

**Syllabus and question paper instructions
for
Entrance Test for Ph.D. Programme in Science Education – 2024**

Read the following instructions carefully.

- This paper has two sections, section I is of multiple choice questions; and section II is a descriptive one- titled as critical reasoning.
- Section I of the written test carries **100 marks**.
- There are a **total of 80 questions** in section I distributed among different subjects as:
 - **Q 1 to 25:** Quantitative reasoning, scientific literacy and technical comprehension.
 - **Q 25 to 40:** Social and cognitive sciences and education.
 - **Q 41 to 80:** Ten questions each on biology (41 to 50), chemistry (51 to 60), mathematics (61 to 70) and physics (71 to 80).
- All questions are of multiple-choice type with four options, out of which only one option is correct. Each correct answer earns 2 marks. An unanswered question or a wrong answer earns no mark.
- You may answer **any 50 questions** from section I. In case **more than 50 questions** are attempted, the score obtained will be **normalized** to that corresponding to 50 questions, using the following formula.

$$\text{Normalized score} = \frac{\text{Score obtained}}{\text{No. of questions attempted}} \times 50$$

- Section II of the written test carries **50 marks**. It has 3 questions. Q 81 is of 20 marks, and Q 82 and Q 83 are 15 marks each.

Please note

- You will need to click on ‘**Submit**’ at the end of Section I to access Section II for the first time. **However**, you can continue switching between sections **anytime** to edit/update your response.
- While typing in the text boxes, the following function keys CANNOT be used/operated: Ctrl+C Ctrl+X Ctrl+V [Accidental or otherwise – use of the above keys will lead to erasing of the text matter already typed in that particular text box.]

Please visit HBCSE Graduate school website for syllabus details.

<https://www.hbcse.tifr.res.in/academic/graduate-school/admissions>