher in his/her career and/or critically analyze the new information before using them to benefit his/her patients.

'PG student' means students who are studying one of the following courses:

1. MD
2. MS
3. MDS
4. DM
5. MCh
6. MSc
7. MPH

2.1 Who will be doing dissertation?

The students who are admitted to the following courses will be doing dissertation work and submit a report in the form of a dissertation book. Currently, they are admitted in two batches in a year viz January and July:

1. MD
2. MS
3. MDS
4. DM
5. MCh
6. MSc
7. MPH

Note:

a. For the courses of less than three years duration, the dissertation/project work is optional as decided by the departments.
b. The office of the Dean (Research) will NOT be involved in the process, except for a grant of funds for the research work.
c. The completed dissertation/project reports will NOT be submitted to the Dean (Research) office. The evaluation will be done by the internal and external examiners at the time of the final examination.

2.2 Requirements for dissertation work

a. Guide/Supervisor: Each student will be allotted a guide as soon as he/she joins the department.
b. Equipment and Infrastructure: All departments are equipped for carrying out research work, and good infrastructure facilities are available to facilitate research.
c. Finance: Up to Rs 2,00,000 (maximum limit) will be made available for carrying out research work on the approval of the protocol of dissertation work
d. Participants/animals/research material: Healthy volunteers and patients can be involved in research after due permissions.
e. Co-guide(s): The guide will choose the co-guides. Not more than three co-guides and not more than one co-guide from the same department will be allowed.

3. Eligibility to become a guide

1. Any faculty member (from Assistant Professor and above) who has a postgraduate degree or a Diplomate of National Board (DNB) and completed uninterrupted six months of service in JIPMER can guide a PG student.
2. He/she should have at least 36 months of service left in JIPMER at the time of student joining the institute. A relaxation of up to three months may be given in exceptional circumstances after approval by the Dean (Research).
3. Any faculty member can be a co-guide. He should have at least 33 months of service left in JIPMER at the time of student joining the institute. If a faculty member is not available, medical officers/tutors/demonstrators with a postgraduate qualification can be included as a co-guide. The head of the department cannot be a co-guide for all the students in his/her department.
4. The number of co-guides for a dissertation work should be as small as possible. It should not typically exceed three, and if it does, the Departmental Postgraduate Research Monitoring committee should justify and approve it.

3.1 Responsibility

The guides and the co-guides:

a. are expected to be adequately knowledgeable about the research methodology, statistical procedures, and ethical principles governing research. They should avoid claiming ignorance of basic principles and strive to update themselves continuously in the above areas.

b. will take responsibility for planning, execution, analysis, submission of the dissertation book, and publication of the work in a good journal. However, this does not mean the guides and the co-guides are expected to do the work themselves, but train/guide the student to be able to do the above, supervise them, sort out the administrative/logistic/practical problems for smooth conduct of the work.

c. will allow adequate time for the work related to the dissertation, including interaction and training of each student under him/her and does not unduly delay the work and make the student wait endlessly.

d. will refuse to take students if he, in his best judgement, decides he cannot do justice to the student.

e. will continuously monitor the postgraduate dissertation work of the students under their guidance, will take primary responsibility for their research and ensure that informed consent is taken and the research is conducted as per the Responsible Conduct of Research mentioned in the National Ethical Guidelines for Biomedical Research involving Human Participants, 2017 (https://main.icmr.nic.in/sites/default/files/guidelines/ICMR_Ethical_Guidelines_2017.pdf)
f. will arrange to conduct the departmental meetings once in six months (in January and July) to assess the progress of the work. The student will make a presentation giving details of the work done, work left to be carried out, a justification for delay if any, and the difficulties faced, if any. The student, guide, and co-guides should discuss the shortcomings and find ways to rectify them.
g. will arrange a meeting to discuss/verify the draft of the dissertation before submission of the dissertation book.
h. will submit (through the head of the department) six-monthly progress reports in the prescribed format without fail.
i. will report to the Dean (Research) without delay the unsatisfactory performance, misconduct, fraudulent activity, if any, by the student.
j. will make sure the student has received all the necessary permissions (in writing) before allowing the student to execute the work, and the copies of the permissions are displayed during the dissertation presentation.
k. will make alternative arrangements for smooth execution if he/she leaves the institute (a) for a short term (not more than three months), (b) for a long term (3-6 months), or (c) permanently. He should inform the student, other guides, colleagues, head of the department, and dean (research) well in advance and ensure that his/her departure does not adversely affect the student.
l. will not try to disown the student or ask for relief from the assignment in the middle without conveying strong and justifiable reasons. He is expected to exhibit leadership and ownership. He should discuss with the head and the Dean (Research), if and when he faces problems and try to sort them out.
m. will maintain the highest standards in all aspects of the dissertation work and be a role model for his students.
n. will ensure ready availability of clinical material, timely procurement of materials/equipment, and timely completion of the dissertation.

o. will not be unrealistic in selecting the research topic and finalize a topic keeping uncertainties in mind.

p. will maintain in his custody, a separate file for each student. It will contain a copy of the protocol, permissions, communications, and all other documents related to the dissertation.

q. will ensure that the dissertation is aimed at improving the spirit of enquiry and creativity, exposing the student to the technical aspects of research, critical thinking, and analysis, encouraging the student to familiarise with the latest developments in medical science and acquiring the skills of identifying and consulting available literature. Hence, the guide/co-guide is expected to provide academic guidance by:

    - providing scholarly direction;
    - encouraging student to do his/her dissertation work;
    - ensuring that appropriate time table for the different phases of the work is drawn;
    - ensuring that student is given timely advice about the requirements of writing a dissertation;
    - ensuring acquiescence with all guidelines associated with the dissertation work such as legal, professional, ethical or safety guidelines;
    - recognizing the missing skills in the student and helping him/her acquire the same for his/her research.

r. will take overall responsibility for the contents of the dissertation including the authenticity of data

4. Role of the head of the department

The head of the department

1. will allot the students to eligible guides on a rotation basis <u>in consultation</u> with the faculty members of the department in a departmental meeting within ten days of PG students joining the department and will see that no faculty will not normally guide more than 6 PG students at a time.
2. will do his/her best to the smooth conduct of the dissertation work and carry out conflict/dispute resolution when conflicts arise among students and guides.
3. will act as a wise counsel without any bias and taking sides.
4. will promptly notify the Dean (Research), if any student has not submitted the protocol even after six months.

5. will not impose co-guides of his/ her choice to the guides of his department or other departments (when they seek a co-guide). He/she should honor the request of guides to the maximum possible extent.
6. will also not impose topics of his/her own choice and shall give freedom to the guides/co-guides to choose the same pending approval by the departmental PG dissertation committee.
7. will ensure a copy of the manuscript of the dissertation work (in the Uniform Requirements format [http://www.icmje.org/about-icmje/faqs/icmje-recommendations/]) has been submitted to the guide, before signing the No Due Certificate of the student at the end.
8. will encourage the guides and the students to publish the dissertation work as early as possible.
9. will exhibit leadership qualities and inspire the guides and the students.
10. will call for the meetings of departmental PGRMC and review meetings without delay.
11. will bring to the notice of the Dean (Research) irregularities, if any, is occurring in the dissertation-related work,
12. will sign the No Dues Certificate of the student at course completion.

5. Protocol preparation and submission

1. A training workshop on 'how to write protocol' will be conducted by the dept of medical education in March/April and July/August. All postgraduate students should attend without fail.
2. The topic of research will be decided by the student and the guide. The protocol written by the student and corrected and finalised by the guide will be submitted to the departmental PGRMC in the prescribed format (available on the JIPMER website). The Member-Secretary of the committee will make entries in the register kept for the purpose.

5.1 Role of departmental postgraduate research monitoring committee (PGRMC)

1. PGRMC which is constituted by the head of the department comprises of departmental faculty members and a few invited faculty, if the departments have a small number of faculty members. The members will evaluate the student research proposals, document

the minutes, and issue an approval certificate for submission to the ethics committee (as per the format enclosed).

2. The total number of members should be at least nine faculty among which seven should be physically present during the discussion. In case the department does not have that many faculty, the deficiency must be made up of faculty from other departments as per the guidelines from the Dean (Research) office.
3. The Departmental PGRMC should include the head / acting head of the department as its chairman. All faculty members from the department must participate (minimum 75% attendance mandatory) as members of the committee. The chairman will appoint one of the faculty members as the member-secretary.
4. Responsibility of forming the committee for screening and scrutiny of dissertation projects in a department, calling for the meeting, issuing the certificates to students and submitting the minutes to the Dean (Research) office will rest with the Head of the Department (HoD)/chairman and the member-secretary of the committee.
5. HoD may incorporate experts in biostatistics or study design.
6. HoD may invite other faculty members for the meeting to give suggestions.
7. HoD should submit a final copy of the protocol along with the minutes of the meeting (mentioning the discussions and corrections suggested with signatures of the entire faculty in attendance in the meeting) to the division of research within seven working days of the meeting date.
8. The guide will take full responsibility for ensuring that all the corrections are carried out before submission. HoD to ensure that all corrections in minutes of meetings are implemented and issue a certificate to the student.
9. Protocols to be submitted to IEC along with the PGRMC approval certificate (Format enclosed).
10. All suggestions in the meeting must be noted in the following format.

S. No	Student's name	Guide & Co-guide	Title of the topic	Suggestions by members	Accepted and corrected by investigators

5.1.1 Mandate of the committee

1. To assess the clinical utility and scientific validity of the research question or hypothesis of the study.

2. To assess and suggest improvements in title, objectives, methodology, and suggest improvements in the conduct of the study.

3. To assess the feasibility of methodology for infrastructure and finances available.

4. To suggest improvements for enrolment of subjects or samples and ensure conformity with ICMR ethical guidelines.

5. To ensure adherence to Institute format, including references as per Vancouver format. Any grievance(s) related to the proposal review process may be addressed to the office of the Dean (Research) through proper channels. The Dean (Research) may ask the JSAC to review PG protocols under dispute for a final decision.

5.1.2. The combination of departments for constituting PGRMC

1. Biochemistry + Physiology

2. Microbiology + Pulmonary Medicine

3. Surgical Oncology + Medical Gastroenterology + Plastic Surgery

4. Ophthalmology + ENT

5. Orthopaedics + Emergency Medicine + Dentistry

6. Urology + Nephrology + Paediatric Surgery

7. Radiology + Nuclear Medicine + Medical Oncology + Radiotherapy + Surgical Gastroenterology

8. Neurosurgery + Neurology+ Endocrinology

9. PSM and Biostatistics

10. Obstetrics and Gynaecology

11. Pathology and Transfusion Medicine

12. Anaesthesiology

13. Paediatrics + Neonatology

14. Medicine

15. Surgery

16. Pharmacology + Clinical Pharmacology

17. Clinical Immunology + Cardiology + CTVS

18. Anatomy+ Forensic Medicine and Toxicology

19. Psychiatry + Dermatology & STD

5.1.3 Observer for PGRMC

Dean (Research) will nominate a faculty member as an observer for each of the above 19 committees. The PGRMC committee chairman and the member-secretary will be informed of the details of the observer and the meeting should be fixed in consultation with him/her. The observer will attend the meeting in full and forward a confidential report to the Dean (Research) office in the format given below as soon as the meeting is over. He/she does not have a decision making role/voting right and need not participate in the subject discussion but can raise queries to gather information to complete the report.

Form to be filled in by the observer for PGRMC

a. Name of the nominee :

b. Name(s) of the department(s) :

c. Date & Time of the meeting :

d. Venue of the meeting :

e. Was the quorum met? : Yes No

f. Were the arrangements for the meeting adequate? Yes/No/NA. If 'no' give details.

g. Did the students make a satisfactory presentation? Yes/No/NA. If 'no' give details.

h. Did free and adequate discussion of protocols/progress of the work take place? Yes/No/NA. If 'no' give details.

i. Were the protocols/progress of the work critically analysed by the members? Yes/No/NA. If 'no' give details.

j. Were the problems in executing the studies and the solutions discussed? Yes/No/NA. If 'no' give details.

k. Any other comments:

To be forwarded to the Dean (Research) in a confidential envelope

5.1.4 Format of the certificate

Departmental PG Research Monitoring Committee
CERTIFICATE

This is to certify that the PG dissertation proposal with the following details has been approved by the **Departmental PG Dissertation Monitoring Committee**, held on xxxxxx, subject to clearance by the institute Ethics Committee.

Title of the proposal:
Name of the postgraduate:
Name of the postgraduate course :
Date of joining the postgraduate course:

Name of the guide:

Name(s) of co-guide(s):

Signature/Seal
Member-Secretary

Signature & Seal
HEAD OF THE DEPARTMENT

5.1.5 Procedure

1. The member-secretary (appointed by the HoD/Chairman) of the departmental PGRMC in consultation with the chairman (normally the HoD) will call for a meeting giving at least 15 days' notice (30 days preferable). It is advised that the meeting date may be announced in the month of January-February/July-August with a months' notice so that the students would have ample time to prepare the protocol before the deadline.
2. The student should make a presentation of the protocol in the presence of his guide and the members. The committee should discuss it, and the decision may be announced. The minutes may be prepared, signed by all the members (attended the meeting), and circulated.
3. The student may revise and resubmit if he was asked to do so, and another meeting may be held to discuss the revised protocol. Minutes of the meeting should be prepared, signed by all the members (attended the meeting) and circulated.
4. Once a protocol is approved a certificate of approval signed by the chairman and the member-secretary (Format given) is issued to the student

5. The committee should scrutinize not only the scientific content but also the budget and certify that the budget is justified, and the consumables asked for are required for the study.

5.2 Submission to Dean (Research) office and ethics committee

1. A copy of the minutes of all the meetings should be submitted to the Dean (Research) office by the member-secretary well before the deadline (i.e., April 30 / October 31)
2. The student should submit 2 copies of the protocol complete in all respects for onward transmission to the ethics committee. The protocol must carry a copy of the approval by the PGRMC and the entire content in a CD. The deadline for January and July batches is as follows:

January session	**July session**
Last date - March 31 Late submission without fine - April 30 Late submission with fine - May 10	Last date - Sept 30 Late submission without fine - Oct 31 Late submission with fine - Nov 10

3. If the last day is a closed holiday, the next working day will be considered the deadline.
4. Late submission carries a fine of Rs 10,000/- and no exemption will be given whatsoever may be the reason.
5. Students who have not submitted before the deadline will be allowed to submit only after paying a fine of Rs 20,000/-. If the protocol is not submitted on or before 30 June (for January session) or 31 December (for July session), salary/stipend will be withheld until the protocol is submitted. If the protocol is not submitted within 9 months of start of the session, the registration will be cancelled and the student will be terminated from the course without any notice.
6. Delay in the submission of protocol will delay the submission of dissertation, and the student will not be allowed to take final examination before the dissertation is submitted, evaluated, and approved.
7. All protocols submitted within the deadline will be transferred to the ethics committee, and the ethics committee will contact the student.

5.3 Ethics committee (Human Ethics Committee & Animal Ethics Committee)

1. The ethics committee will review all the PG protocols received from the Dean (Research) office.
2. The student will be informed well in advance of the date, time, and venue of the meeting.
3. He/She is supposed to present his/her protocol before the ethics committee.
4. The ethics committee may reject, accept, or ask the student to revise the protocol.
5. If the protocol is rejected, a new protocol should be submitted after approval from the departmental PGRMC.
6. If the student is asked to revise the protocol, the revised protocol should be submitted to the ethics committee within a reasonable time for scrutiny and approval.
7. No work should be carried out before obtaining the approval of the ethics committee
8. The protocols which in the opinion of guides do not require ethics approval (e.g. studies on cell lines of animal origin obtained from National Center for Cell Sciences/systematic reviews) should be submitted to Dean (Research). He can scrutinize the proposal and decide whether the proposal needs approval from the ethics committee. If the proposal does not require ethics clearance, the dean will issue a certificate to that effect. Otherwise, he/she will refer it to the ethics committee.

6. Intramural Research Fund

All PG students, through their guides who will be the Principal Investigator of the dissertation project, can apply for intramural funding to carry out the dissertation projects approved by the respective Departmental PGRMC and ethics committee. The funding details must be filled in when the application is submitted to Departmental PGRMC, which will go through the details and submit a declaration that the requirements are necessary for carrying out the study and the quantity asked for, and the price of the items are reasonable. HoD and guide must ensure that infrastructure should be available in the Department to complete the dissertation project, and budget requirement is within the sanctioned limits.

The maximum sanctioned financial limit that could be sanctioned for the following dissertation projects is given below:

MD/MS/MDS/DM/MCh	Rs 2,00,000/-
MSc /MPH	Rs 50,000/-

Normally consumables are allowed. Small gadgets/equipment and travel charges (exclusively for field visits for data collection) could be sanctioned to the limit of Rs 50,000/ and Rs 25,000/ respectively. For MSc/ MPH students, up to a maximum of Rs, 5,000 will be sanctioned for the preparation of dissertation books.

The Intramural Research Fund Committee will scrutinise the applications, and the amount requested will be sanctioned if the application and other documents are in order. The guide will be informed of the sanction of money through sanction order, and an account will be opened in SFacts system (computerised research fund management system). All guides will be given access to SFacts.

The consumables and other items can be purchased adhering to the JIPMER purchase rules detailed under GFR 2017. The procedures such as GFR 154, GFR 155, Proprietary consumables, and limited tender enquiry could be used for procurement. Continuation order of Departmental e-tender may be given the preference. In case of limited tender enquiry, a comparative statement should be prepared, which should be verified by a three-member committee: guide, HoD, and a faculty from the other Department. Purchase order (P.O.) should be issued to the supplier by the Principal Investigator of the dissertation project. The supplier will supply the items as per purchase order and provide invoices (bills) in the name of the Director, JIPMER.

All purchased items should be entered in the Departmental Stock Register Book (SRB). Payment request to the supplier should be made through SFacts. Payment request, Invoice (bills), Purchase order, Comparative statement (if available), tender enquiry (if available), sanction order should be submitted to the account section for making payment to the supplier. Invoices dated in one financial year (April to March of the next year) should be submitted to the accounts till February month of the financial year to clear payment. It is advisable to avoid the generation of invoices in March month. The account section will not clear the invoices for the previous financial year.

As soon as the dissertation work is over, the guide and the student must submit the utilisation certificates (UC), statement of expenditure (both can be downloaded from the SFacts), and final report to the Dean Research Office to close the Research account.

Unless the Research account is closed, the student will not be given the No Due Certificate to get himself/herself relieved from the Institute. No subsequent research grant will be given to the guide unless the previous account is closed. HoD should ensure the closure of all dissertation grants.

7. Publication

1. All the dissertation work should be published. It is the responsibility of the guide to get the work published.
2. Unless the guide provides proof of publication/letter from the journal of acceptance or submission of the previous work (completed three months or more before the date of the research grant meeting) supported by an intramural grant, the further grant will not be provided.
3. The manuscript must be written using the Uniform Requirements format [http://www.icmje.org/about-icmje/faqs/icmje-recommendations/] must be submitted to the guide, if the student is not able to publish it or submit it to a journal before he completes the course.
4. 'No due certificate' will not be issued to the student unless he/she has published the dissertation work or submitted a copy of the manuscript to the guide.

If an intramural research fund is availed to carry out the work, the grant must be acknowledged in the manuscript.

8. Research misconduct and integrity

8.1 Responsibilities of the students

The researchers (students and guides) must be aware of the principles of research ethics and publication ethics. Responsibilities while conducting research as mandated by ICMR policy on Research Integrity and Publication Ethics (https://ethics.ncdirindia.org//asset/pdf/ICMR_PRIPE2019.pdf) are reproduced below:

1. *All raw data should be available and securely kept by the lead investigator (Guide) that could be presented later (if needed). Data should be preserved after study completion as it may be necessary to confirm research findings, establish priority, or be re-analyzed by other researchers or for monitoring by sponsors or regulators. The present requirement is to maintain research records for three years in case of biomedical and health research and five years for clinical trials as per regulatory requirements.*

2. *Declaring Conflict of Interest (COI). COI, both academic and financial, may have serious implications and threaten the quality of research and its outcomes. The student and the guide must declare in writing all the COI to the Departmental PGRMC and ethics committee.*
3. *All biomedical and health research must follow National Ethical Guidelines for Biomedical Research involving Human Participants, 2017 (https://main.icmr.nic.in/sites/default/files/guidelines/ICMR_Ethical_Guidelines_2017.pdf) and maintain research integrity in the conduct of research while ensuring the safety of research participants.*

   [Other applicable guidelines and regulations must also be followed and before initiating research required approvals must be obtained from committees such as Postgraduate Research Monitoring Committee (PGRMC)/Institute Ethics Committee (IEC), Institutional Animal Ethics Committee (IAEC), Institutional Biosafety Committee (IBSC), Institutional Committee for Stem Cell Research (IC-SCR), Sponsored Clinical Trial Research Committee, Health Ministry's Screening Committee (HMSC), Central Drug Standard Control Organization (CDSCO), Atomic Energy Regulatory Board (AERB) as the case may be. Registration with Clinical Trial Registry-India (CTRI) is mandatory for clinical trials but desirable for other types of research to maintain transparency and accountability]
4. *For collaborative research, there may be a requirement for having appropriate memorandums of understanding (MoU) and material transfer agreements (MTA) in place*
5. *Research should be undertaken by persons who are competent with qualifications, having relevant experience/training to collect reliable data, undertake accurate analysis, interpretation, and publication.*
6. *Researchers should be sensitive to societal and cultural values, engage and improve public trust, undertake meaningful research, be accountable to outcomes, and take needful steps to protect participants from harm or risks.*
7. *Guides should lead by example and devote sufficient time to guide and ensure that their trainees (Research Fellows, Associates, Post-doctoral Researchers, students, and others) conduct research honestly.*
8. *Informed consent should be obtained whenever required, or waiver should be obtained from IEC.*

9. *Any form of research misconduct is unethical, including plagiarism, fabrication, falsification, manipulation of data or images/digital image/use of unreliable or duplicate images, exaggeration on the part of results and interpretation, use of wrong statistical tools, gift/ghost authorship, etc.*
10. *Researchers must ensure the authenticity of research results before publishing or disseminating information out of the institution.*
11. *Researchers should follow guidelines of the International Committee of Medical Journal Editors (ICMJE - http://www.icmje.org/), Committee on Publication Ethics (COPE - https://publicationethics.org/), research integrity and authorship and ensure the substantial intellectual role of all authors who are included in the publication or presentation. Ghost authorship and gift authorship are not allowed, and contributions of all authors should be clearly identified, collaborations if any, may be declared preferably at the time of dissertation project initiation or when the collaboration evolves during the conduct of research, with the name and details of collaborators stated. The role of all authors should be clearly identified/justified.*
12. *Authorship should be duly given to all those who have substantially scientifically contributed to the research and may include permanent as well as contractual/ temporary staff.*
13. *The researcher is also required to submit an annual report to the ethics committee for review.*

If some of the responsibilities expected from a researcher is not adhered to, it will amount to misconduct/fraud. Students/ Guides should do not deviate from the good ethical practices mentioned above.

8.2 Research misconduct

The following practices will amount to misconduct/fraud. Students/ guides should avoid them at any cost.

1. Recording wrong observation/data
2. Doing incorrect analysis
3. Insufficient record keeping
4. Withholding the details of methods
5. Duplicate and sliced publications

6. Biased or post-hoc amendment of study design
7. Overlooking previous work of others
8. Suppressing own data / dropping data points
9. Undeclared conflict of interests
10. Conscription of authorship without consent
11. Undeserved authorship (includes gaining authorship by power harassment).
12. Wrongful denial of authorship to deserving persons
13. Misuse of public funds (research grants)
14. Overlooking others use of flawed data
15. No permission from appropriate scientific advisory committee and Institute Ethics Committee
16. No informed consent (if waiver not obtained)
17. Plagiarism/ Falsification/ fabrication of data
    a. Using other's ideas, processes, data, or text without giving proper credit is plagiarism.
    b. Manipulating data/results by altering research materials, equipment, processes, output, and figures leading to inaccurate representation in the research report is a falsification.
    c. Fabrication is making up data or results and recording or reporting them
18. Ignoring supervisory duties, persuading, guiding, encouraging, or knowingly letting others indulge in fabrication, falsification, or plagiarism.
19. Illegal human experiments
20. Unethical publications practices such as multiple simultaneous submission of a manuscript to different journals, duplicate publications, sliced publications, denying authorship to a deserving member of the research team, and gift authorship.

Note: Honest errors do not come under misconduct or fraud and hence not unethical. However, it is the responsibility of the investigator to prove it.

8.3 Plagiarism checking

The dissertation report should be submitted to the plagiarism checking committee for screening for evidence of plagiarism before submission to Dean (Research)/ Dean (Academic). The report shall be accepted if approved by the plagiarism checking committee.

Students shall submit their dissertation report to Plagiarism Checking Committee (jipmerpcc@gmail.com) along with self-declaration by the student and guide, regarding non-use of copyrighted content and non-modification of text after issue of the certificate.

8.4 Submission procedure

The submission procedure is as follows:

Step 1: Enter your details directly by using the following link:
https://docs.google.com/forms/d/e/1FAIpQLSd9_Y4GBcDwIhJld-6Yie69INwfVt14mBfRfqj18TE3c2__WA/viewform?usp=sf_link

Step 2: Download "PCC Manuscript Submission Proforma" from Plagiarism Checking Committee webpage in the JIPMER website and use it to prepare your manuscript file which would be suitable for processing by iThenticate Software. Rename the final file as "candidate name department manuscript". (e.g.: Rajesh pharmacology manuscript)

Step 3: Download "Declaration Form" from Plagiarism Checking Committee webpage in JIPMER website. Enter the details in Declaration Form, take a print out and add signatures where necessary. Scan the completed document and save as PDF file format. Rename the final file as "candidate name department declaration form". (Eg: Rajesh pharmacology declaration form)

Step 4: Email the following files to jipmerpcc@gmail.com with a brief statement of candidate and submission details.

1. Manuscript file prepared and renamed as per instruction
2. Declaration form scanned copy as pdf format and renamed as per instruction

Step 5: Certificate:

Institute Policy on research misconduct: The Institute policy on research misconduct is detailed in the anti-plagiarism policy of JIPMER.

8.5 Institute policy on research misconduct

Any misconduct in research, and publication whether minor or major, will be viewed seriously. On receipt of a complaint, the competent authority will be notified for initiating an investigation. If found guilty of misconduct, appropriate action will be initiated based on the general procedures outlined by CCS Conduct Rules, ICMR guidelines (https://main.icmr.nic.in/sites/default/files/upload_documents/ICMR_policy_ripe.pdf) and the University Grants Commission (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018.

(https://www.ugc.ac.in/pdfnews/7771545_academic-integrity-Regulation2018.pdf).

The punitive measure will be commensurate with the degree of misconduct i.e., large scale fraud, small scale fraud, major mistake (intentional) or minor mistake (intentional). Unintentional mistakes or honest errors will not attract any penal action.

9. Progress, modification and completion reports

Six-monthly progress reports must be submitted to the dean research office by all the students. Failure to submit the same will attract punitive action. The guides and the HoDs should ensure that the students submit the progress report. A proforma for the report is given below. The students should submit the completion report to the dean research office / ethics committee before or as soon as they submitted the dissertation books. No due certificate will not be issued to those who have not submitted the same.

Any modification/any change in any part of the protocol including change of title, guide/co-guides/investigators, objectives, methods, data collection procedure, plan of analysis should be duly approved by the PGRMC. Two copies of the revised protocol along with the approval letter from the above committee should be submitted to the Dean Research office for forwarding the same to the Ethics committee for approval of modifications. No modification in the protocol could be implemented before obtaining the explicit approval of the ethics committee.

Action will be initiated if the progress is poor and the stipend/salary may be withheld till the student shows progress. If the progress continues to be poor or slow, the student will be terminated from the course.

JIPMER, Puducherry

Review of progress of PG dissertation by the departmental PGRMC/HoD

(To be submitted in the months of January and July for all PG students)

Identifying information of PG student

Name			
Department		Date of joining the department	
Email ID		Phone no.	

Identifying information of guide

Name			
Designation		Department	
Phone no.		Email ID	

Details of progress of dissertation work

Date of approval of Departmental PGRMC	Date: /Not submitted yet/Awaiting approval
Date of approval of IEC	Date: /Not submitted yet/Awaiting approval
Percentage of work completed	00 25 50 75 90 100
Any 'Protocol deviation' or 'Protocol violation'? If yes, give details	Yes No
Was there any change of guide/co-guide/protocol in the last six months?	Yes No
If yes, were the departmental PGRMC and IEC approvals obtained for the above amendments? Mention IEC approval number and date of approval for amendment.	
Problems, if any faced by the student, the guide or the department in making progress.	
Progress of the dissertation work	Satisfactory ☐ Unsatisfactory ☐ Poor ☐
Whether Dean Research office intervention is required?	Yes No
Conduct of the PG student	Outstanding/Very Good/Good/Poor
Attendance of the PG student (Give details of long leave other than CL taken in last six months)	Regular/Irregular

Any additional comments

Sign and Name of Guide with date & seal **Sign and Name of HOD with date & seal**

10. Grievance and conflict resolution

If any student has any grievance regarding PG dissertation work, he/she should approach the guide, co-guide, head of the department, and the Dean (Research) in that order. If the problem is not sorted out, he/she can approach the Director.

11. Preparation of dissertation books

The dissertation books should be prepared as given below:

Length – approximately 50-60 pages

Font – Arial / Times New Roman

Size of font – 11/12

Spacing – Single/1.5 spaced

30-40 lines/page, 400-450 words/page

Executive bond paper

Printing - Both sides

Margins – Left 1.5"; Right 1" Top 1" ; Bottom 1"

Continuous pagination

Binding – Spiral binding

The arrangement of sections in the book should be in the following order:

1. Preliminary pages
    - Title page, Certificates
    - Acknowledgement, Table of contents
    - List of tables and Figures
    - Definitions, Abbreviations
2. Main text
    - Introduction, Aims & Objectives, Review of literature
    - Methods, Results, Discussion
    - Limitations, Scope for future studies
    - Conclusions, Summary
    - Bibliography (References)
3. Annexures (as applicable):
    - PGRMC certificate, IEC certificate, Plagiarism Checking Committee certificate
    - Blank data sheets, Blank consent form(s), Master chart (without any patient identifying information), Additional figures/pictures and photographs

- Questionnaires, Permission/License for using illustrations and other copyrighted material

4. Subsidy:

MD/MS/MDS students are entitled to a subsidy of Rs 5000 for having met the expenditure of preparation of dissertation books on production of certificate of submission of the books.

12. Submission of dissertation books

Two hard copies of the dissertation books, along with a softcopy on a CD, should be submitted to the Dean (Research) office before the deadline. One soft copy of the entire dissertation book should be submitted through mail to *pgdissertationjipmer@gmail.com* and. One hard copy of the book will be returned to the student from the Dean (Academic) office after the books are inked with signatures. The deadlines are as follows:

January session	**July session**
Last date - June 30 Late submission without fine - July 31 Late submission with fine - Aug 31	Last date - December 31 Late submission without fine - January 31 Late submission with fine - Feb 28/29

Those who do not submit the dissertation books complete in all aspects within the deadline, will not be allowed to appear for the final examination in that session.

If the last day is a closed holiday, the next working day will be considered the deadline. Late submission carries a fine of Rs 10,000/- and no exemption will be given whatsoever may be the reason. Submissions beyond Feb/Aug will not be processed, and the students will NOT be allowed to appear for the upcoming examination. They will be allowed to appear for the examination in the next session subject to the approval of the dissertation work by the reviewers/examiners.

13. Evaluation

After scrutiny, the dissertation books will be submitted to the Dean (Academic) office. One internal and two external reviewers will be chosen for each dissertation, and they will be sent either print or e-copy of the dissertation for review and recommendation. Once the review is received, the same will be passed on to the HoD, for transmission to the guide and the student. If a reviewer has not approved or asked for a revision, the Dean (Academic) will review the recommendation and the comments and takes the final decision. Dean's (Academic) decision is final. If the dissertation is not approved, the student has to modify the protocol, carry out the work, and submit the dissertation books. If a revision is needed, the student will submit the revised version of the dissertation, which will be re-reviewed by the reviewers.

14. What do examiners expect in a dissertation?

14.1 How is the dissertation valued?

There is no defence; no oral presentation; no viva-voce on dissertation before or during the final examination. The dissertation copies (either print or softcopies) will be sent to three examiners – one internal and two external. The examiners will be asked to give a report in a specified format within a time period. They will be asked to recommend one of the following:

1. The dissertation is approved
2. The dissertation is not approved
3. The dissertation should be modified and re-resubmitted

The comments will be sent to the guide and the student if the dissertation is to be modified.

A model dissertation assessment form is given in page 29.

14.2 What do they expect?

In short, they expect

a. the work to be of reasonable quality
b. the report to be clearly and logically written
c. the procedures to be in conformity with ethical standards
d. integrity
e. a reasonably made dissertation book

Examiners are aware of the limitations of PG dissertation work in general. They do NOT expect voluminous research report. They also realize it is not a PhD work.

14.3 Quality of work

The examiners will look into the following:

Hypothesis / Research question – Framed properly?

The novelty of the work and Justification – Acceptable or not?

Objectives – Are they framed to answer the research question?

Whether the study is appropriately designed or not? i.e., Is the design appropriate to achieve the objectives?

Are there design flaws? – major / minor.

Execution – proper instrument / equipment used? Are the data collection procedures appropriate?

Major results – Do they answer the questions raised?

Analysis of results – were the appropriate statistical methods used?

Interpretation – proper?

Conclusions – valid? too speculative? supported by the data?

14.4 Write-up

Style and grammar – Poor/confusing writing style, Spelling/ grammatical mistakes

Clarity – understandable?

Structure – TIMRAD (Title, Introduction, Methods, Results, And Discussion)

Other elements – Summary, Review of literature, Conclusions, References, Acknowledgements, Annexure.

Title – Appropriate?

Introduction – justification, hypothesis, objectives

Review of literature – current info, relevance?

Methods – adequate details of procedures and ethical aspects, details of statistical methods as a subsection of methods

Results – Any duplicate/redundant illustrations?

Tables and figures – complete in all aspects?

Discussion – structural conventions followed? Limitations and strengths reported?

Conclusions – tally with or conform to hypothesis, objectives, and data

References – format proper and uniform?

Summary – all information covered briefly? Is it an accurate thumbnail picture of the study?

Annexures – Are they relevant?

Any violation of accepted ethical practices – Is the study ethically acceptable?

Ethical procedures - Followed? Any statement to that effect recorded?

Ethics committee permission – mentioned?

Informed consent – Obtained? Reported? Model forms attached?

Plagiarism – Fraud - Any portion of the dissertation plagiarized? Is there a sign of fraud?

14.5 Dissertation book

Poor quality papers, printing, and binding, loose sheets, missing pages can irk the examiners. A perfect book may NOT attract attention or receive appreciation but the one with poor quality will certainly invite criticism.

15. Dissertation assessment form

DISSERTATION ASSESSMENT REPORT

Name of the candidate :
Branch / Subject :
Title of the Dissertation :

		A	B	C	D	I	N
	INTRODUCTION (15)						
1	Purpose of Study						
2	Mention of lacunae in current knowledge						
3	Hypothesis if any						
4	Aims & Objectives						
	REVIEW OF LITERATURE (10)						
1	Relevance						
2	Completeness						
3	Is it current and up-to-date						
4	Citation of reference is properly done?						
	METHODS (20)						
1	Type of study mentioned						
2	Details of study subjects (i.e. cases and controls)						
3	Details of materials (i.e. apparatus used, laboratory tests etc.) & experimental design						
4	Procedure used for data collection						
	a) Questionnaire						
	b) Cases						
	c) Records						
	d) Field if study						
5	Statistical methods employed, level of significance considered						
6	Statement of limitations						
7	Mention of ethical issues involved						
	OBSERVATION AND RESULTS (20)						
1	Logical organization in readily identifiable sections						
2	Correctness of data analysis						
3	Appropriate use of charts, tables, Graphs, figures, etc.						
4	Statistical interpretation						
	DISCUSSION (25)						
1	Relevance (within framework of study) and appropriateness of data						
2	Interpretation of implications of results						
3	Statement of limitations of interpretation [mentions of appropriate caution while stating inferences]						
4	Mention of unanswered questions						
5	Mention of new questions raised						
6	Summary and conclusion						
7	Bibliography - (Whether in order and complete for all reference)						
	ANNEXURE (10)						
1	Whether all required annexures and appendices are included, e.g., the clinical pro-forma, the questionnaire used, etc.,						

A- Excellent ≥(80%)	B- Good (70%)	C- Adequate (60%)	D- Marginal (50%)	I- (Inadequate) ; N-(Not Included) (<50%)

Please √ appropriate column (Excellent-A/Good-B/Adequate-C/Marginal-D/Inadequate-I/Not Included-N).

1. General Observations on the Dissertation / Case Report
2. Please state whether the Dissertation is approved: **Approved/Not Approved** (Kindly tick the appropriate box)
3. If not approved, please suggest the lines on which the Dissertation has to be revised before resubmission.(**separate sheet**).

Date :

SIGNATURE OF THE EXAMINER
(With Seal)

16. Miscellaneous

16.1 Non-submission of protocol and dissertation books

If any student does not submit the protocol even after 9 months, he or she will be terminated from the course. Any student who does not submit dissertation books will not be allowed to write the final examination though he or she may be allowed to continue and complete the course. No notice will be given in either case.

16.2 Poor progress of dissertation work

If the progress of the dissertation work remains poor or slow, the student will be terminated from the course without notice.

16.3 Change of topic

Change of the topic for dissertation work will be allowed only if proper justification is presented. Guide and the HoD, along with the student, should write to the Dean (Research), explaining the need for the same. With the permission of the Dean (Research), a new topic may be given to the student, and it would undergo all the processes of approval of the dissertation protocol.

16.4 Change of guide

Only in exceptional circumstances change of guide will be permitted. The HoD should discuss the need for change of guide with the Dean (Research) for approval.

16.5 Unmet sample size

The guide and the student must ensure that the proposed sample size is achieved within the time frame. If it is not possible to achieve the sample size, the work must be continued after submission of the dissertation, either by the student or by any other competent person under the supervision of the guide.

16.6 Clinical Trial Registry - India (CTRI) registration

Clinical trial registries are online public record systems for registration of clinical trials being conducted. No fee is charged for registration.

CTRI (*www.ctri.nic.in*) was launched and is managed by the ICMR-National Institute of Medical Statistics. All studies involving intervention must be registered prior to the recruitment of participants. More details can be had from the CTRI website.

17. DOs and DON'Ts

DOs

1. Submit the protocol and get required permissions as early as possible. This will enable the student to start the work soon and let him/her complete the study comfortably.
2. Discuss the problems, if any, with the guide/HoD/any other faculty member and try to solve it.
3. Read books on research methodology, statistics, and medical research ethics.
4. Get the approval of the Departmental PGRMC, Dean (Research), and Ethics committee, if any change in the title, methodology or investigators (guides) needs to be done.
5. Follow the procedures meticulously so that high-quality data can be collected.
6. Publish the results in a journal as soon as possible.

DON'Ts

1. Do not delay the submission of protocol.
2. Do not start the work unless until the ethics committee certificate is received in hand. This also applies to approval of amendments made in the protocol.
3. Do not exceed the sample size approved by the ethics committee
4. Do not violate any ethical principle.
5. Do not carry out any activity that amounts to fraud.
6. Do not let any patient identifying information appear in any part of the dissertation book.
7. Do not delay the submission of dissertation book.