प्रोमोशन ऑफ रिसर्च एटिट्यूड इन यंग एण्ड एस्पाइरिंग स्टूडेंट्स PROMOTION OF RESEARCH ATTITUDE IN YOUNG AND ASPIRING STUDENTS





# PRAYAAS

प्रोमोशन ऑफ रिसर्च एटिट्यूड इन यंग एण्ड एस्पाइरिंग स्टूडेंट्स 2023-24

PROMOTION OF RESEARCH ATTITUDE IN YOUNG AND ASPIRING STUDENTS 2023-24

## प्रयास

### दिशानिर्देश विकास समिति (एनसीईआरटी)

#### सदस्य

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## समीक्षा समिति

अरविंद सी रानाडे, निदेशक, नेशनल इनोवेशन फाउंडेशन (एनआईएफ), गांधीनगर, गुजरात शीर्षेंदु कुमार मुखर्जी, मिशन निदेशक, जैव प्रौद्योगिकी विभाग, नई दिल्ली राखी चतुर्वेदी, आचार्य एवं अध्यक्ष, बायोसाइंसेज और बायोइंजीनियरिंग विभाग, आईआईटी गुवाहाटी काशीनाथ हिरेमथ, सेवानिवृत्त प्रोफेसर, गोवा विश्वविद्यालय, Goa गोवा महेश हरिहरन, प्रोफेसर, भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान, तिरुवनंतपरम अनिता कामरा वर्मा, प्रोफेसर, प्राणीशास्त्र विभाग, किरोड़ीमल कॉलेज, दिल्ली विश्वविद्यालय मोनिका कौल, प्रोफेसर, वनस्पति विज्ञान विभाग, हंसराज कॉलेज, दिल्ली विश्वविद्यालय पूनम शर्मा, प्रोफेसर, प्राणीशास्त्र विभाग, गार्गी कॉलेज, दिल्ली विश्वविद्यालय सुनीता मल्होत्रा, प्रोफेसर, रसायन विज्ञान विभाग, इग्नु, नई दिल्ली पुनम अग्रवाल, पूर्व प्रोफेसर, एनसीईआरटी, नई दिल्ली इंद्राणी भादुरी, प्रोफेसर, ईएसडी, एनसीईआरटी, नई दिल्ली एम. वेल्लाइचामी, सहायक आयुक्त, केंद्रीय विद्यालय संगठन मुख्यालय, नई दिल्ली अमित कुमार भगत, शैक्षणिक अधिकारी, एससीईआरटी, जम्मू संभाग, जम्मू-कश्मीर अनवर सलीम, पीजीटी रसायन विज्ञान, विज्ञान शाखा, शिक्षा निदेशालय, नई दिल्ली युसुफ अली, व्याख्याता जैव रसायन, लद्दाख डेरजी वांडू, विज्ञान अधिकारी, शिक्षा विभाग, हिमाचल प्रदेश संजीब घोष, प्राचार्य, परमाणु ऊर्जा शिक्षा सोसायटी, महाराष्ट पी. तमिल सेल्वन, सहायक प्रोफेसर, रसायन विज्ञान, आरआईई मैस्र परिजित स्त्रधार, सहायक प्रोफेसर, विज्ञान, एससीईआरटी सिक्किम के.के.शुक्ला, सहायक प्रोफेसर, वनस्पति विज्ञान, एससीईआरटी छत्तीसगढ़ देवराज सिंह राणा, प्रवक्ता, गणित, एससीईआरटी, देहरादून

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### **GUIDELINES**

Promotion of Research Attitude in Young And Aspiring Students

**PRAYAAS 2023-24** 

# **1.Introduction**

The young mind of a learner is full of curiosity and imagination. The innate characteristic of inquisitiveness is important for a learner to understand the concepts better and apply them in real life situations for solving problems. The creative skills of children can be used in developing solutions to the societal challenges. They need to be given an opportunity to address societal problems and also for creating new knowledge domains. National Education Policy 2020 emphasizes on the need to encourage original thinking in the students and make India a global knowledge superpower and generate new avenues of employment. To nurture the young innovative minds, Promotion of Research Attitude in Young And Aspiring Students PRAYAAS, 2023-2024 scheme is planned by the Department of Education in Science and Mathematics (DESM), NCERT for school students.

This programme also provides opportunities for the creative minds of young students to realize and recognize the importance of STEAM (Science, Technology, Engineering, Arts, and Mathematics) education in real-life situations and foster their creative imaginations. It will also help them to showcase their scientific potential at the national level through this

scheme, PRAYAAS. In this context, it is envisaged that students, under the mentorship of a science teacher and the guidance of faculty member/expert from the Higher Educational Institutes which (HEIs). includes. Indian/ Bhartiya Universities, Colleges, PSUs, Research & Development Laboratories of government or non-government organisations, Industries. would propose a project and, if selected, try to study by applying different aspects of STEAM education in their research through this project Proposal. This will make the learners to generate scientific temper, to develop new ideas to prepare research project proposal and further implementation for a noble cause. Students and teachers would get oreinted to explore and work on new ideas, innovations and investigate where and how these innovations can bring a better solution to local or global contemporary challenges. This programme will engage the students in learning of scientific concepts in innovative ways which can help in their holistic development.

Promotion of Research Attitude in Young And Aspiring Students, PRAYAAS scheme, 2023-24 is a unique programme which aims at giving opportunity to the school students for conducting year-long research/investigation and get acquiainted with scientific

methodology and experimentation. unique characteristic Another of this programme is making linkages between school education and Higher Institutes Educational (HEIs) and optimizing and teaching learning relationship among student, teacher from schools and expert from HEI. This programme is aligned with the spirit of NEP 2020 and focuses on scientific temper and evidence-based thinking, creativity and innovativeness, logical reasoning and problem-solving keeping in view the critical issues that the local communities are facing. It also focuses on 'Experiential Learning' where the learner is embedded in learning a concept as a whole encompassing all domains of learning. The Promotion of Research Attitude in Young And Aspiring Students, PRAYAAS scheme, 2023-2024 is the much-needed impetus in the positive direction to enhance learning flexibility of young students.

Department of Education in Science and Mathematics, National Council of Educational Research and Training, New Delhi, has initiated the programme by providing catalytic grant to nurture any of the original ideas in the areas of Science, Technology, Engineering and Mathematics and their possible intergration with arts (STEAM). This is an integrated programme for carrying out scientific research by a school student and a science teacher in collaboration with an expert from any discipline of science in Higher Educational Institutes who will play role of a mentor. It will provide a common platform to the budding scientists from schools of different states and union territories of India with the following objectives:

- Orienting school students in science process skills for carrying out research and investigation.
- Generating scientific temper and instill evidence-based science process skills, innovativeness and creativity among school students.
- Developing competency among school students for carrying out research or investigation individually or in groups.
- Providing them a platform to become a problem-solvers by applying scientific methods for solving societal problems.
- Making linkages between school education and higher education for optimizing learning of school students for development of scientific thinking and skills.
- Developing the competency of entrepreneurship towards initiating start-ups among the students by applying science process.

1.1 Area covered for the Project under the PRAYAAS 2023-24

PRAYAAS 2023-24 invites project proposals for carrying out research/ investigation on an original Scientific idea such as;

- Identify and study a local problem
- Investigate a scientific reason behind a local problem
- Attempt to find a scientific solution

to any problem.

• Work on any idea/imaginations/ conceptions that intends to generate scienctific knowledge

Through the scheme, "PRAYAAS" school students and school teachers along with a faculty/expert from HEI would carry-out research work on investigation of a problem and its research-based solutions that would contribute to learning of science or saving of environment etc. A team of maximum two students and one teacher in collaboration with one faculty/expert from any HEI may apply for this project proposal.

#### **1.2.** Eligibility Criteria

The eligibility criteria for participation in this programme are:

### **For Students**

- The student(s) must belong to the age group of 14-18 (as on the date of application).
- The student(s) must be studying in class IX to XI.
- Students from all schools are eligible to participate in PRAYAAS.
- Single student or a group of maximum two students, along with a teacher at their school, and an expert from any HEI.
- Only one entry per school will be considered.

### **For Teachers**

A qualified Post Graduate Teacher (PGT) or equivalent who is teaching Science/

Physics/ Chemistry/ Mathematics and Biology to classes 9 to 12, are eligible to become a "PRAYAAS" Guide Teacher under the PRAYAAS scheme.

#### For Expert from an HEI:

Experts from any discipline of science and technology serving in an HEI (listed in Annexure I (A) Sr. No. 4) are eligible to be PRAYAAS expert.

#### **1.3 PROJECT TENURE**

The Project tenure is for one year from the date of commencement of the project in school to completion. Tentative date of tenure will start from 10 October 2023 to 9 October 2024 for PRAYAAS 2023-24. Heads of Schools and HEIs for the selected projects are expected to facilitate the project work during the tenure and ensure completion of the project by the end of the tenure. The research work done by the school students will be uploaded on the NCERT web-site.

#### 1.4 RESEARCH GRANT

A grant of total Rs. 50,000/- (Rupee Fifty Thousand only) will be given for each selected research proposal. Out of this amount, Rs. 10,000/- will be provided to the student (Rs. 5,000 each in case of two students) and Rs. 20,000 each will be given to the School and HEI expert as catalytic grant to facilitate the students in conducting the research.

The grant will be released in two installments to the students/school/ Expert from HEIs. The first installment of the grant (half of the amount) will be released within a month of the declaration of results and will be transferred directly to the bank account of the student(s), the school and the mentor. The second installment will be released only after the submission of satisfactory progress report after six months.

#### **1.5 ROLES AND RESPONSIBILITIES:**

In this project, a teacher from the school will be designate to the student(s) to guide and supervise in their research throughout the tenure. The science faculty member/expert of the Higher Educational Institutes (HEI), located close to the school, would be involved as a mentor to give more technical and experimental guidance to the students and facilitate and guide them in working in the laboratory with tools and techniques. The science teacher is advised to choose an original idea or topic from any of the science suitable subject/research mathematics and areas.

Role of schools in managing the research is the most important as it will be the primary source of guidance and communication for the students regarding the project proposal. Schools are required to make a team of student(s), teacher and experts from Higher Educational Institutes. All in the team needs to understand their individual responsibilitie as a team member. Teachers and Experts from HEIs are required to provide students with the subject knowledge and skills needed in the project. Special emphasis may be given to the children with special needs. School management committee is required to maintain school atmosphere to encourage PRAYAAS student(s) to work better during survey and to prevent errors in the research.

Special efforts may be made by the schools to create awareness among the students about **PRAYAAS**.

PRAYAAS Student(s) need to perform experiments / investigation under the proposed project by planning and discussion with teacher and/or expert from HEI and ultimately to implement the project under the scheme. They need to perform the experiment or conduct investigation following proper scientific procedures, science process skills such as making observations, report and record observation, analyse data, infer, conclude results and discuss results in application perspectives. As per the needs, the students may have to go on field visits or field survey for data collection and investigation.

PRAYAAS Guide Teacher under the scheme would need to provide guidance to PRAYAAS Student in planning of experiments / investigations to be carried out. They are required to guide PRAYAAS Students to follow proper scientific procedure. They may also help them scientific method with data analysis and infer and conclude research for its applied aspects.

Mentors from HEIs may propagate the idea into furtherance of research or provide guidance for error free or unbiased research and investigations and to work with precision etc. They are expected to provide technical and experimental guidance to PRAYAAS student(s) and facilitate and guide them in using the laboratory tools and equipments.

School Heads are expected to contact and collaborate with HEI and facilitate learning-teaching relationships of science learning in schools.

Head of Higher Education Institutions are expected to support and facilitate infrastructure in their institutions.

### **1.6 Important Dates of the PRAYAAS** Scheme:

Date of Announcement of PRAYAAS scheme: 08 August 2023

Last date of submission of application: 20 *September* 2023

Screening of applications: 25 *September* 2023

Deadline for Jury and selection of project proposal: *30 September 2023* 

Announcement of results: 05 October 2023

Commencement of Project: 10 October 2023

Progress Report (four months after the date of commencement of the project)

Completion of project: 09 October 2024

Report Submission: 14 November 2024

Applications received after the last date will not be considered.

# 2.Application Procedure

The related information is also available on NCERT website www.ncert.nic. in. The applicants are required to send their application and project proposal which they intend to undertake, online to email id (prayaasncert@gmail.com in the prescribed format (Please see Annexure I). The format for sending the application in HTML and PDF format is given as Annexure I A and Annexure I B respectively. The students who are willing to fill their applications may download the HTML format and fillup and type the entries or they can download the PDF format and fill-up the entries by clean hand writting after filling-up of the application form, they may get the form duly signed with seal by the School Head. Duly typed and

completed applications may be scanned and sent to prayaasncert@gmail.com

- 1. The research proposal should clearly state the aim, principle, materials and equipment required (though tentative), research methodology that will be adopted for the study and the expected outcome of the research which they wish to undertake. [Format for the research proposal is given in the Annexure I].
- 2. The No Objection Certificates (Annexure IV, V and VI) should be printed, filled up, scanned and then be uploaded in the online form itself. It is to be noted that if two students are participating as a group, the Annexures IV and V need to be filled in individually for both the students of the group.
- 3. Expert from HEI must submit a No-Objection Certificate duly signed by the Head/Principal of their Institution.

# **3. Selection Procedure**

#### **3.1.** Screening of the entries

After receiving the entries, the project proposals will be screened by a committee of experts. The screening process will be based on the criteria adopted by NCERT which are following:

- 1. Originality of the Research proposal (20%)
- 2. Scientific Thought/Principle (10%)
- 3. Scientific Methodology to be followed for performing Research (10%)
- 4. The relevance of proposed research for solving local problems, or the generation of scientific knowledge (20%)
- 5. Environmental efficacy and sustainability (20%)
- 6. Explanation and clarity of the proposed research project proposal and write up(20%)

Note: NCERT reserves the right to alter the criteria to include adequate numbers of entries from rural/backward regions and entries from disabled students.

Based on the criteria suggested above, the entries will be shortlisted for consideration for next round of selection for PRAYAAS scheme. It should be noted that merely fulfilling the eligibility criteria may not entitle the applicants for being shortlisted for next round. NCERT reserves the right to call or not to call a candidate for a presentation/interview.

#### **3.2.** CALL FOR INTERVIEW

For the shortlisted entries, the concerned students and teachers/mentors will be called by NCERT for presentation cum interview. The concerned teacher and student(s) against each selected proposal will be expected to give a presentation of five to seven minutes explaining their project proposal. Presentation can be given with the help of PPTs and charts etc. The presentation will be followed by an oral discussion/ assessment by the jury.

The project proposal will be evaluated based on following criteria:

- 1. Originality of thought about the research proposal (20%)
- 2. Clarity of scientific principle behind the research (10%)
- Clarity of Scientific Methodology to be followed for performing Research (10%)
- 4. Clarity about Relevance of proposed research to society and practical applicability or generation of new knowledge (20%)
- 5. Clarity about Environmental sustainability and efficacy (20%)
- 6. Oral presentation and explanation of the research project proposal (20%)

#### **3.3. DECLARATION OF RESULT:**

The results will be declared soon after the interviews on the NCERT

website. Only 15 presentation cum research proposals will be selected and considered for the catalytic grant under PRAYAAS scheme. The notification will be sent to selected students, guide teacher, faculty member/expert from HEI, Head of facilitating school and HEI's administration through a letter by Indian Postal Services. Concerned state SCERT and DIET will also be informed.

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# 4. Implementation of PRAYAAS Scheme

Selected PRAYAAS Student(s), PRAYAAS Teacher and PRAYAAS Expert from any HEI will be nominated and catalytic grants will be released to PRAYAAS student and facilitating schools and HEIs.

#### 4.1. Acceptance of Catalytic Grant:

The catalytic grants under PRAYAAS scheme will be awarded to the selected applicants by a formal letter giving details of the catalytic grant and the terms and conditions for their utilization. The offer should be availed immediately from within the last date mentioned in the award letter and acceptance letter should be sent back to the mail id of PRAYAAS scheme prayaasncert@ gmail.com through School Head.

## 4.2. Release of Catalytic Grant for Selected Projects:

- a. After receiving the necessary documents as mentioned in the award letter, through the school/Institution duly forwarded by the Principal/ Head of the school/Institution in whose favour the catalytic grant is to be released, the first installment of the catalytic grant will be released.
- b. The catalytic grant money will be

transferred through Direct Bank Transfer mode to the concerned school and HEI administration.

c. Subsequent installment will be made on receipt of duly signed bills alongwith reprint the attendance records.

#### 4.3. CONDUCTING RESEARCH:

Immediately after receiving the acceptance letter, the PRAYAAS Student may start working on the proposed project. They do not need to wait for release of catalytic grants. The first installment will be released in due course of time. PRAYAAS student(s) may make work plan to complete the work in collaboration with PRAYAAS guide teacher and PRAYAAS expert from HEI. They are expected to utilize minimum 5 to 7 hours per week on the project. For conducting the research and investigate work in HEI, they may utilize 10 bagless days, winter and summer vacation.

#### 4.4 Use of catalytic Grant

The catalytic grant given to the student(s) can be used for travel for data collection etc.

The catalytic grant provided to schools and HEIs may be utilised for various requirements for project work to be undertaken. Part of this catalytic grant may be used for stationary, purchase of books, travel expenditure and small consumables required for performing experiments, such as; non-poisonous, non-toxic chemicals, laboratory related glasswares, science kit, and other consumables and non-consumable etc., related to the research work in the purposed study. Non-consumable once purchased will be the property of school laboratory during after the completion of the project.

The catalytic grant cannot be used for taking membership of scientific associations and organisations.

The budget for catalytic grant utilized must be submitted by the science teacher of Schools and experts from HEIs by submitting of account in the form of bills and utilization certificate may be obtained from the concerned Head of the Schools and Head of HEI. Students do not need to provide any bill.

#### 4.5 SUBMISSION OF PROGRESS REPORT

The preparation of progress report on the research work done shall be an essential part of the student's work. The students shall submit their research progress report after four months in the prescribed format (Annexure VI). It is essential to give latest and full information about ongoing research. The results should be presented quantitatively in Tables/ Figures and discussed qualitatively in terms of the fulfillment of objectives and conclusions drawn should also be given. Further planning of research for completing the tenure may also be given in the progress report. Fragmentary or partial or incomplete reports shall not be entertained. PRAYAAS Guide teacher and school shall bring out in her/his assessment report the share of originality and initiative of the PRAYAAS student in carrying out the research work. Format for the progress report is given in the Annexure VI.

## **4.6.** Submission of Final Technical **R**eport

Final technical report is important for the students in reflecting all the hard work and investigation they have done. Thus, it is important to write the report in a presentable and disciplined manner. It will make the result more comprehensible to the readers. The prescribed format for writing the final technical report is given in the (Annexure VII) and it should be strictly adhere to while writing the report. The final technical report should duly acknowledge financial assistance for the project from NCERT. The final technical report needs to be submitted within 15 days of completion of project deadline. The research work submission should be accompanied by the submission of Performa talking about the details regarding the Research work (Annexure II) and the declaration for originality of research (refer Annexure VIII). Attendance record duly signed by school head and PRAYAAS mentor of HEI must accompany the report.

# 5. General Terms and conditions

#### 5.1. Obligations and commitments:

#### **The PRAYAAS Student**

- 1. Once the student accept the project and joins, it is necessary for her/ him to continue the research for the normal tenure of the project or for the duration in which the original objectives of the proposal are achieved.
- 2. Each PRAYAAS student needs to fill the consent form duly signed by her/his parents/guardian and a noobjection certificate duly signed by the Principal of the school.
- 3. Once the project is accepted and working is initiated by the team under the scheme, the project should not be discountinued without the prior approval of the NCERT. In case she/ he wishes to discontinue the project prior to completion of the tenure, on attainment of original objectives of research, She/he must submit the letter to NCERT through the school one month in advance, indicating specific reasons for not continuing the project. The project shall be terminated from the date stipulated in the NCERT letter by approving the reasons given by PRAYAAS team.

- 4. The student(s) must maintain a daily record of her/his research work in a separate notebook.
- 5. The student(s) must also maintain a diary for writing his daily-expenses related to the project.
- 6. During the tenure of the research study, the student shall correspond with NCERT only through the school with the approval of the Principal of the school.

#### **PRAYAAS** Teacher:

- 1. Schools have to designate a teacher of concerned subject to the students at the time of submitting project proposal to help them in their research work.
- 2. PRAYAAS teacher has to maintain an attendance register for PRAYAAS student(s).
- 3. Schoolshave to ensure that the activity may be carried out by the teacher and student(s) as beyond classroom activity or may also get extra time period in school or in laboratories of HEI to work on this project with all safety and precautions. PRAYAAS teacher should guide PRAYAAS student(s) to take proper safety precaution while undertaking any research activity.
- 4. During the students' visit to the HEI or any other visit related to the project, teacher may accompany the students.
- 5. At the end of the duration of the project, the teachers will get a certificate from NCERT for their

contribution in the research work.

### The HEIs/Expert:

- 1. Higher Educational Institutes (HEIs) need to designate expert of concerned subject from their institution to guide the students at the time of submitting project proposal.
- 2. Expert from HEI may use her/ his own lab or any other lab of the institution for providing guidance to the student(s).
- 3. Experts is expected to help the students in the experimental work involved and related to the project and guide them in the right direction. They are envisaged to give them their expert advice during the project work.

#### **5.2 FURTHER MOTIVATIONS:**

- 1. Project work of PRAYAAS Student (s), PRAYAAS Guide Teachers and PRAYAAS Expert HEI along with their names will be uploaded on the web portal of PRAYAAS.
- 2. Work done by PRAYAAS Student (s) may be showcased in Rashtriya Bal Vaigyanik Pradarshani (RBVP) and other suitable events.

#### 5.3 Publication of Project Work

The results of the project work may be published in standard referred journals at the discretion of the student(s) teacher and expert. It should be ensured that the assistance provided by NCERT is always acknowledged in all such publication(s). Soft and hard copy of the published research papers should be sent to NCERT.

The PRAYAAS team must acknowledge the support of NCERT in any of the publication patent out of this Project work.

#### 5.4 General terms and conditions

- 1. PRAYAAS-(Promotion of Research Attitude in Young And Aspiring students) is a connecting link between the students and NCERT. NCERT will be sending the details of the scheme and the related updates to the schools. Schools are required to be up-to-date with the new updates and disseminate them to the students.
- 2. NCERT will bear no responsibility for any force emergency incident during the project activity.
- 3. NCERT may send, whenever considered necessary, its officers for reviewing the research/investigation under the PRAYAAS scheme in schools and Institutes where the students are studying and working.
- 4. In all matters, decision taken by NCERT will be final.
- 5. The tenure of the selected projects under the PRAYAAS scheme is one year. It may be extended for six months to one year depending upon the progress of the exceptional research work (will be determined by the progress report) done by the PRAYAAS team. It must be noted that in case of extension, the amount reserved for catalytic grant will remain the same for PRAYAAS

student(s), PRAYAAS Guide Teacher and PRAYAAS Expert from HEI. Tenure of the project may also be extended on the basis of geographical location of the PRAYAAS student(s). in this case no extra ammount in the form of catalytic grant will be paid.

6. NCERT reserves the right to extend the selected research idea with the same school with different students for years as per the demand of the project proposal. Other terms and conditions will be the same in such cases.



APPLICATION PERFORMA PROMOTION OF RESEARCH ATTITUDE IN Young And Aspiring For STUDENTS PRAYAAS scheme, 2023-24

## **APPLICATION PERFORMA**

Photograph of Student(s), Teacher and HEI Expert

Student 1

Student 2

Guide Teacher Expert from HEI

## A. Personal Details

### 1. Student Details

Number of students involved in the project: .....

a. Name of student::

E-mail .....Contact No.....

Age..... Class ..... Category .....

b. Name of student (in case of two students, detail of two students may be filled in):

PRAYAAS - GUIDELINES 2023-2024

## 2. Teacher's Details

a. Name of teacher
b. Designation
Contact No
c. Qualification
d. Specialization
3. Name of School (with Postal Address)
VillageDistrictStateState
Pin code E-mail
4. Details of Expert from HEI (Universities, Colleges, PSUs, Research & Development Laboratories of Government or Non- Government Organisations, Industries)
a. Name of Expert
b. Designation
c. Name of HEI
(Full Address)
VillageStateDistrictDistrict
Pin code E-mail
Contact No
d. Qualification

e. Subject specialization

## **B.** Project Proposal

- 1. Title of the Project Proposal .....
- 2. Origin/Genesis of the Idea (Maximum 50 words) .....
- 3. Background (Maximum 150 words)
- 4. Objectives (Maximum 2-3 objectives) (Maximum 50 words)
- 5. Relevance of the proposal to society (Maximum 100 words)
- 6. Scientific Principal (Maximum 150 words)
- 7. Research Methods (Maximum 200 words)
- 8. Time line (three monthly)

SN	Month	Work to be undertaken	Work to be completed

9. Practical applicability of the project proposal (Maximum 100 words)

- 10. Learning by scientific approach (Maximum 100 words)
- 11. Conclusion (Maximum 100 words)
- 12. References

PRAYAAS - GUIDELINES 2023-2024



**Declaration by PRAYAAS Student(s)** 

#### This is to certify that

- *I/We agree to abide by the terms and conditions of the Catalytic grant provided by NCERT under PRAYAAS scheme.*
- I/We did not submit this or a similar project proposal elsewhere for financial support.
- I/We will undertake and complete the research work proposed by us within the proposed tenure and submit the report in the given format on time.

Signature Student 1 Signature Student 2 Signature of Guide Teacher

Endorsement Signature of School Head with Seal and Date

## Annexure-III

#### ENDORSEMENT FROM SCHOOL HEAD

### (on letter head)

- 1. This is to certify that the project proposal titled "....." has not been submitted to any other agency/agencies for any kind of financial support
- 3. The school will provide the basic facilities and infrastructure facilities for PRAYAAS Student to carry out the proposed project work.
- 4. The school will facilitate the guide teacher to support the PRAYAAS student to conduct the research/ investigation related to proposed project under the PRAYAAS scheme.

Signature of School Head with Seal with date

## Annexure–IV

ENDORSEMENT FROM HEAD OF THE HIGHER EDUCATIONAL INSTITUTES

### (on letter head)

- 1. This is to certify that the project proposal titled "....."
- 2. The institute welcomes participation of Ms./Mr.....student and Dr./ Mr./Mrs. .....Post Graduate Teacher of ...... school under the mentorship of Prof./Dr. .....of .....college/ university / institute / research laboratories/ industry (PSU)/government/non-government) (HEI) in the the project proposal titled ".....".
- 3. The Institute will provide the basic facilities and infrastructure facilities for PRAYAAS Student to carry out the proposed project work.

Signature of Executive Authority of Institute/ University with Seal with date



## **CONSENT FORM**

\*To be filled individually by Parent/Guardian of student (separate in case of two students)

I,, Father/
Mother/Guardian of student of class
, of
School, hereby give my consent for her/his participation of in the Research work
under 'Promoting Research Attitude in Young And Aspiring Students (PRAYAAS)
2023-24' scheme of 2023-24 organized by National Council of Educational Research
and Training (NCERT), New Delhi. In case if her/his Project proposal is selected, s/
he will abide by all the rule and norm of NCERT.
Date
Place

Signature of the Parent/Guardian



## Format for the Progress Report

The progress report must be submitted by the student(s) after three months of date of start of tenure of PRAYAAS. The report should be prepared under the following headings and required content under them:

S.No.	Section
1	Summary
2	Acknowledgment
3	Introduction and Objectives
4	Materials and Equipments required
5	Principle
6	Procedure
7	Results (till the progress report submission)
8	Conclusions and Discussion (on results till then and how much still needs to be done)
9	Index
10	References

# Annexure-VII

#### FORMAT FOR FINAL TECHNICAL REPORT

S.No.	Section	Content	
1	Acknowledgment	Write words of gratitude towards the institutions involved and the people who helped you in some way throughout the research.	
2	Abstract	Write a brief summary of your research work.	
3	Introduction	Write about the background of the research while giving elaborate description of facts like principle, reactions, equations, and data etc. and relevance of the research in the community/society; also write about your motivation/reason to do the research.	
4	Objectives	Write the aim(s) of your research in clear words.	
5	Methodology	Write the procedure/approach/method in stepwise and clear words; Write about the research methods you have used in the research. You can also use other creative way to write the procedure.	
6	Results	<ul><li>Write about the findings about your research in easy and comprehensible way to make it easy for readers to understand;</li><li>You can also use the tables and flowcharts etc. in this section.</li></ul>	
7	Conclusion/Discussion	Write about the conclusion you have drawn from the result. What does the result conclude? Summarize your research work here with the methodologies used and then you can write the reasons behind your obtained result; Also write about how the research will be relevant for the community/society. If your result is not in line with your objective, then you can write about the possible reasons for the outcomes. Also write about some recommendation that you can give for this project.	
8	References Write all the citations of references that you have used wh   doing the research work. The citation can be given in the late   APA format.		

PRAYAAS - GUIDELINES 2023-2024



## **Declaration Form**

### **CERTIFICATE OF ORIGINALITY**

hereby declare that the submitted Research work is our original creative work/ modified form of available work and to the best of our knowledge, this work has never been done/developed by any other person in this form.

(Signature of the Student, the Teacher and the faculty member from Higher Educational Institutes)



राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद् NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING