

2017

BPSC

Assistant Engineering (Civil)
Services Examination

Paper I & II

Edited by

Hridha Khanna

Includes:

- According to Civil Engineering Syllabus
- Covering all Topics Briefly
- Mock Test Papers with Answers for Practice
- Previous Five Years Solved Question Papers
- Complete Guide to Crack Both Papers of Civil Engineering BPSC-2017

KHANNA PUBLISHERS

BPSC

Assistant Engineering (Civil)
Services Examination

Hridha Khanna

Edited by



BPSC
ASSISTANT ENGINEER (CIVIL)
SERVICES EXAMINATION

2017

Edited by
Hridha Khanna



KHANNA PUBLISHERS

Operational Office

**B-35/9, G.T. Karnal Road, Industrial Area,
(Near Telephone Exchange), Delhi-110033**

Phones : 011-27224179 • Mob. 09811541460

email : contactus@khannapublishers.in

Published by :

Romesh Chander Khanna & Vineet Khanna
for **KHANNA PUBLISHERS**
2-B, Nath Market, Nai Sarak,
Delhi-110006 (India)

Website : www.khannapublishers.in

Copyright: Publishers

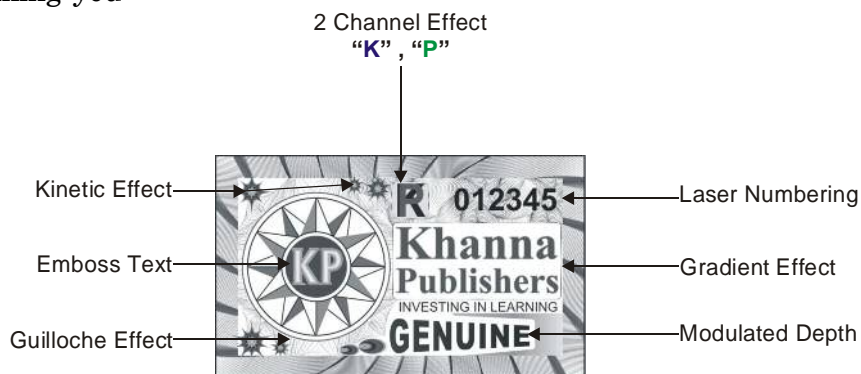
© 1979 and onward.

This book or part thereof cannot be translated or reproduced in any form without the written permission of both Authors and the Publisher. The right to translation, however, reserved with the Authors alone.

Hologram & Description

To all readers of our books, to prevent yourself from being frauded by pirated books. Please make sure that there is an Hologram on the cover of our books with the below specifications. If you find any book without the Hologram or Description, please mail us at **contactus@khannapublishers.in**.

Thanking you



First Edition : 2017

Preface

The book has been designed as per the latest syllabus prescribed for BPSC Assistant Engineer (CIVIL) Services and other States Assistant Engineer examinations. The book comprised into six sections along with Interview preparation and Mock tests. This book will serve the purpose for the students who are preparing for Assistant Engineering Services Examinations. The main objective of this book is to guide the students about the technique of questions asked in the examinations. The latest updates have been included in general studies section. Objectives and subjective questions have been included in each section.

The book covers the following topics:

- General English
- General Hindi
- General Studies
- General Engineering Science
- Civil Engineering Paper -I and II
- Interview Preparation
- Mock Tests (Solved and Unsolved)

Every attempt has been made to make this book student friendly. . Any suggestions made by the students to improve the usefulness of the book are welcomed.

—Publishers

Syllabus

S. No	Exam	Paper	Subject	Part	Marks	Nature	Duration
1.		I	General English		100	Objective	3 hours
		II	Hindi		100	Objective	
		III	General Studies		100	Objective	
		IV	General Engineering	I	100	Objective	1 hour
				II	100	Subjective	2 hours
		V	Civil Engineering Paper - I	I	100	Objective	1 hour
	II			100	Subjective	2 hours	
	VI	Civil Engineering Paper -II	I	100	Objective	1 hour	
			II	100	Subjective	2 hours	
2.	Interview				100		
					Total Marks		
					1000		

Bihar PSC AE Syllabus 2017 – General English/ Hindi

- Vocabulary.
- Grammar.
- Usage of Words.
- Indirect and Direct Speech.
- Parts of Speech.
- Translation of Sentences.
- Idioms and Phrases.
- Precise Writing.
- Cloze test.
- Comprehension.
- Fill in the blanks etc.

BPSC Assistant Engineer Syllabus 2017 – General Studies

- Current Affairs – National & International.
- Indian Geography.
- Indian Polity.
- History – India & World.
- Indian Constitution.
- Indian Economy.
- Science & Technology.
- Environmental Issues etc.

Bihar Public Service Commission AE Syllabus 2017 –

- Engineering Mechanics
- Mechanics of Solids
- Engineering Economy & management
- Transport Phenomenon
- Energy Conversion
- Engineering Materials
- Survey
- Electrical Measuring Instrument
- Environment Engineering etc.

BPSC Syllabus 2017 – Civil Engineering

Paper I

- Engineering Mechanics.
- Surveying & Measurement.
- Mechanics of Solids.
- Engineering Economy & Management.
- Engineering Materials & Constructions.
- Energy Conversion.
- Transport Phenomenon.
- Elementary Engineering.
- Environmental Engineering.

Paper II

- Structural Analysis.
- The Design of Hydraulic Structure.
- Soil Mechanics & Foundations.
- Hydrology & Water Resources.
- Structural Design.
- Open Channel Flow.
- Hydraulic Engineering.
- Transportation Engineering.
- Public Health Engineering.

Contents

I. GENERAL ENGLISH	03-120
1. Grammar : Parts of Speech	03-16
2. Usage of Words	17-19
3. Direct and Indirect Speech	20-30
4. Sentence Completion	31-33
5. Cloze Test	34-41
6. Vocabulary	42-57
7. Idioms and Phrases	58-69
8. Fill in the Blanks	70-78
9. Comprehension Passage	79-91
10. Precise Writings	92-100
11. Translation of Sentence	101-120
II. सामान्य हिन्दी	121-226
1. भाषा एवं व्याकरण	123-134
2. शब्द और वाक्य संबंधी अशुद्धियाँ	135-148
3. उपसर्ग तथा प्रत्यय	149-154
4. सन्धि	155-162
5. समास	163-177
6. तद्भव तथा तत्सम शब्द	178-181
7. विलोम या विपरीतार्थक शब्द	182-190
8. पर्यायवाची तथा अनेकार्थी शब्द	191-199
9. वाक्यांश के लिए एक शब्द	200-209
10. मुहावरे तथा लोकोक्तियाँ	210-217
11. हिन्दी की प्रमुख रचनाएँ एवं रचनाकार	218-220
12. अपठित गद्यांश	221-226

III. GENERAL STUDIES 227-352

1. Current Affairs	229-239
2. History— India and World	240-263
3. Indian Polity and Constitution	264-291
4. Indian Economy	292-312
5. Indian Geography	313-330
6. Environmental Issues	331-340
7. Science and Technology	341-352

IV. GENERAL ENGINEERING SCIENCE 353-492

1. Engineering Mechanics	355-380
2. Mechanics of Solids	381-398
3. Engineering Economy and Management.	399-404
4. Transport Phenomenon	405-414
5. Energy Conversion	415-426
6. Engineering Materials	427-444
7. Survey	445-462
8. Electrical Measuring Instrument	463-471
9. Environmental Engineering	472-492

V. CIVIL ENGINEERING, PAPER - I 493-628

1. Engineering Mechanics	495-510
2. Survey and Measurement	511-536
3. Mechanics of Solids	537-558
4. Engineering Economy and Management.	559-566
5. Engineering Materials and Constructions.....	567-580
6. Energy Conversion	581-587
7. Transport Phenomenon	588-593
8. Elementary Engineering.....	594-600
9. Environmental Engineering	601-628

VI. CIVIL ENGINEERING, PAPER - II **629-734**

- 1. Structural Analysis.631-642
- 2. The Design of Hydraulic Structure643-654
- 3. Soil Mechanics and Foundations655-678
- 4. Hydrology and Water Resources679-686
- 5. Structural Design687-692
- 6. Open Channel Flow693-704
- 7. Hydraulic Engineering705-716
- 8. Transportation Engineering717-730
- 9. Public Health Engineering731-734

INTERVIEW PREPARATION **735-754**

MOCK TESTS **755-828**

- 1. Mock Test -1 Civil Engineering-1 (Solved) 755-774
- 2. Mock Test -2 Civil Engineering-2 (Solved)775-798
- 3. Mock Test -3 Civil Engineering-1 (unsolved)799-806
- 4. Mock Test -4 (Solved)807-814
- 5. Mock Test -5 (Unsolved).....815-822
- 6. Mock Test -6 (Solved).....823-828