QUADSPARK '21
PRELIMS

Please read the whole document carefully before attempting the paper.

A. General Instructions

- **Note: Total time for each paper has been revised to 90mins/paper.**
- It is strongly advised that you appear in the test from a PC and not from a mobile/tablet.
- Students can take help from any book or internet sources. They can discuss amongst themselves.
- The links for the questions will be mailed to the candidates on the date of prelims, i.e., **20th June at 10 am. A total of 4 google form links will be sent. The forms will start accepting responses from 11:00 am. Refresh your link at 11:00 am to view the questions.**
- Anyone who doesn't get the mail should contact the coordinators immediately.
- **All four google forms shall stop taking responses strictly at 12:40 pm.**
- Each google form has two sections:

  - *Section 1*: Here, you need to fill up your team ID & team email ID. Remember to use the same email ID that you used during registrations. Each member of a team should use the same Team ID & Email ID. We have given 10 mins specifically for this. Check your Email ID & Team ID before moving to section 2.

  - *Section 2*: This section contains the questions.
    - The questions are mostly MCQ (Single/Multi Correct), Short one-word answer.
    - The type of each question will be written just before each question.
    - Questions of different types are jumbled.
    - Each paper ideally requires 1.5 hr to be solved & all four papers, together, should be submitted within 1.5 hr, so divide the workload amongst yourselves.
    - Each member should submit only one paper out of the four papers. Multiple submissions of a paper from the same team will be considered invalid.

B. Full Marks & Time

- *Each Paper is of 100 Marks & ideally requires 1.5 hour to be solved.*
- *All 4 papers are to be submitted by 12:40pm (The google forms won't accept responses beyond 12:40pm. The paper needs to be submitted by the student by clicking on the submit button before 12:40pm. The forms won't be automatically submitted.)*

C. Paper Pattern

Paper 1: Science

- **Full Marks: 100**
- **Total Number of Questions: 28**
- **Duration: 90 mins**

Science paper has 3 subsections:

Physics:

There are **10 questions totaling 33 marks**. The question pattern is as follows:

- *Short Answer Type (9 Marks, 3 Questions):* These questions are to be answered in short, precise sentences that include the keywords for the answer. Each of these questions carries **+3 marks for the right answer and 0 for the wrong answer**. **Q1, Q2 and Q3 are of this type.**

- *Single Correct Type (12 Marks, 4 questions):* Only one option is correct. Each of these questions carries **+3 marks for the correct answer and -1 for the wrong answer. Q4, Q5, Q6, Q7 are of this type.**

- *Multiple correct Type (8 Marks, 2 Questions):* One or More than one option is/are correct. Each of these questions carries **+4 marks for all the right answers and 0 for the wrong answer.** Each correct option fetches +1 mark provided no wrong option is chosen. **Q8 and Q9 are of this type.**

- *Numerical Type Questions (4 Marks, 1 Question):* Answer to these questions are numerical values. For Q10, the nearest integer value has to be given. This question carries **+4 marks for the correct answer and 0 for the wrong answer.**

Chemistry:

There are 9 questions totaling 34 marks. The question pattern is as follows:

- *Single Correct Type (12 Marks, 4 questions):* Only one option is correct. Each of these questions **carries +3 marks for the correct answer and -1 for the wrong answer. Q1, Q2, Q3, Q4 are of this type.**

- *Multiple correct Type (8 Marks, 2 Questions):* One or More than one option is/are correct. Each of these questions **carries +4 marks for all the right answers and 0 for the wrong answer**. Each correct option fetches +1 mark provided no wrong option is marked**. Q5 and Q6 are of this type.**

- *Numerical Type Questions (8 Marks, 2 Questions):* Answer to these questions are numerical values. **For Q7 and Q8,** the nearest integer value has to be given. These question carries +**4 marks for the correct answer and 0 for the wrong answer.**

- *Paragraph Type (6 Marks, 3 Sub-Questions):* Each of these sub-questions is related to their respective paragraphs. **Q9 is a paragraph type question, with 3 sub-questions. Each of these sub questions carries +2 marks for the correct answer and -0.5 for the wrong answer.**

Biology:

There are 9 questions totaling 33 marks. The question pattern is as follows:

- *Short Answer Type (3 Marks, 1 Question):* This question is to be answered in a short word that best describes the question. This question carries +**3 marks for the right answer and 0 for the wrong answer. Q1 is of this type.**

- *Single Correct Type (16 Marks, 5 questions):* Only one option is correct. Each of questions **Q2, Q3, Q4, Q5 carries +3 marks for the correct answer and -1 for the wrong answer. Q6 carries +4 marks for the correct answer and -1 for the wrong answer.**

- *Multiple correct Type (8 Marks, 2 Questions):* One or More than one option is/are correct. Each of these questions carries +**4 marks for all the right answers**

and 0 for the wrong answer. Each correct option fetches +1 mark provided no wrong option is chosen. **Q7 and Q8 are of this type.**

- *Paragraph Type (6 Marks, 2 Sub-Questions):* Each of these sub-questions is related to their respective paragraphs. **Q9 is a paragraph type question, with 2 sub-questions.** Each of these sub questions carries +**3 marks for the correct answer and -1 for the wrong answer.**

Paper 2: Mathematics

- **Full Marks: 100**
- **Total Number of Questions: 16**
- **Duration: 90 mins**

This question paper has a total of 16 questions totaling 100 marks to be solved in 1.5 hour. Marking scheme of Each question is mentioned just before starting of each question.

The paper has questions of the following pattern:

- *Single Option Type (30 Marks, 6 questions):* Only one of the options is correct. These questions have a marking scheme of +**5 for correct answer & -1 for wrong answer. Q1, Q2, Q3, Q4, Q7, Q8 are single option correct type question.**

- *Multiple Option Type (32 Marks, 4 questions):* One or More than one of the options is/are correct. These questions have a marking scheme of +**8 for correct answer & 0 for selecting any wrong option. Each correct option fetches +2 marks provided no wrong option is selected. Q6, Q10, Q11, Q14 are multiple option correct type question**.

- *Numerical Type (10 Marks, 2 questions):* Answer to these questions are numerical integer values. Each Correct answer fetches +**5 marks. There is no negative marking. Q9 & Q13 are Numerical Type.**

- *Paragraph Type (8 Marks, 2 questions):* One paragraph follows two related questions. **Q15 & Q16 are based on the same paragraph.** Each question carries +**4 marks for correct answer with no negative marking.** Answers are numerical type up to two places of decimal.

- *Star Questions (20 Marks, 2 questions):* These are the questions of higher level of difficulty. Each question carries +**10 marks for correct answer with a negative marking of -3 for wrong answer.** There is **ONLY ONE Correct option**. **Q5 & Q12 are star marked questions**

Paper 3: Reasoning

- **Full Marks: 100**
- **Total Number of Questions: 22**
- **Duration: 90 mins**

This question paper has a total of 22 questions totaling 100 marks to be solved in 1.5 hour. Marking scheme of Each question is mentioned just before starting of each question.

The paper has questions of the following pattern:

- *Q1-Q8: Numerical Type Questions (8 Questions, 40 Marks):* Each question has an Integer Answer. Each question carries +**5 marks for correct answer & -1 negative marking for wrong answer.**

- *Q9-Q20: Single Option Correct Type (12 Questions, 48 Marks):* Each question has a single option correct as Answer. Each question carries +**4 marks for correct answer & -1 negative marking for wrong answer.**

- *Q21-Q22: STAR Single option Correct type (2 Questions, 12 Marks):* These two questions are questions of higher difficulty. **A correct answer fetches +6 Marks. There is no negative marking to these questions. Q21 is Numerical Type & Q22 is Multiple option correct type (One or more than one option may be correct in Q21)**

Paper 4: Out of the Box

- **Full Marks: 100**
- **Total Number of Questions: 25**
- **Duration: 90 mins**

There are 25 questions totaling 100 marks to be solved in 1.5 hours. Marking scheme of each question has been mentioned before the start of each question.

The paper has questions of the following pattern:

- *One Word Type (21 Marks, 7 questions):* The answer expected for each question is a single word that describes the nearest possible answer for the question. Each of these questions carries +**3 marks for the correct answer and -1 for the wrong answer. Q1, Q2, Q3, Q4, Q5, Q6, Q7 are of this type.**

- *Short Answer Type (12 Marks, 3 Questions):* These questions are to be answered in short, precise sentences that include the keywords for the answer. Each of these questions **carries +4 marks for the right answer and 0 for the wrong answer. Q8 – Q10 are of this type.**

- *Single Correct Type (15 Marks, 5 questions):* Only one option is correct. Each of these questions carries **+3 marks for the correct answer and -1 for the wrong answer. Q11 – Q15 are of this type.**

- *Multiple correct Type (12 Marks, 3 Questions):* One or More than one option is/are correct. Each of these questions carries **+4 marks for all the right answers and 0 for the wrong answer. Each correct option fetches +1 mark provided no wrong option is selected. Q16 – Q18 are of this type.**

- *Paragraph Type (15 Marks, 5 Sub-Questions):* Each of these sub-questions is related to their respective paragraphs**. Q19 and Q20 are paragraph type questions, with 3 sub-questions from Q19 and 2 sub-questions from Q20. Each of these sub questions carries +3 marks for the correct answer and 0 for the wrong answer.**

- *Numerical Type Questions (25 Marks, 5 Questions):* Answer to these questions are numerical values. Each of these questions carries **+5 marks for the correct answer and 0 for the wrong answer.**

D. Advices for prelims:

(Practising these might help you score more in the prelims! Although, it's your call whether to follow them or not)

- *It is advisable that team members be in a group call while attempting the prelims in the last few minutes & can discuss some questions if need be.*
- *It is advisable that the team members decide amongst themselves, beforehand, on who would be attempting each paper. Remember! Each paper ideally requires 1.5 hours to be solved & the total time for four papers combined is 1hour 30 mins.*
- *The members should have a stable internet connection throughout the exam.*
- *It is advisable to open the google form in the google chrome browser.*
- *It is advisable to finish & submit the form by 12:30 pm. The extra compensatory 10 mins is given to compensate for internet issues that might arise during submission. It is not advisable to solve questions during those 10 minutes and any request to allow an extension of the deadline beyond 12:40 pm will not be entertained.*
- *Do not waste precious time searching questions on the internet. While there's no one stopping you, we have taken due care that questions are not easily searchable on the internet & hence the caution!*

E. Contact:

Coordinators:

- *Anand S.*
    - Mobile: 9845519837
    - Email: anands1@iisc.ac.in
- *Debojjal Bagchi*
    - Mobile: 8296866451
    - Email: debojjalb@iisc.ac.in

Note: The link to all 4 google forms will be shared to everybody at 10 am on 20th June. The forms should be submitted by 12:40 pm. Get in touch with the coordinators if you do not receive the google form links by 10:15 am.

Questions will be visible from 11:00 am. Refresh your link at 11:00 to view questions.

ALL THE BEST!