Rules and Regulations - Decoherence

Team Decoherence 2021

May 2021

Note: Here the term "Team" has been used for both a team of two participants and for single participants.

1 Eligibility

On the day of registration, any candidate who is studying in class 11 or above(till third year of UG) and have not started his/her fourth year of UG is eligible for the competition. Primarily, this competition is meant for UG students but it is open for any motivated high school student. However, scoring and leader board is common for all.

2 Registration

- Eligible candidates who wish to participate must register themselves through the registration form on the Decoherence website upto 24 hours before the objective prelims.

- Eligible candidates can participate in teams of upto 2 members. For a team of two members, one registration for the team is sufficient.

- During the time of registration, candidate(s) must agree to abide by the rules and regulations of the competition and declare that the details furnished by the candidate(s) are true to best of their knowledge and meet the eligibility criteria.

3 General Rules

- Decoherence 2021 will be conducted entirely online. There are two rounds-Prelims, Finals.

- Dates for the prelims and finals will be decided by the organizers and will be available on Decoherence website and will also be communicated via email to the registered participants.

- All the rounds are open book exams. Teams are free to refer to any non-living source during the exam. However, you are required to cite the sources wherever specified.

3.1 Prelims

The prelims will have two parts- Objective and Subjective. The objective round will serve as a screening test for appearing in the subjective round. Objective prelims will be held on 13th June 2021 (10 AM to 11:30 AM) and Subjective prelims will be held on 20th June 2021.

3.1.1 Objective

- Duration of objective prelims is 90 min. Any submission beyond 90 min will NOT be accepted. We highly encourage participants to start submitting 5 min before the due time.

- Question paper will consist of 20 single correct questions and 10 multi correct questions. Question paper will be uploaded on the website 5 minutes prior to the start of the round (i.e. at 9:55 AM).

- Key for the objective prelims will be released on the Decoherence website within 24 hours after the exam. Window for challenging the key will be open for 48 hours after releasing the key. Participants must pay Rs 50 per question to challenge the key. If the participant succeed in changing the key, money will be refunded(UPI ID/mobile number for payment will be communicated later via email).

- 25 teams will be selected from the objective round for the subjective prelims. Selected teams will be informed within maximum of four days (i.e. by the end of 17th June) and the results (list of reg. no. selected teams) will also be put up on the website.

- One or few specific submission method(s) and format(s) has to be followed for submitting the answers for the objective questions. The details will be informed well before the objective round and will also be mentioned on the question paper. We assure that the format will be very simple and easy to follow. The format has to be followed otherwise the response will either be cancelled or might result in erroneous score. In either case, the team will be the sufferer. In case a team is unable to follow the format for some reason, the reason should be clearly mentioned while submission.

3.1.2 Subjective

- The duration of the subjective round will be somewhere between 18-24 hours. The duration will be informed sufficiently before the subjective round. It will be put up on the website as well as informed individually to the respective teams selected for the finals.

- The question paper will have 8 subjective questions including 2 data analysis questions. The question paper will be mailed to the email ID(s) that the teams provide in the form.

- Typed answers preferred. Problems regarding handwriting often comes up so handwritten answers are discouraged. Partially typed answers are allowed where the portions difficult to type (like long equations or complicated relations) can be handwritten clearly, and uploaded as a properly scanned image in the answer, make sure the image has been attached at the correct place. Fully handwritten answers will not be allowed unless appropriate reason(s) is provided for doing so. Scribbled answers, rough work etc will not be considered for evaluation.

- Answers need to be submitted in MS Word or pdf format only.

- The question numbers must be clearly mentioned.

- Extra time may be given depending on the response from the teams in the subjective round. If more than or equal to 10 teams submit the answers within time, no extension will be granted. Information regarding extension will only be provided after the initial time for the exam is up. This will be done to discourage any intentional extension of time by the teams. Extension will be granted only if the paper comes out to be insolvable within the given time to the extent that even 10 teams can not write enough, which is worthy of a submission.

- After the time for the round is up, no request of re-submission will be entertained. If there are some very genuine issues regarding submission or anything, the respective teams may contact with adequate proofs to support the same. But nothing can be guaranteed and the decision of the organizers will be binding in such a case. Such requests will be entertained within 2 hours of the submission deadline. After that, no other requests will be entertained.

3.2 Finals

Finals is a two day event which happens during the Pravega 2021 entirely online. Dates of Pravega 2021 are 29th July to 1st August 2021. 10 teams will be selected from the prelims for the final round. More details (such as exact dates, rules and regulations) about the Finals will be updated in due time and will also be communicated to the participants via email. Tentative plans for the finals are -

- Day 1 will be an online presentation of solutions in front of leading physicists in various fields to the questions that will be given to participants within the given time limit.

- Day 2 will be a day long event where in participants are expected to solve one or few problems. The problem(s) will require some (or all) of the following types of analysis - Mathematical modelling and theoretical analysis, Computational methodology, Experimental design etc. Participants are expected to submit their solutions online within those 24 hours.

4 Miscellaneous

- The participants are expected not to share or discuss answers with anyone except their partner during the exam for both prelims and finals.

- The participants are required to abide by the above rules and regulations. Any changes made in the rules and regulations will be informed to the candidates. Organisers reserve the right to change the rules and regulations at any point of time.

- In case of any conflict, organisers' decision is final and binding.

- Unless otherwise mentioned, all exams will be set in English and all responses must be submitted in English.

4.1 Handling ties

- **Objective Prelims Round:** In case of ties in the objective scores, the team with more score in the "Multiple Correct Option" type questions will be given an upper hand. If there is a tie even there, both the teams will be considered equally. In case it requires to increase the number of selections from the objective to subjective round due to cases as mentioned above, it will be done.

- **Subjective Prelims Round:** It is very unlikely to have a tie in the subjective round that may affect selection. If such a case arises, decision will be taken accordingly and the decision of the organizers will be binding.

- **Finals:** Same holds as in case of subjective prelims, instead here judges' decision will be binding.

4.2 Handling network issues

- **Objective Prelims Round:** Submission from any one of the team member will be accepted, in case the team consists of two members. This itself reduces the probability of network related issues for teams with two members. For single participants or in case both members of a 2-membered team suffers connectivity issues, the information regarding that should be conveyed to us immediately using any one of the phone numbers that will be provided as a list along with the question paper. In that case, the team will be given some extra time to send the answers in one of the two formats: a) As a text message containing the question number and the answer in a serial manner b) Over a phone call, clearly dictating the answers. Adequate extra time will be allotted in such cases.

- **Subjective Prelims Round:** Measures regarding such issues will be taken as and when the need arises. But we highly encourage the participants to start submitting their responses at least 15-30 min before the due time to avoid any technical issues.

- **Finals:** Measures regarding such issues arising during presentation or uploading of the answers will be taken as and when the need arises.