राष्ट्रसंत तुकडोजी महाराज नागपूर विद्यापीठ, नागपूर
विद्यार्थी विकास विभाग

"सेंट्रल प्रोव्हिन्सेस शासन शिक्षण विभागाची अधिसूचना क्रमांक ५१३ दिनांक १ ऑगस्ट, १९२३, द्वारा स्थापित व महाराष्ट्र सार्वजनिक विद्यापीठ अधिनियम, २०१६ (सन २०१७ चा महाराष्ट्र अधिनियम क्रमांक ६) द्वारा संचालित राज्य विद्यापीठ"

छत्रपती शिवाजी महाराज, मुख्य प्रशासकिय परिसर इमारत क्र २ महाराजबाग चौक, रविंद्रनाथ टागोर रोड नागपूर ४४०००१
फो. नं. ०७१२–२५४८५८४ मोबाईल नं. ९४२३१४८७७९ ई–मेल dirsw@nagpuruniversity.nic.in; sp.rtmnu@gmail.com

क्र.रातुमनावि/सं.वि.वि./२०२२/545.   दि. २२/११/२०२२

प्रति,
मा. प्राचार्य/विभाग प्रमुख
सर्व संलग्नीत/संचालीत महाविद्यालय व पदव्युत्तर शैक्षणिक विभाग
रा.तु.म. नागपूर विद्यापीठ, नागपूर.

विषय :– "आविष्कार २०२२–२३" च्या जिल्हा स्तरीय स्पर्धांचे आयोजन करण्याबाबत.

महोदय,

उपरोक्त विषयाच्या अनुषंगान आपणांस कळविण्यात येते की, राजभवनाद्वारे आयोजित केल्या जाणा–या "आविष्कार २०२२–२३" आंतर विद्यापीठ संशोधन स्पर्धांच्या अनुषंगाने आपल्याला महाविद्यालय स्तरावर दिलेल्या नियमावलीनुसार स्पर्धा घेवून प्रत्येक प्रकारात व गटात आपल्या महाविद्यालयाची चमू तयार करावी. व दिनांक ०९/१२/२०२२ पूर्वी आपल्या महाविद्यालयातील प्रत्येक प्रकारात दोन (२) चमू निवडाव्या. व निवड झालेल्या चमूची नोंदणी जिल्हा स्तरीय होणा–या स्पर्धांमध्ये करावी. नोंदणी झालेल्या चमूचा सहभाग लवकरच घेतल्या जाणा–या जिल्हा स्तरीय स्पर्धांमध्ये करण्यात येईल. याबाबतची सूचना लवकरच पत्राद्वारे कळविण्यात येईल.

धन्यवाद.

सहपत्र :– स्पर्धांची नियमावली सोबत जोडली आहे.

आपला विश्वासू

(डॉ. मंगेश पाठक)
सदस्य–सचिव
"आविष्कार २०२२–२३" समिती
संचालक,
विद्यार्थी विकास विभाग

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
Avishkar Research Convention 2022-23
(Selection Trials)

The frontiers of education are changing every day, We are moving from the information based society to a society of innovation and thus research becomes one of the most important components of higher education. Today, one of the indices for the measurement of the potential of any educational institution is its research activity.

All stakeholders namely students, teachers and other entities in the higher educational institutes should be enthused to engage themselves in research at various levels. It is essential to unveil the unknown and unexplored areas of knowledge in all fields of academic enquiry. Due to the increasing requisite of interdisciplinary approach, no discipline goes untouched from the research activity. Keeping in view the new challenges, the then Hon'ble Governor of Maharashtra and the Chancellor of the Universities in the State of Maharashtra, Shri. S.M. Krishna had initiated Avishkar Research Convention in the academic year 2007-2008.

The convention is designed with the intention to develop a research culture and scientific temper among the students, scholars and teachers from under-graduate to doctoral level in the state of Maharashtra.

It provides them an opportunity to showcase their fields of expertise. In the first stage, the college level competition will be organized and the best entries will be selected for onward participation at University level and Inter-University Competition. All the colleges are expected to participate in this competition aiming and providing a common platform to young and inquisitive minds.

The activity will also help to develop skill, review new dimensions of explored areas of knowledge as well as the unexplored areas of enquiry. It shall be the collective responsibility of all of us to sensitize the students and teachers about the convention and build confidence among them to venture into research.

Objectives

To identify the hidden innovative scientific talents and capacities of students.
To provide opportunities for inculcating research attitude in the students and teachers.
To create academically sound youth by developing knowledge, skill and attitude of research.
To promote aptitude with emphasis on high standards of research and development activities for the benefit of students and teachers. • To explore the active student centered paradigm of education.
To open new channels of scholarly research between faculty and students. To excel active learning standards of research.
To develop personality and communication skills among the students.
To produce a research scholar commensurate with the need of future.
To promote the interaction among the students for the exchange of various aspects of research by organizing collegiate and inter-collegiate research activities.
To encourage the students to participate in research activities at inter-collegiate, district, university, and state levels.
To felicitate and recognize students' achievements by offering awards and honours.
To provide financial assistance in the form of fellowship / scholarship to the selected researchers and teachers for innovative research development.
To convert innovation idea into new start-up. To encourage students and teachers towards community-based research.

Rules and Regulations

1.CATEGORIES AND LEVELS

Students at the University are allowed to participate in any of the following category/discipline

irrespective of their own discipline/course. Categories/Disciplines Category

1. Humanities, Languages and Fine Arts
2. Commerce, Management and Law .
3. Pure Sciences
4. Agriculture and Animal Husbandry
5. Engineering and Technology
6. Medicine and Pharmacy

The students can participate in above disciplines in the following level were fit eligible.

Levels

Level 1: Undergraduate Students (UG)
Level 2: Postgraduate Students (PG)
Level 3: Post PG Students (PPG)
Level 4: In-service Teachers (TH)

2. AREAS COVERED UNDER EACH CATEGORY

Category 1: Humanities, Languages and Fine Arts
It covers research areas like languages, social sciences, fine arts, education, humanities and of fields where these disciplines are applicable.

Category 2: Commerce, Management and Law
It covers research areas like commerce, accountancy, management, law and other fields wh these disciplines are applicable.

Category 3: Pure Sciences
It covers areas like all basic sciences, soil sciences, home sciences and other fields biotechnology, microbiology, environmental sciences, life sciences, biochemistry, biophysics, analytical, etc.

Category 4: Agriculture and Animal Husbandry
It covers areas like horticulture, agriculture, agronomy, entomology, fisheries, animal husbandry and other fields like biotechnology, microbiology, biophysics, biochemistry, bio-analytical chemistry, etc. where agricultural and animal husbandry aspects are covered.

Category 5: Engineering and Technology
It covers all branches of engineering and technology. It also includes computer science information technology, agricultural engineering, food technology, dairy technology, biophysics biomedical and biosensor, etc, where engineering and technology aspects are covered.

Category 6: Medicine and Pharmacy
It covers all branches of medicine and pharmacy. It also includes veterinary medicine, preventiv medicine, epidemiology, clinical studies, etc.

3. THE GENERAL ELIGIBILITY CRITERIA FOR PARTICIPATION

1. The student must be full time Bonafede student enrolled under RTMN University of Nagpur of UG/PG/M.Phil. / Ph.D. programme or any diploma course of a minimum duration of on academic year.

2. Students enrolled in correspondence course in Recognized Institute / Centres or Departments RTMN University of Nagpur are not eligible.

3. Casual students, external students and students pursuing only bridge course from RTM University of Nagpur and Colleges / Recognized Institutes affiliated to RTMN University Nagpur is not eligible

4. Students having provisional admission are not eligible.

5. Student can represent only that College / Recognized Institute/ Department of RTMN Universi of Nagpur from where he/she is pursuing his/her degree / diploma.

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6. Student should have valid identity card of the College / Recognized Institute / Department RTMN University of Nagpur from where he/she is pursuing his/her degree / diploma.

7. Student migrating from other University can participate only when his/her admission regularized and he/she gets admitted as Bonafede student.

8. Students can present their research project in group with maximum number of students exceeding five. However, at State level only one student from the group will represent the RTMN University of Nagpur.

9. Student from any discipline can participate in any category to which their research project fits.

10. Student can present their research project in English or Marathi or Hindi language.

11. Any disqualification of participant from the given criteria may result in removal of the conting from the Avishkar Research Convention and the candidate also will be debarred fr

participating in the Avishkar Research Convention to be held in the futures years.

12. Ethics of research must be delicately observed by students and his/her mentor.

4. ELIGIBILITY CRITERIA FOR CATEGORIES AND LEVELS

The rules for each level are as follows

Level-1: Undergraduate Students (UG)

1. Student pursuing any bachelor degree or diploma (of duration not less than one academic year) after their 12th class examination and enrolled under RTMN University of Nagpur is eligible.

2. The age of the student should not be more than 25 years as on 28th February of the academic year in which competition is being held.

Level-2:Post-Graduate Students (PG)

1. Student pursuing any master degree or post graduate diploma (of duration not less academic year) after their degree examination and enrolled under RTMN University of Nagpur is eligible.

2. The age of the student should not be more than 30 years as on 28th February of the academic year in which competition is being held.

Level-3: Post PG Students (PPG)

1. Student acquired post graduate degree / diploma and pursuing/ duly registered for M.Phil./Ph.D./D.Sc./D.Litt. degree under RTMN University of Nagpur is eligible.

2. Student pursuing Post-doctoral Research under RTMN University of Nagpur is also eligible.

3. Student who has submitted their synopsis / thesis for his/her M.Phil. / Ph.D. viva-voce examination is awaited is also eligible.

4. Student who has successfully completed his/her viva-voce examination for his/her M.Phil Degree is not eligible.

5. There is no age limit for the Post PG students.

Level-4: Teachers (TH)

1. Teacher must be an approved teacher of RTMN University of Nagpur.

2. Teacher must be pursuing his/her M.Phil. / Ph.D. degree and must be registered under University of Nagpur.

3. Teacher who has submitted his/her synopsis / thesis for his/her M.Phil /Ph.D. degree and viva-voce examination is awaited is also eligible.

4. Teacher who has successfully completed his/her viva-voce examination for his/her M.Phil./Ph.D. degree is not eligible.

5. There is no age limit for the teacher.

5.GUIDELINES FOR PARTICIPATING COLLEGES

Teacher Coordinator

1. Every participating College / Recognized Institute / Department of University must appoint one teacher as a "Teacher Coordinator' to conduct the activities of Avishkar Research Convention

2. He/she shall maintain a liaison between the Director, Students' Development, Avishkar Re Convention, District Coordinator, District Co-coordinator and participant of his/her Co Recognized Institute/ Department of University.

3. He/she is expected to attend the meeting/s as and when called by Department of Students' Development as well as accompany the students at the time of Zonal / District / University Avishkar Research Convention.

4. Teacher Coordinator should perform the assigned duties on various committees constituted by University time to time for the conduct of Avishkar Research Convention at different levels.

5. Teacher Co-ordinator should conduct various programmes / activities to increase participation for the convention and enhance research skill among the students in consultation with Principal/ Director/Head under Avishkar Research Convention.

6.GUIDELINES FOR THE PARTICIPANTS

1. Projects should be in the form of live demonstration/models/posters (1 mx 1 m size) and should bring out innovative work and ideas in their respective categories.

2. The college/institution can send maximum two entries each from Under Graduate, Post Graduate, Research level (M.Phil/Ph.D.), and teachers pursuing research for their M.Phil/Ph.D. degree in every discipline.

3. Participants are expected to display their projects before the panel of subject experts nominated by the authorities. The subject experts will shortlist the entries for oral presentation.

4. Each oral presentation (Power Point format only) will be given 5 minutes followed by questions and answers for 2 minutes.

5. Each participating team should have only one student engaged in the project (model).

6. Infrastructural facilities like working space, electricity, water, tables, mounting boards, LCD will be made available to the participants by the organizing college on prior etc.. information.

7. For requirements other than the above mentioned facilities, participants should inform the in charge well in advance.

8. Registration is compulsory for all participants (Registration fee for Rs. 100/- per participant)

9. Each participant is eligible to get the participation certificate by the University.

10. The decision of subject experts/judges will be final and binding on all participants.

11. All winning participants will be informed about their selection on the **20 December 2022**

7. IMPORTANT INSTRUCTIONS FOR PARTICIPANTS

1. The entries must be forwarded through Principal/Head of the Institution.

2. Maximum two entries in each category will be accepted for University Level Competition

3. The participating teams will have to register themselves on or before **09** December 2022-for the university level competition.

4. The participating candidate should carry the ID card of the college/institute.

5. Each participating college will have to make their own arrangement for lodging and boarding for the participating members.

6. Name of the college or participant is not allowed on the exhibit.

Guidelines for the Preparation of Abstract

1.The abstract should be unstructured without any subtitles.

2.It should introduce the top, ch methodology and results, etc

3. References should not be included in the abstract.

4.The maximum length of the abstract should be 200 words

Guidelines for the Preparation of Foster

1. The poster with slot number (given at the time of registration) must be displayed in the p alloned immediately after the registration.

2 Do not write/affix name of the poster.

3. Poster must be 1m X 1m size printed on any suitable type of printing paper/material.

4. The research material must be properly organized on poster and the text must be minimum and font size must be legible from the distance at least 1m.

Guidelines for the Construction of Model

1. The model with slot number (given at the time of registration) must be displayed in the place allotted immediately after the registration.

2. Do not write/affix name of the participant or the college on the model.

3. The model may be working or non-working

4. Do not use thermocol for preparation of non-working model. It is advised to use non-polluting or environment friendly materials for preparation of non-working model.

5. More weightage is to be given for working model.

6 Use of fireworks/arms during model presentation is strictly prohibited.

7. However, if it is unavoidable for an exhibit, its imitation may be used with the prior Director, Students' Development, Avishkar Research Convention / Principal of the organizing college.

8. Participant's should communicate the additional facilities (table, chair, electricity points, etc.) required for the display of the model to the organizing college and Department of Students" Development a week prior to the convention/competition through their Teacher Coordinator.

Guidelines for Preparation of Power Point Presentation

1. The power point presentation can be made by using any tool carried by the presenter.

2. It can be made either in English or Deonagari.

3. Use universal font/s to avoid delays during presentation.

4. In case of Deonagari, carry the fonts in your pen drive.

5. Keep your pen drive virus free.

6. Possibly save only one folder containing the important files of related to your research project in your pen drive to avoid delays.

7. Use minimum text on the slide/s.

8. Make presentation using suitable pictures/ diagrams/graphs/tables, etc.

9. Keep the slides limited so as to finish presentation within the required time specified for competition.

10. The title of research project and Themes Category should be mentioned on the first slide.

11. Mention the slot no (to be given at the time of registration) on first slide.

12. Do not mention name of the participant or the college on any of the slides.

13. Introduce yourself only with slot number (to be given at the time of registration) and do not reveal the identity or name of the college during the presentation.

8. MODE OF CONVENTION/COMPETITION

Avishkar Research Convention is conducted at various levels

Intra-Collegiate/Institute/Department Level

1. Each college can depute maximum 48 research projects for the Zonal District Level not exceeding more than 6 research projects in each level per category.

2. Each college should conduct Intra-collegiate / Institute Department Avishkar Research Convention to select best 48 research projects.

3. The research projects are expected to be evaluated and mentored by the reputed personnel of the respective research fields.

4. The research projects should be short listed on the basis of the poster and/or model presentation

5. The short listed research projects should be evaluated based on power point presentation.

6. The time for poster / model presentation is 3 minutes and the time of discussion will vary according to the judges' choice. But the maximum time of discussion is 5 minutes.

7. The time for power point presentation is not more than 10 (8 + 2) minutes, which will be followed by discussion. However the time of discussion will vary according to the judges' choic But the maximum time of discussion is 5 minutes.

8. Use of fireworks, arms at the venue of competition/convention is strictly prohibited. However, it is unavoidable for an exhibit, its imitation may be used with the prior permission of Principal.

9. The selected research projects should be refined by the experts before deputation to the Zonal/District Level.

10. If number of entries of research projects exceeds 48 by the mistake of the College /Recogniz Institute/Department of RTMN University of Nagpur then right of cancellation of specifi entries will be reserved with Director, Students' Development. Such cancelled entries of resear projects should not be considered for declaration of merit at Zonal / District/University Avishi Research Convention as well as Category-wise Championship Trophies / University Over Runner Championship Trophy/University Overall Championship Trophy.

अविष्कार 2022-23 (निवड चाचणी)

District Level

1. The Inter-collegiate Zonal / District Level Avishkar Research Convention will be conducted behalf of University in different Zones / Districts as declared by RTMN University of Nagpur.

2. The Zones / Districts will be declared by Director, Students' Development, RTMN University Nagpur with the permission of "Committee of Students" Development in the beginning of academic year.

3. The Zonal District Level Avishkar Research Convention will be conducted, according to the time table declared by Director, Students' Development in the beginning of the academic year.

4. may be revised according to the schedule of examinations of UG and PG Programmes. The Director. Students' Development shall declare the revised time table 20 days before of the actual Convention Competition.

5. The student must present his/her project in the respective Zone/District.

6. Student shall be given chance to present their research project 'Out of Turn' in another Zone/ District if he/she fails to present it in the respective Zone/District due to his/her appearance/ participation in University Examination/activity. In such case the student should take prior permission of the Director, Students' Development through his/her Principal/Director/Head of University Department. However, if such project is selected for University (Inter-Zonal / Inter District) Avishkar Research Convention, then for declaration of Zonal/District Championship the same project will be considered in a Zone / District where the college of the student is located and it will not consider in a Zone/District where the student is participated.

7. The research projects should be short listed on the basis of the poster and/or model presentation.

8. The short listed research projects should be evaluated based on power point presentation.

9. The time for poster / model presentation is 5 minutes and the time of discussion will vary according to the judges' choice. But the maximum time of discussion is 5 minutes. The time for power point presentation is not more than 10 (8 + 2) minutes, which will be followed by discussion. However the time of discussion will vary according to the judges' choice. But the maximum time of discussion is 5 minutes. Use of fireworks, arms at the venue is strictly prohibited. However, if it is unavoidable for an exhibit, its imitation may be used with the prior permission of Director, Students' Development, Avishkar Research Convention/Principal of the organizing college.

10. The best research projects from each category and level will be selected for the University Avishkar Research Convention.

University (Inter-Zonal/Inter-District) Level

1. The University (Inter-Zonal / Inter-District) Avishkar Research Convention will be conducted according to the time table declared by Director, Students' Development in the beginning of the academic year.

2. It may be revised according to the schedule of examinations of UG and PG Programmes. The Director, Students' Development shall declare the revised time table 20 days before of the actual Convention/Competition.

3. The best research projects selected from the Zonal District Level Avishkar Research Conventions will be allowed to present in University Avishkar Research Convention.

4. The research projects should be short listed on the basis of the poster and/or model presentation.

5. The short listed research projects should be evaluated based on power point presentation. The time for poster/model presentation is 3 minutes and the time of discussion will vary according to the judges' choice. But the maximum time of discussion is 5 minutes.

6. The time for power point presentation is not more than 10 (8 + 2) minutes, which will be followed by discussion. However the time of discussion will vary according to the judges' choice. But the maximum time of discussion is 5 minutes.

7. Use of fireworks, arms at the venue is strictly prohibited. However, if it is unavoidable for an exhibit, its imitation may be used with the prior permission of Director, Students' Development, Avishkar Research Convention/Principal of the organizing college.

8. The best research projects will be given ranks based on the merit.

9. First two winning research projects from each level per category will be given chance to present at State Inter-University Avishkar Research Convention.

10. In case the winning team's withdraws their participation under unavoidable circumstances / valid reason, then the chance will be given to the next team/s in the order of merit.

11. The University reserves rights of replacing research project/s to be deputed for State Level if necessary, however, the merit / rank of such project/s declared at Zonal/ District/University Avishkar Research Convention will remain the same and counted for District Championship Trophy/Category-wise Championship Trophies / University Overall Runner Championship Trophy/University Overall Championship Trophy

12. In case in a particular category / level there is no found entry / suitable entry, the University reserves its right to send any other entry to State Inter-University Avishkar Research Convention. In such case the Director, Students' Development will depute the research project in discussion with Experts.

State Level

1. University deputes 48 research projects (entries) comprising 6 categories and 4 levels with maximum 2 research projects (entries) in each level to Maharashtra State Inter-University Avishkar Research Convention.

2. Only two students per level in each category will be the contingent of University team.

3. University reserves the rights to select the student from the team of the research project to be the

contingent of the University team.

4. The contingent must follow the guidelines given by Director, Students' Development, Avishkar

Research Convention/Team Managers / Staff of Department of Students' Development time to time.

5. It is obligatory for the contingent to make themselves available for the workshops, grooming sessions and rehearsals and State Inter-University Avishkar Research Convention, failing which their prizes won at the Zonal District/ University Research Convention may be cancelled and his/her performance at the convention/ competition may be considered as null and void. Such student and his/ her college will also be liable for appropriate disciplinary action as decided by University authorities.

6. At state level also, the research projects will be short listed on the basis of the poster / model presentation.

7. The short listed research projects will be evaluated based on power point presentation. The time for poster and/or model presentation is 3 minutes and the time of discussion will vary according.