



नेशनल प्रोजेक्ट्स कन्स्ट्रक्शन कॉर्पोरेशन लिमिटेड

NATIONAL PROJECTS CONSTRUCTION CORPORATION LIMITED

प्लॉट नंबर-67-68, सेक्टर- 25, फरीदाबाद-121 004 (हरियाणा); Plot No-67-68, Sector- 25, Faridabad - 121 004 (Haryana)

NOTICE TO THE CANDIDATES

Reference to the Advertisement No. NPCC/Regular /AE/Nov./2016 dated 26.11.2016 inviting applications for filling up the post of Assistant Engineer (Civil) in NPCC planned to conduct the **Computer Based Test/Examination for provisionally eligible candidates as per the scheduled given below:**

Name of post	Date of Computer Based Test/Examination	Reporting Time at Center	Gate Closing time	TIME OF EXAM.
Assistant Engineer (Civil)	21.01.2017 (Saturday)	8:30 AM	09:30 AM	10.00 AM to 12.00 PM

- The Computer Based Test/Examination will be held in **Chennai, Delhi/NCR, Guwahati, Kolkata & Mumbai** on 21.01.2017 (Saturday).
- The link for downloading of Admit Cards will be sent from 04/01/2017 onward through e-mail to all eligible candidates on their respective registered e-mail ID along with facility to download the Admit Cards from NPCC website <http://www.npcc.gov.in> w.e.f. 04/01/2017.
- The candidate must carry this printed copy of E-Admit Card on the day of examination at the allocated venue of Examination Centre on the Date and Time mentioned above alongwith at least one ORIGINAL (not copy or scanned copy) of one valid **PHOTOIDENTIFICATION CARD** viz. Voter Identity Card, Driving License, PAN Card, Passport, Aadhaar Card, Employer ID (Government) issued by Government Authorities. Failing which they will not be allowed to enter into examination hall.
- In case your E-Admit card is without photograph, you are advised to bring two recent passport/stamp size photographs to the examination centre along with photo identification proof to paste on attendance sheet and E-admit card.
- The candidates should check the particulars viz., Name, Date of Birth, Category, Sub-category, etc mentioned in E-Admit Card carefully and also eligibility in all respects as per recruitment Advertisement No: NPCC/Regular /AE/Nov./2016 dated 26.11.2016. In case your admit card mentions some other discipline/post or any other discrepancy, then the candidate is advised to personally report, one day before the conduct of examination at the '**Facilitation Counter**' in their respective city on **20.01.2017 from 10.00 AM to 02.00 PM** with copies of documentary proofs i.e., copy of online application form, certificate, testimonials, etc along with two (2) passport/stamp size photographs and photo identity card so that necessary corrections are made. No request for change in name, category, date of birth, etc. shall be entertained since the candidates were advised to check their details in the online application before submission. The address of the '**Facilitation Counter**' will be made available in "**Career**" link of NPCC's website i.e. <http://npcc.gov.in>.

- f) Mock test for candidates practice would also be made available on NPCC website from 04.01.2017 to 21.01.2017 for candidates to familiarize themselves with Computer Based Test.
- g) Computer Based Test/Examination will be of 120 Minutes duration and shall consist of Objective Type 120 Questions. Each question shall carry One Mark.

Types of Questions	Questions to be covered	No. of Questions	Total Marks	Duration
Total 120 numbers of Multiple Choice Objective Type Questions with four alternative options with one right answer.	1. Related to subject knowledge 2. General Knowledge 3. General Intelligence/Reasoning 4. Numerical Ability 5. English Language	80 10 10 10 10	120	2 hours (120 Minutes)

The Syllabus is detailed at Annexure-I given at the end of this Notice for information to candidates.

h) There will be no provision for negative marking in the examination for wrong answer.

- i) No request for change in examination date/session/centre/venue will be considered under any circumstances.
- j) Candidates appearing for examination will have to report at 08:30 AM at examination Center.
- k) Candidates are advised to reach their allotted examination centre on or before reporting time as mentioned in E-Admit Card so that entry formalities i.e., Biometric and frisking can be done prior to allotment of computer nodes for appearing in the examination. The entry gates of examination centre will be closed at 09:30 AM i.e. before half an hour prior to commencement of Computer Based Test. **No late coming is allowed.**
- l) Once the Biometric Attendance Registration and Capturing of Photograph is done at Registration Desk, the Candidate should not leave the Examination Hall/Room till completion of Computer Based Test.
- m) The User ID and Password for the Computer Based Test (CBT) will be provided to the Candidate 10 minutes before the commencement of examination at their respective computer terminal. The Candidate will be required to enter Login ID and Password which will be provided at examination centre to appear for Computer Based Test. Please ensure that your name, photograph appearing on the computer screen are correct after Login.
- n) Please retain this E-Admit Card carefully for future records as the same is required to be produced at the time/stage of verification/checking of documents.
- o) Your candidature in the whole recruitment/selection process is **"PURELY PROVISIONAL"** pending scrutiny of your eligibility as mentioned in the Advertisement. In case, it is found at any stage of selection process that the candidate does not full the eligibility criteria and any information/documents provided by the candidate is/are found to be false or is not in conformity with the eligibility criteria mentioned in the advertisement including Age, Caste Category, Sub-Category, Application Fee, Educational Qualification, etc., the candidature of such candidate will be rejected at any stage of selection process and recruitment of such candidate, if made shall stand automatically terminated even after appointment.

- p) **The candidate should bring only E-Admit Card, Photo Identification Card and Ball Point Pens at Examination Centre.** Frisking will be done at entry gates and during examination. Candidates are strictly advised not to bring any electronic devices viz., mobile or cellular phones, electronic gadgets, earphones or microphones or electronic watches with computing facilities, electronic or non-electronic communication devices, hand bags, purse, calculator, log tables/pager, digital diary, book/notes etc which are strictly prohibited in the examination center. If any candidate is found in possession of any of these devices/documents, his/her candidature is liable to be cancelled. Candidates are also advised not to bring any valuable costly items to the examination center as arrangement of safe keeping of the same cannot be assured and NPCC Limited will not be responsible for safe custody, loss or theft.
- q) Anyone found to be disclosing, publishing, reproducing, transmitting, storing or facilitating transmission and storage of test contents in any form or any information therein in whole or part thereof or by any means i.e., verbal or written, electronic or mechanical or taking away the papers supplied in the examination centre or found to be in unauthorized possession of test content will be considered as serious misconduct and liable to be debarred from examination. The NPCC Limited will take appropriate legal action as per rules and such cases will be reported to police, if necessary.
- r) No TA/DA shall be paid for attending the written examination and candidates are requested to make their own arrangements for stay & travel.
- s) The candidates should regularly visit NPCC Limited website <http://www.npcc.gov.in> for latest updates through notifications, instructions, circulars related to this recruitment process.

Date: 04.01.2017

NPCC Limited

Annexure-I

Syllabus for Assistant Engineer (Civil)

Part-1 (80 Questions/80 Marks)

Civil Engineering

- i) **Building Materials** : Physical and Chemical properties, classification, standard tests, uses and manufacture/quarrying of materials e.g. building stones, silicate based materials, cement (Portland), asbestos products, timber and wood based products, laminates, bituminous materials, paints, varnishes.
- ii) **Estimating, Costing and Valuation** : estimate, glossary of technical terms, analysis of rates, methods and unit of measurement, Items of work – earthwork, Brick work (Modular & Traditional bricks), RCC work, Shuttering, Timber work, Painting, Flooring, Plastering. Boundary wall, Brick building, Water Tank, Septic tank, Bar bending schedule, Centre line method, Mid-section formula, Trapezoidal formula, Simpson's rule. Cost estimate of Septic tank, flexible pavements, Tube well, isolated and combined footings, Steel Truss, Piles and pile-caps. Valuation – Value and cost, scrap value, salvage value, assessed value, sinking fund, depreciation and obsolescence, methods of valuation.
- iii) **Surveying** : Principles of surveying, measurement of distance, chain surveying, working of prismatic compass, compass traversing, bearings, local attraction, plane table surveying, theodolite traversing, adjustment of theodolite, Levelling, Definition of terms used in levelling, contouring, curvature and refraction corrections, temporary and permanent adjustments of dumpy level, methods of contouring, uses of contour map, tachometric survey, curve setting, earth work calculation, advanced surveying equipment.
- iv) **Soil Mechanics** : Origin of soil, phase diagram, Definitions-void ratio, porosity, degree of saturation, water content, specific gravity of soil grains, unit weights, density index and interrelationship of different parameters, Grain size distribution curves and their uses. Index properties of soils, Atterberg's limits, ISI soil classification and plasticity chart. Permeability of soil, coefficient of permeability, determination of coefficient of permeability, Unconfined and confined aquifers, effective stress, quick sand, consolidation of soils, Principles of consolidation, degree of consolidation, pre-consolidation pressure, normally consolidated soil, e-log p curve, computation of ultimate settlement. Shear strength of soils, direct shear test, Vane shear test, Triaxial test. Soil compaction, Laboratory compaction test, Maximum dry density and optimum moisture content, earth pressure theories, active and passive earth pressures, Bearing capacity of soils, plate load test, standard penetration test.

- v) **Hydraulics:** Fluid properties, hydrostatics, measurements of flow, Bernoulli's theorem and its application, flow through pipes, flow in open channels, weirs, flumes, spillways, pumps and turbines.
- vi) **Irrigation Engineering:** Definition, necessity, benefits, effects of irrigation, types and methods of irrigation, Hydrology – Measurement of rainfall, run off coefficient, rain gauge, losses from precipitation – evaporation, infiltration, etc. Water requirement of crops, duty, delta and base period, Kharif and Rabi Crops, Command area, Time factor, Crop ratio, Overlap allowance, Irrigation efficiencies. Different type of canals, types of canal irrigation, loss of water in canals. Canal lining – types and advantages. Shallow and deep to wells, yield from a well. Weir and barrage, Failure of weirs and permeable foundation, Slit and Scour, Kennedy's theory of critical velocity. Lacey's theory of uniform flow. Definition of flood, causes and effects, methods of flood control, water logging, preventive measures. Land reclamation, Characteristics of affecting fertility of soils, purposes, methods, description of land and reclamation processes. Major irrigation projects in India.
- vii) **Transportation Engineering :** Highway Engineering – cross sectional elements, geometric design, types of pavements, pavement materials – aggregates and bitumen, different tests, Design of flexible and rigid pavements – Water Bound Macadam (WBM) and Wet Mix Macadam (WMM), Gravel Road, Bituminous construction, Rigid pavement joint, pavement maintenance, Highway drainage, Railway Engineering- Components of permanent way – sleepers, ballast, fixtures and fastening, track geometry, points and crossings, track junction, stations and yards. Traffic Engineering – Different traffic survey, speed-flow-density and their interrelationships, intersections and interchanges, traffic signals, traffic operation, traffic signs and markings, road safety.
- viii) **Environmental Engineering :** Quality of water, source of water supply, purification of water, distribution of water, need of sanitation, sewerage systems, circular sewer, oval sewer, sewer appurtenances, sewage treatments. Surface water drainage. Solid waste management – types, effects, engineered management system. Air pollution – pollutants, causes, effects, control. Noise pollution – cause, health effects, control.

Part-2 (40 Questions/40 Marks)

- (i) General Knowledge (10 Questions, 10 Marks)
- (ii) General Intelligence/Reasoning (10 Questions, 10 Marks)
- (iii) Numerical Ability (10 Questions, 10 Marks)
- (iv) English Language (10 Questions, 10 Marks)