

 UPKAR'S

TET

**Teacher Eligibility Test
Mathematics
& Science**

**PAPER-II
(For Classes VI-VIII)**

By

Dr. S. Anand, Singh

&

Anshu Mangal

Upkar Prakashan, Agra



UPKAR PRAKASHAN

*“Your Feedback,
Our Guidance”*



SCAN ME!

*Scan and Share Your
Experience With Us*

© **Publishers**

Publishers

UPKAR PRAKASHAN

Head Office : 1 State Bank Colony, Khandari, Agra-Mathura Bypass Road, AGRA-282 005

Regd. Office : 2/11A, Swadeshi Bima Nagar, AGRA-282 002

Phone : 2530966, 2531101

E-mail : care@upkar.in, **Website :** www.upkar.in

Branch Office :

8-310/1, A. K. House,

Heeranagar, **Haldwani,**

Distt.-Nainital-263 139

(Uttarakhand)

Mob. : 7060421008

- *The Copyright of this book rests with Publisher. No part of this Publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission in writing from the Publisher. Anybody doing so shall face legal action and will be liable for damages.*
- *The publishers have taken all possible precautions in publishing this book, yet if any mistake has crept in, the publishers shall not be responsible for the same.*
- *Only the courts at Agra shall have the jurisdiction for any legal dispute.*

ISBN : 978-93-6319-772-5

Code No. 1709

Printed at : UPKAR PRAKASHAN (Printing Unit) Bye-pass Road, AGRA

CONTENTS

Section-I

- **Child Development and Pedagogy** 1-48
 - 1. Growth and Development 3-8
 - 2. Heredity and Environment 9-11
 - 3. Meaning and Principles of Learning and its Relation with Motivation and Creativity 12-17
 - 4. Personality 18-20
 - 5. Individual Differences 21-24
 - 6. Various Types of Learners and their Adjustment 25-29
 - 7. Pedagogy and Teaching Learning Process 30-35
 - 8. Intelligence 36-39
 - 9. Measurement and Evaluation 40-43
 - 10. Child Development and Various Concepts 44-48

Section-II

- **Language-I (English)** 1-64
 - 1. Tenses 3-9
 - 2. Modals 10-12
 - 3. Determiners 13-15
 - 4. Articles 16-19
 - 5. Voices 20-22
 - 6. Narration 23-25
 - 7. The Preposition 26-31
 - 8. Clauses 32-34
 - 9. Comprehension 35-39
 - 10. English Usage 40-48
 - 11. Fill in the Blanks 49-55

- 12. Synonyms 56-57
- 13. Antonyms 58-61
- 14. Cloze Test 62-64

- **Pedagogy of Language Development** 1-32

Section-III

- **भाषा-1 (हिन्दी)** 1-111
 - 1. हिन्दी व्याकरण 3-9
 - 2. वर्ण उच्चारण और वर्तनी 10-15
 - 3. शब्दार्थ सामर्थ्य 16-22
 - 4. शब्द विचार (तत्सम, तद्भव, देशज एवं विदेशी शब्द) 23-27
 - 5. पर्यायवाची शब्द 28-34
 - 6. विपरीतार्थक (विलोम) शब्द 35-42
 - 7. युग्म शब्द (Paronyms) 43-48
 - 8. वाक्यांशों के लिए एक शब्द 49-53
 - 9. वाक्य संशोधन 54-57
 - 10. वाक्यों में रिक्त स्थानों की पूर्ति 58-60
 - 11. मुहावरे और कहावतें 61-71
 - 12. उपसर्ग 72-76
 - 13. प्रत्यय 77-79
 - 14. संधि 80-86
 - 15. समास 87-95
 - 16. शब्द शक्तियाँ और गुण-दोष 96-101
 - 17. पाठबोधन 102-111
 - अपठित पद्यांश 1-8

- **Pedagogy of Language Development** 1-32

Section-IV

- **Mathematics** 1-112

Unit-I

- 1. Numbers 3-8
- 2. Surds and Indices 9-11

3. Basic Operations and Factorization 12–15
4. Linear Equations 16–19
5. Arithmetic Progression 20–23
6. Geometric Progression 24–26

Unit-II

1. Simple Interest 27–31
2. Compound Interest 32–38
3. Profit and Loss 39–43
4. Ratio, Proportion and Proportional
Division 44–48
5. Partnership 49–53
6. Percentage 54–57
7. Time and Distance 58–64

Unit-III

1. Lines and Angles 65–68
2. Triangles 69–73
3. Quadrilaterals 74–76
4. Circles 77–81

Unit-IV

1. Area 82–89
2. Cuboid and Cube 90–94

3. Cylinder and Cone 95–99

Unit-V

1. Collection and Tabulation 100–101
2. Graphical Representation 102–108
3. Frequency Distribution, Mean and
Median 109–112

Unit-VI

1. Co-ordinate Geometry 1–8
● **Mathematics Pedagogy** **1–16**
● **Science** **1–64**
I. Food 3–9
II. Materials 10–13
III. World of the Living 14–22
IV. Moving Things—People and Ideas 23–26
V. How Things Work 27–39
● Electric Current and Circuits 27
● Magnetism 28
I. Natural Phenomena 31
II. Natural Resources 33
● Physics 41–49
● Chemistry 50–57
● Biology 58–63
● **Pedagogy of Science** **1–40**

General Information

● Structure and Content of TET

All questions in TET test will be Multiple Choice Questions (MCQs), each carrying one mark, with four alternatives out of which one answer will be correct. There will be no negative marking.

There will be two papers of TET—

(i) Paper-I will be for a person who intends to be a teacher for classes I to V.

(ii) Paper-II will be for a person who intends to be a teacher for classes VI to VIII.

Note : A person who intends to be a teacher for both levels (classes I to V and classes VI to VIII) will have to appear in both the papers (Paper-I and Paper-II).

Paper-II (For Classes VI to VIII)

Duration of Examination : Two-and-a-half hours

● Structure and Content

(i) Child Development & Pedagogy (compulsory)	30 MCQs	30 Marks
(ii) Language-I (compulsory)	30 MCQs	30 Marks
(iii) Language-II (compulsory)	30 MCQs	30 Marks
(iv) (a) For Mathematics and Science Teacher : Mathematics and Science	60 MCQs	60 Marks
(b) For Social Studies/Social Science Teacher : Social Science	60 MCQs	60 Marks
(c) For any other teacher either (iv) (a) or (iv) (b)		

Total 150 MCQs 150 marks

● Nature and Standard of Questions

- The Test items on Child Development and Pedagogy will focus on educational psychology of teaching and learning, relevant to the age group 11-14 years. They will focus on understanding the characteristics, needs and psychology of diverse learners, interaction with learners and the attributes and qualities of a good facilitator of learning.
 - The Test items in Language-I will focus on the proficiencies related to the medium of instruction. The Test items in Language-II will also focus on the elements of language, communication and comprehension abilities.
 - Language-II will be a language other than Language-I. A candidate may choose any one language as Language-I and other as Language-II from the available language options and will be required to specify the same in the Confirmation Page.
 - The Test items in Mathematics and Science, and Social Studies/Social Science will focus on the concepts, problem solving abilities and pedagogical understanding of these subjects. The test items of Mathematics and Science will be of 30 marks each. The test items will be evenly distributed over different divisions of the syllabus of that subject as prescribed for classes VI-VIII by the NCERT/CBSE.
 - The questions in the test for Paper-II will be based on the topics of the prescribed in syllabus of the NCERT/CBSE for classes VI-VIII but their difficulty standard as well as linkages could be up to the senior secondary stage.
-

