

**GOVERNMENT OF WEST BENGAL
DEPARTMENT OF HIGHER EDUCATION,
SCIENCE & TECHNOLOGY AND BIOTECHNOLOGY
(SCIENCE & TECHNOLOGY BRANCH AND BIOTECHNOLOGY BRANCH)
VIGYAN CHETANA BHAVAN
DD-26/B, SECTOR I, SALT LAKE, KOLKATA-700 064**

R&D Projects - Project Proposal Summary (Mandatory)

FOR OFFICE USE ONLY:

Receipt No. & Date:.....

- (1) Title of the Project:.....
.....
.....
- (2) Broad Subject area of the Project Proposal as per
Advertisement:.....
- (3) Govt./ Govt. Sponsd. / NGO/ Private:
- (4) PI Name, E-mail, Mobile No., Address in details:
.....
.....
.....
- (5) Cost of the Project & time frame:
.....
- (6) SC/ST/General Category of the beneficiary/ study area, if any:
.....
- (7) Soft Copy of the Entire Project (in PDF format only): Submitted/ Not Submitted.
- (8) Bank A/c Details with IFSC & MICR CODE and cancelled cheque: Submitted/ Not Submitted.
- (9) Is there any other ongoing Project associated with DHESTBT or any other State or Central Govt.
Yes/ No.: If yes, please furnish details with File No.
- (10) Quotations for instruments asked for: Submitted/ Not Submitted.
- (11) I declare that I have not received any fund during the last three years from DHESTBT.
- (12) U.C. & Report submission date, if any.

D	D	M	M	Y	Y	Y
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D	D	M	M	Y	Y	Y
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UC

Report

Signature of PI

GUIDELINES FOR R & D PROJECT PROPOSALS (2018-19)

Under Call for proposals

About the Scheme:

The Department of Higher Education, Science and Technology & Biotechnology, Government of West Bengal has a scheme on "Research and Development Programmes" which is being implemented throughout the State of West Bengal with an aim to sustainable socio-economic development in the field of Science and Technology. Through this scheme introduction of new technologies and significant modification of the existing technologies with justification to expand knowledge, technology, awareness, skill, income, health and overall quality of life of the people of the State are welcome.

1. NATURE OF PROJECTS SUPPORTED UNDER THE SCHEME :

i) **Studies & Survey related to science & technology:**

Financial support is offered for carrying out basic and applied scientific research/studies/survey that include techno-economic analysis, simulation, modeling and studies etc. and development of State S & T database, S&T policy issues, specific status reports, etc.

ii) **Research & Technology development for micro planning:**

Funding support for S&T related R&D programmes in newly emerging & challenging areas of science & engineering and for development oriented location specific research and technology development that will help in micro planning purpose of the state.

iii) **Lab to land pilot scale demonstration projects:**

Pilot scale demonstration projects including field trials etc. based on technologies developed by S&T Agencies/ Institutions/ Laboratories/ NGOs related to needs of the state.

iv) **Joint programming with other organizations:**

To develop and support specific joint programmes focussing on multi-sectorial area based approach to rural/regional development in co-operation with multiple central and state institutions, universities, etc. These areas must be identified where scientific intervention can significantly improve the socio-economic conditions.

v) **Replication efforts for successful models:**

Replication of already successful projects in other interested districts/areas based on successful experiences of S&T organization/ agency.

vi) **Development of tools for training programmes and awareness development:**

DHESTBT, GOWB encourages development of tools (technical) for the awareness and training on specific innovative technologies, in the form of packages that require S & T inputs for the betterment of livelihood, ecological conservation and sustainable socio-economic development.

2. COMPREHENSIVE GUIDELINES FOR FORMULATING PROJECT PROPOSALS:

i) The project proposal should clearly identify and establish linkages of S&T for overall development of the state. The identified areas (as per the following list of subjects) should have potential to contribute in socio-economic development of the state.

ii) DHESTBT, GOWB encourages proposals generated through consultative approaches. Preliminary proposals providing brief information on concept, idea, proposed activity etc. may be brought to the concerned officer/scientist of the Department. These preliminary proposals can be further improved through discussion, expert advice, etc. if needed.

iii) Objectives of the R & D proposals should be limited to a few specific outputs, which could be possible in duration of twelve months to thirty-six months.

iv) During writing any proposal, scientific and technical details must be clearly narrated.

- v) It is better if results of ongoing and completed projects of the organization are reflected in formulation of new proposals.
- vi) Proposals should have specific, concrete, quantifiable objectives for sustainable development and human welfare.
- vii) The proposals should be based on innovative ideas. Major programmes of extension based on proven technologies are also considered for support.
- viii) The Proposals on other inter-disciplinary category should have specific applications & linkages with science & technology.
- ix) **Soft copy of final report and photographs must be submitted immediately after completion of the project.**

LIST OF BROAD CATEGORY OF SUBJECT AREAS UNDER THE SCHEME

- A) AGRICULTURE
- B) ANIMAL AND FISHERY SCIENCES
- C) BIOLOGICAL SCIENCES
- D) BIOTECHNOLOGY
- E) ENVIRONMENT, ECOLOGY AND CLIMATE CHANGE
- F) PHYSICAL SCIENCES
- G) MATHEMATICS
- H) CHEMICAL SCIENCES
- I) ENGINEERING AND TECHNOLOGY
- J) MEDICAL SCIENCES INCLUDING PUBLIC HEALTH
- K) ENERGY AND ALLIED SCIENCES
- L) EARTH SCIENCES INCLUDING GEOINFORMATICS
- M) OTHER INTERDISCIPLINARY

3. WHO CAN APPLY?

The projects are being supported at universities, colleges, reputed research and academic institutes/ organisations, etc.

**Filled in Applications along with entire proposal
(both in hard copy & soft copy) to be submitted to:**

The Special Secretary
to the Government of West Bengal
Higher Education, Science & Technology and Biotechnology
(Science & Technology and Biotechnology Branch)
Vigyan Chetana Bhavan (2nd Floor)
DD-26/B, Sector- I
Salt Lake, Kolkata-700064
e-mail: gobeshonaybangla@gmail.com

3. GENERAL TERMS AND CONDITIONS:

- i. The proposals shall only be considered if it is a primary research and is done in the state of West Bengal. The Principal Investigator (P.I) or Co-P.I(s) must be attached to the organization/ institution (which can receive the fund) situated in the state of West Bengal only.
- ii. The proposals are initially considered for approval/ rejection by "Project Evaluation Committee" of DHESTBT. The Department may seek any expert's opinion on the merit of project if required.
- iii. **Those PIs who have already received fund from this Department, can submit new proposals only after three years from the date of submission of final completion report, Utilisation Certificate (U.C) and Audited Statement of Expenditure (S.O.E) of the earlier projects, otherwise the project proposal will not be considered for funding.**

- iv. All kinds of technology sources, references to quotations, annotations, etc. are to be clearly mentioned in the project proposal.
- v. **No engagement** in DHESTBT sponsored project is **permanent**. Any engagement (SRF & JRF only) under the project shall strictly be contractual and temporary in nature and will cease automatically as soon as the project is terminated. The manpower (SRF & JRF only) engaged (if any) for the project should be paid remuneration as per the latest rules and guidelines of the DHESTBT, Government of West Bengal (vide Annexure III).
- vi. International travel is **NOT** permissible under the project. Air travel is normally not permitted. In some special cases if air travel is essential, **written permission must be obtained** before travel from the Principal Secretary DHESTBT, GOWB showing necessary reasons and justifications.
- vii. In case of any multi-institutional collaborative project, **formal agreement documents** along with details of activity/ role/ equipment shared among the collaborating institutions/ scientists should be **submitted to the Department**.
- viii. The Nodal Institution referred in the sanctioned project proposal assumes financial and other administrative responsibilities of the project. All the corresponding communications regarding purchase/recruitment/travel/IPR/publications will be the responsibility of the Nodal Institution.
- ix. DHESTBT, GOWB encourages to maximize the use of **equipments** which are to be strictly kept within the institution when not in use/ after the completion of the project. Investigator should permit the use of spare of idle capacities of any equipment procured under the project by bonafide users within the Institution only. In general, cost of equipments should **not exceed Rs. Five lakhs**. Necessary quotations for consumables & equipments need to be submitted as applicable. Procurement of generally available equipments/ accessories like desktop/ laptop/ printer/ refrigerator, etc. will not be entertained from project fund.
- x. **Intellectual Property Rights** arising out of the R & D Project work (if any) should be intimated to this Department and should be filed jointly in the credit of the Department of Higher Education, Science & Technology, Biotechnology and the implementing organisation. The sharing of royalty with respect to the IPR (if any) should be settled between the institution and this Department through **MoU, which is to be signed prior to the commencement of the project**.
- xi. DHESTBT, GOWB must be acknowledged in all the publication made using the data/ results/ study of the funded project.
- xii. Violation of the above mentioned rules in respect of IPR, publication matter, etc. while making the Department a legal partner shall be considered as a serious offence.
- xiii. Overhead Charges are not permissible.
- xiv. Bank details of the institution/ organisation are to be furnished (vide Annexure IV).
- xv. **Ethical approval must be submitted if the project involves humans or animals**.
- xvi. Whether the project has already been submitted elsewhere for grant, must also be mentioned.
- xvii. The PI is essentially required to declare that the project proposal (during submission time) is original and not a plagiarized one.
- xviii. **Progress Reports (interim as well as final)** are to be compulsorily submitted and the reports are to be signed by the PI & all Co-PIs. The said reports are to be countersigned/ authenticated by the Head of the Institution and this is mandatory. After completion of the project, the PI is also required to **declare that the work done (along with the progress reports and final report) is original and not a plagiarized one**. **Audited statement of expenditure and utilization certificate** (5 copies as per Annexure-VI) are also to be submitted on yearly basis and also on completion of the project after observing all procedural formalities.
- xix. **Age limit: The upper age limit of the PI** who must be a working employee of the concerned Institution **should not exceed 58 years in general**. The age limit may be **relaxed in exceptional cases**.

- xx. **Qualifications of PI/ Co-PI:** As mentioned at Annexure-VII.
- xxi. **The Competent Authority reserves the right to reject any proposal** which is not according to the Terms & Conditions and relevant Guidelines/ without assigning any reason.

4. ENCLOSURES REQUIRED TO BE SUBMITTED WITH THE PROPOSAL:

- i. Certificate from Principal Investigator and all Co-Investigators (Annexure-I) along with scanned copy. Endorsement from the Head of the Institution on Letterhead (Annexure-II) along with scanned copy.
- ii. **Hard copy (two Nos.) and soft copy of the entire proposal including original signatures (size should be less than 15 MB in PDF format only) must be submitted.**
- iii. Undertaking and/ or MOU (as applicable) from the P.I and Co-PI(s) on Patent and IPR sharing with DHESTBT, GOWB as mentioned under general terms and conditions.
- iv. Bank details are to be furnished as per the attached format (Annexure-IV) along with scanned copy.
- v. Bio Data of PI and all Co-PIs as per prescribed format (Annexure-V).

5. Instruction related to filling up the proforma:

- I) Please type as per the layout given in the format. Text of the R&D Project Proposal may be typed in Times New Roman/ Calibri /Arial / Verdana Font of 11/12 pt.
- II) Please use papers of A-4 size (21cms x 29 cms).
- III) Please do not skip reproduction of any answer as “NIL” or “Given elsewhere”.
- IV) Project title should be precise and specific & normally should not exceed 20 to 24 words within two lines.
- V) Expected total duration of the project should normally be 12-36 months.
- VI) If project is to be executed by more than one Institution and/or requires regular inputs from other Scientists, names of collaborating Institutions/Scientists/S & T bodies must be listed.
- VII) Use telegraphic language to the maximum extent possible for objectives, work plan, methodology, expected outcome, etc.

We agree to the terms and conditions of DHESTBT as stated above.

Signature:

Signature:

Date:

Date:

Name of Principal Investigator:

Name of Head of the Institution:

FORMAT FOR SUBMISSION OF R & D PROPOSALS (2018-19)

(TO BE FILLED BY THE APPLICANT)

A. PROPOSAL AT A GLANCE:

1. Title of the project.....

.....
.....

Key words (*ten maximum*).....

.....

2. **Type of Project Programme** (please tick)

- | | |
|--------------------------|------------------------------------------------------------------|
| <input type="checkbox"/> | S & T Studies (basic and applied) |
| <input type="checkbox"/> | Research and technology development for micro planning |
| <input type="checkbox"/> | Lab to land pilot scale demonstration project |
| <input type="checkbox"/> | Replication efforts for successful models |
| <input type="checkbox"/> | Collaborative programmes with other organizations |
| <input type="checkbox"/> | Exchange of S & T related information and experience sharing |
| <input type="checkbox"/> | Technical tools for training programme and awareness development |
| <input type="checkbox"/> | S & T surveys |

3. **Subject Category of Project** (with specific detail) :

4. **Summary of the project proposal (in 300 words) [to be attached separately]**

5. **Duration** (number of months):

6. **Total estimated cost** (In Rupees and in Words) :

7. **Name of University/ Institution/ NGO to be considered for Funding** (with details of affiliation) :

8. **Name and details of the Collaborative Institute** (if any)

9. **Bio Data of Principal investigator & Co-Investigator(s):**

(a) Name & Address of PI (b) Mobile No. & E-mail Address (c) Date of Birth [**with all Details in Annexure V**]

10. Overall technical & intellectual capacity:

(a) Expertise available

(b) List of ongoing and completed projects giving the following details

Project title	Start date	Completion date	Project cost	Sponsoring organization

(c) Instruments/facilities available in the implementing Institute

11. Whether you have received any sanction/project from W.B. State DHESTBT earlier? If yes, give detail.

12. Designation of the authority who will act as D.D.O. in respect of the allotted amount, if any grant is sanctioned.

B. Technical details:

1. Background:

1.1 Description of problem/ Description of hypothetical idea

1.2 Review of existing literature/patents etc.

1.3 Reasons for taking up the project.

1.4 Relevance to state priorities.

1.5 Financial resources committed at state level.

2. Challenges & constraints:

Strengths and weaknesses of the implementers vis-à-vis current project in terms of technical expertise, term building, past record etc. Also provide the perceived opportunities and threats and describe how PI/organization is approaching to capitalize on them or avert them.

3. Details of proposal:

3.1 Objectives of the project (Brief and to the point) [in 100 words].

3.2 Preliminary Investigations done by organization (if any).

3.3 S & T component in the project.

3.4 Linkage with S & T Institutions/R & D organization/industry/NGOs resource persons for technical backup

3.5 Other organizations working in this area.

3.6 Methodology detailing stepwise activities and sub-activities.

4. Work plan & time schedule:

Phase-wise plan of action up to post project activities detailing time schedule milestones may clearly be stated.

5. Output of the project:

Attempt may be made to quantify output in measurable parameters.

6. Likely impacts (please attempt to quantify).

7. Parameters for monitoring effectiveness of the project.

8. Suggested post project activities viz. application areas/field trials etc.

C. BUDGET ESTIMATES: SUMMARY

(In Rupees)

Item	BUDGET			
Year	1 st Year	2 nd Year	3 rd Year	Total
A. Recurring:				
1. Remunerations/salaries				
2. Consumables				
3. Travel				
4. Other costs				
B. Non-recurring				
Permanent equipment				
Grand Total (A+B)				

*Please provide brief justification for each Head of expenditure (100 words for each).

DETAIL BUDGET FOR REMUNERATIONS/ SALARIES

(In Rupees)

Designation				
(Number of persons)	1 st Year	2 nd Year	3 rd Year	Total
Fulltime				
i)				
ii)				

DETAIL BUDGET FOR TRAVEL

(In Rupees)

Item	Budget			
	1 st Year	2 nd Year	3 rd Year	Total
Travel 1. Local*				
2. Out station*				
Total				

*Please specify.

DETAIL BUDGET FOR OTHER COSTS

(In Rupees)

Item	Budget			
	1 st Year	2 nd Year	3 rd Year	Total
a) Contingencies				
b) Others				
Total				

DETAIL BUDGET FOR PERMANENT EQUIPMENT

(In Rupees)

Sl. No.	Estimated cost	Name of equipment*
1.		
2.		
Total		

*Please provide justification for each equipment along with quotation from reputed vender.

Other Project (s) Submitted for evaluation

Sl. No.	Title of Project	Name of Organization	Status

Attachments:

- 1) Detailed list of publication (books and papers/articles in standard referred national and international journals).
- 2) List of patents and their present status.
- 3) A soft copy of the entire proposal.
- 4) Annexure I & II

I declare that I shall abide by all the guidelines, rules and regulations of the Department of Higher Education, Science and Technology and Biotechnology, Government of West Bengal regarding financial assistance to R & D project and shall acknowledge the funding authority in all publications made out of the sanctioned project. I shall also make the Department of Higher Education, Science and Technology and Biotechnology, Government of west Bengal, a legal partner in all the patents generated out of the sanctioned project.

(Name and signature of the PI with official seal)

Date.....

Place.....

(Name and signature of the Co-PI with official seal)

(Signature of the Head of the Institution with official seal)

CERTIFICATE FROM THE INVESTIGATOR(S)

Project Title:

.....
.....

1. I/We agree to abide by all the terms & conditions and guidelines of the DHESTBT, GOWB grant.
2. I/We did not submit this or a similar project proposal elsewhere for financial support.
3. I/We declare that this R&D project proposal is a new one and unique of its kind. This type of project has not been conducted elsewhere so far as my knowledge is concerned. The project proposal is original and the outcome will usher new light in this particular field.
4. In case any item of the project proposal is found to be plagiarized, I/We shall be liable for the consequences.
5. I/We have explored and ensured that equipment and basic facilities available within the Institution will be used as and where required for the purpose of the project. I/We shall not require financial support under this project for procurement of the items already available.
6. I/We undertake that the permanent equipments will be kept within the institution and the same will be made available to other users of the Institution also.
7. I/We undertake that **Intellectual Property Rights** arising out of the R & D Project work (if any) will be intimated to Department of Higher Education, Science and Technology & Biotechnology (DHESTBT), Govt. of WB and will be filed jointly in the credit of the DHESTBT, GOWB and the implementing organization.

Name and Signature of Principal Investigator with Seal

Name and Signature of Co- Investigator(s) with Seal

Date.....

Place.....

Annexure-II

ENDORSEMENT FROM THE HEAD OF INSTITUTION

(TO BE GIVEN ON LETTER HEAD)

Project Title:

.....
.....

1. **Certified that** the Institute welcomes participation of Dr./Shri./Smt./Km
..... as the Principal Investigator and Dr./Shri./Smt./Km.
..... as the Co-Investigator for the project
and that in the unforeseen event of discontinuance by the Principal Investigator, the
Co-Investigator will assume the responsibility of the fruitful completion of the project (with due
intimation to DHESTBT, GOWB).
2. Certified that the equipments, other basic facilities and such other administrative facilities as per
terms and conditions of the grant, will be extended to investigator(s) throughout the duration of the
project.
3. Institute assumes to undertake the financial and other management responsibilities of the project.

Name and Signature of Head of Institution with Seal

Date.....

Place.....

Remarks:

In regard to research proposal emanating from scientific institutions/laboratories under various scientific Departments, the Head of the Institution is to provide a justification indicating clearly whether the research proposal falls in line with the normal research activities of the institution or not, and if no, the scientific reasons which merit its consideration by Department of Higher Education, Science and Technology & Biotechnology, Government of West Bengal.

Annexure-III

**ELIGIBILITY & REMUNERATION FOR CONTRACTUAL MANPOWER
TEMPORARILY ENGAGED IN R & D PROJECTS**

Sl No.	Category	Rate of Remuneration	
		1 st year & 2 nd year	3 rd year
01	Junior Research Fellow (JRF) Graduate degree in Engineering disciplines/ Post Graduate degree in Science disciplines and equivalent.	Rs. 16,000/-p.m. + H.R.A. (15%). & M.A (Rs.300/-) Total: 18,700/-	Rs. 18,000/- p.m. + H.R.A. (15%). & M.A. (Rs.300/-). Total: 21,000/-
02	Senior Research Fellow (SRF) In the Medical and Engineering subjects M.B.B.S/B.D.S./M.V.Sc./M.Pharm/M.E/M.Tech/ and B.E/B.Tech/ B.V.Sc/B. Pharma or Post Graduate degree in Science disciplines with 2 years experience and equivalent.	Rs. 18,000/- p.m. + H.R.A. (15%). & M.A. (Rs.300/-). Total: 21,000/-	Rs. 18,000/- p.m. + H.R.A. (15%). & M.A. (Rs.300/-). Total: 21,000/-

The Junior Research Fellow will be allowed to continue on review, after two years.
The H.R.A. & M.A. will be allowed as per rules of Government of West Bengal.
Tenure of any of these projects will not generally be more than 3 years.

BANK & OTHERS DETAILS OF THE APPLICANT INSTITUTION FOR RECEIVING GRANT

Name of the Organization	
Account number & name of the Account holder as per Bank Passbook/Cheque Book	
Type of Account (Savings or Current A/c)	
Name of the Bank	
Name of the Branch with Branch address	
IFSC code of the Branch	
Mobile Phone Number of the PI	
PAN / TAN of the Account holder	
File Number (for Office use)	

Date:

Signature of Authorised Person with seal

Enclosures: Cancelled Cheque / Photo Copy of first page of Bank Pass Book

Annexure-V

BIO DATA OF PRINCIPAL INVESTIGATOR & CO-INVESTIGATOR(S)

Name:

Designation:

Department:

Organization/Institution name:

Address:

Pin:

e-mail:

Telephone (office):

Mobile:

Fax:

Date of birth:

Sex (M/F):

Category (Gen/SC/ST/OBC):

Academics

Sl. No.	Institution Place	Degree Awarded	Year	Field of Study

Position and Employment (Starting with the most recent employment)

Sl. No.	Institution Place	Position	From (Date)	To (date)

(Attach extra sheets if necessary)

Honors and Awards, Books, Patents Received

Others (please specify):

Publications (use separate sheets if necessary)

1. Selected peer-reviewed publications (Ten best publications in chronological order):

2. Five recent publications relevant to the proposed area of work:

Research Support: Ongoing Research Projects (As Principal Investigator)

Sl. No.	Title of Project	Name of Funding Agency	Amount (Rs.)	Date of Initiation & Duration

Ethical Approval (if the project involves humans or animals), whether obtained:-

Whether this project has already been submitted for grant elsewhere:

Date:

Signature of Principal Investigator
with seal

Recommended and Forwarded

(Head of the Department/Institution)

UTILISATION CERTIFICATE IN RESPECT OF GRANT-IN-AID

No.

Date:

1. Name of the Grantee Institute (s) :
[Attach separate list for more than one Grantee Institution]
2. Sanctioning Authority :
3. Sanction Order Number & Date :
4. Amount Sanctioned :
5. Drawing & Disbursing Officer :
6. Treasury/PAO :
[From where the bill was drawn]
7. Bill No. & Date :
8. T. V. No. & Date :
9. Amount Drawn :
10. Unspent Balance of Previous year, if any :
11. Amount Utilised :
12. Unspent Balance, if any, in Current year :
13. Purpose of Utilisation :

CERTIFICATE

Certified that I have satisfied myself that the conditions on which the Grant-in-Aid was sanctioned have been duly fulfilled/are being fulfilled that I have exercised the following checks to see that the money was actually utilised for the purpose for which was sanctioned.

[Applicable in case of unspent balance] The unspent fund will be adjusted against the Grant-in-Aid to be sanctioned and paid in the Current Financial Year (applicable in case of recurring grant only).

Kinds of checks exercised

1. Cash Book
2. Ledger
3.

Date

Signature with Official Stamp

**Essential Qualifications of Principal Investigators (PI)
and Co-Principal Investigators (Co-PI)**

(I) For projects costing Rs. 7 lakhs or more:

- 1) Doctoral degree in relevant subject areas of Science disciplines including Geography.
- 2) M.E/ M.Tech or equivalent Post Graduate degree in Engineering/ Technology disciplines recognized by Govt. of India/ UGC/AICTE, etc. with 3 years' research/ teaching experience at PG level.
- 3) M.D/ M.S/ M.D.S or equivalent Post Graduate degree in Medical Science/ Dental Science disciplines recognized by Govt. of India/ MCI/ DCI, etc. with 3 years' research/ teaching experience at PG level

(II) For projects costing less than Rs. 7 lakhs:

- 1) Master's or equivalent Post Graduate degree in relevant subject areas of Science disciplines including Geography recognized by Govt. of India/ UGC, etc.
- 2) M.E/ M.Tech or equivalent Post Graduate degree in Engineering/ Technology disciplines recognized by Govt. of India/ UGC/AICTE, etc.
- 3) M.D/ M.S/ M.D.S or equivalent Post Graduate degree in Medical Science/ Dental Science disciplines recognized by Govt. of India/ MCI/ DCI, etc.