

# Office of the Hooghly Zilla Parishad, Chinsurah :: Hooghly

আমরা করছি অঙ্গীকার ব্যবহার করবো শৌচাগার মাঠে ঘাটে নয় আর নিরোগ হোক আমাদের পরিবার। - দির্মল ছগলী ফেলা -

Date: 07.12,2016

#### NOTICE

Online applications are invited through the website <a href="www.hooghly.gov.in">www.hooghly.gov.in</a> from the Citizen of India as defined in Part-II of the Constitution of India for engagement to the post of Assistant Engineer, Sub Assistant Engineer(Civil), Sub Assistant Engineer(Electrical), Lower Division Assistant, Assistant Cashier and Additional Accountant against the vacancies in the Hooghly Zilla Parishad on fulfillment of the following criteria:

# 1. Name of post - Assistant Engineer

A. Educational Qualification :-

First Class Bachelor Degree or equivalent qualification in Civil Engineering from any recognized University or Council or Association with minimum two years working experience.

B. Scale of Pay:

Pay in Payband 4 - 9000-40500, Grade Pay - 5400.

C. Total number of Vacancies :-

3 (UR - 1, UR(EC) - 1, SC - 1)

# 2. Name of post - Sub Assistant Engineer (Civil)

A. Educational Qualification :-

Diploma in Civil Engineering from any Council or Board recognised by the

State Government.

B. Scale of Pay:

Pay in Payband 4 - 9000-40500, Grade Pay - 4400.

C. Total number of Vacancies :-

1 (OBC Category A-1)

# 3. Name of post - Sub Assistant Engineer ( Electrical )

A. Educational Qualification :-

Diploma in Electrical Engineering from any Council or Board recognised by

the State Government.

B. Scale of Pay:

Pay in Payband 4 - 9000-40500, Grade Pay - 4400.

C. Total number of Vacancy:-

1 (OBC Category B - 1)

# 4. Name of post - Lower Division Assistant

A. Educational Qualification :-

Passed Madhyamik or equivalent examination of any recognised University,

Board or Council having secured at least 50% marks in aggregate. Knowledge

of type writing shall be a desirable qualification.

B. Scale of Pay:

Pay in Payband 2 - 5400-25200, Grade Pay - 2600.

C. Total number of Vacancies :-

8 (UR (Disable) - 1, SC-1, ST-1, SC(EC)-1, SC(Ex-serviceman)-1, OBC

Category A-1, OBC Category B-1 and OBC Category A(EC)-1)

# 5. Name of post - Assistant Cashier

A. Educational Qualification :-

Passed Madhyamik or equivalent examination of any recognised University,

Board or Council having secured at least 50% marks in aggregate.

B. Special Condition:

Person appointed as Assistant Cashier shall have to make a security deposit in favour of Hooghly Zilla Parishad at the rate determined by the State

Government in this behalf.

C. Scale of Pay:

Pay in Payband 2 - 5400-25200, Grade Pay - 2600.

D. Total number of Vacancy:-

1 (UR-1)

6. Name of post - Additional Accountant

A. Educational Qualification :-

Bachelor degree in Commerce from any recognised University.

B. Scale of Pay:

Pay in Payband 2 - 5400-25200, Grade Pay - 2900.

C. Total number of Vacancy:-

1 (UR-1)

Note:-

Total vacancies as stated above is purely provisional and subject to revision.

Qualification as stated against Sl No. 1 - 6 above must be possessed by the Candidate on or before the date of publication of the advertisement. If it is found during verification of testimonials at any stage that the candidate has acquired qualification as stated above at any date after the date of publication of this advertisement, his / her Candidature shall be summarily rejected.

As on the January 1, 2016 subject to the provisions of the West Bengal Age for all of the above posts (Sl. No. 1 - 6) Services (Raising of Age Limit) Rules, 1981.

Unreserved.

18 - 40 years.

Other Backward Classes -A & B.

18 - 43 years.

Scheduled Caste & Scheduled Tribe.

18 - 45 years.

Ex -Serviceman.

As per the provision of the Ex -Serviceman (Reservation of

vacancy in the State) Services and Posts, (Group -C & Group -D)

Rules, 1982.

**Exempted Category Candidate** 

Relaxation of age will be considered as per Finance Department's

order no. 2498-F, dt. 10.03.1986.

# Reservation of Posts

 The benefits for reservation of vacancies and age concession for SC, ST, OBC-A and OBC-B candidates are admissible to SC, ST, OBC-A and OBC-B candidates of West Bengal only as per existing rules. The prevalent norms for exclusion of Creamy Layer will be applicable for the OBC Candidates.

SC, ST, OBC-A and OBC-B candidates of other States will be treated as Candidates of Unreserved

- Before final selection, short-listed candidates belonging to the SC, ST, OBC-A and OBC-B category will be directed to furnish original certificate issued by a competent authority of West Bengal as laid down in the West Bengal Schedule Castes and Schedule Tribes ( Identification ) Act, 1994 and SC Tribal Welfare Department order no. 261-TW/EC/MR-103/94 dt. 06.04.1995, for verification of testimonials in support of
- Similarly the Persons with disabilities ( 40% and above) and the Ex-Servicemen candidates shall have to produce relevant documents, in original, in support of their claim in reservation as well as age relaxation at
- Similarly candidates applying for Exempted category shall have to produce relevant documents, in original, in support of their reservation as well as age relaxation at the time of verification.
- No claim for being member of SC/ST/OBC-A/OBC-B or a person with Disability or Ex-Servicemen or belonging to Exempted Category shall be entertained after submission of the application.
- Particulars and certificates required: a candidate claiming to be SC/ST/OBC-A/OBC-B/Physically Handicapped must have a certificate in support of his / her claim from a Competent Authority as Specified below:-

- For SC/ST/OBC-A/OBC-B candidates [vide the W.B. SCs & STs (Identification )Act, 1994 and SCs & TW Department order no 261-TW/EC/MR-103/94 dt. 06.04.1995:
  - a. In the District, the Sub-Divisional Officer of the Sub-Division concerned, and
  - b. In Kolkata, the District Magistrate, South-24-Parganas or such Additional District Magistrate, Suth-24-Parganas, as may be authorized by the District Magistrate, South-24-Parganas, on his
- Names of Exempted Category candidates shall also be obtained by DLSC directly from the Exempted Category Cell under the Directorate of Employment, West Bengal to fill up the vacancies meant for Exempted Category candidate in terms of provision of point no-6 as laid down in the Notification issued by Labour Department video no 50-Emp/1M-25/98 dated, Kolkata, the 1st March 2011.
- For Ex-servicemen Candidates names of Ex-servicemen shall also be obtained both from Zilla Sainik Board as well as through online application for filling up the vacancies meant for Ex-Servicemen.

# Mode of Examination

Total Marks (100 marks)

Part I. Written Examination - 85 Marks.

Part II. Viva-Voce - 15 Marks

The Successful Candidates of written examination will be called for an interview in the ration of 1:5 against the total number of vacancies in a particular post. The final merit list will be prepared on the basis of the total marks obtained in the written examination, computer test ( wherever applicable ) and viva-voce.

The successful candidates of the post for which computer knowledge is essential or desirable, shall have to undergo a computer test at the time of Viva-voce.

# Syllabus for Written Examination

Lower Division Assistant:

English - 20 marks, Bengali - 20 marks, Arithmetic - 25 marks and General

Knowledge - 20 marks.

Standard of Question - English, Bengali & Arithmetic - Madhyamik or

equivalent standard.

Assistant Cashier:

English - 20 marks, Bengali - 20 marks, Arithmetic - 25 marks and General

Knowledge - 20 marks.

Standard of Question - English, Bengali & Arithmetic - Madhyamik or

equivalent standard.

Additional Accountant:

English - 20 marks, Bengali - 20 marks, Accountancy - 30 marks and General

Knowledge - 15 marks.

Standard of Question - English, Bengali - Madhyamik or equivalent standard.

Accountancy - Higher Secondary or equivalent standard.

Assistant Engineer:

a)Short questions - 15 Marks (Marks for individual question - 1 or 2)

On Highways, Survey, Hydrology, Irrigation, Public Health, Environment,

Bridges and other short questions from IS456, IS800 and IS875.

b) Structural Analysis - 10 Marks

Shear Force and Bending Moment diagram with analysis for indeterminate structures. Influence Line diagram with analysis.

c) Reinforced concrete Structure Design - 10 Marks

For Beam (Rectangular or T-Beam), Column Foundation (Isolated/combined)

d)Pavement Design - 10 Marks

For Flexible or Rigid Pavement. e) Design of Reinforced Concrete structures a. Steel structures - 20 Marks For Pier Abutment (closed type. or spill through), Cast in Situ piles, Retaining walls, Water retaining structures like dams, barrages etc. For Girder with built in sections, Roof Truss.

f) Quantity Analysis - 10 Marks Earth work from data of level book, Single or Two storied Buildings (major items), Retaining wall/Septic tank/Well/surface drains.

g) Programming for Schedule of any Civil Engineering Work in Critical Path Method or Bar Chart - 10 Marks

#### Sub Assistant Engineer:

#### 1. STRENGTH OF MATERIALS

Simple stresses & strains, stress-strain curve for Mild Steel, S.F. and B.M. diagrams of loaded beams, bending & Shear Stresses of beams, slope and deflection, direct & bending Stress, Eccentric loading on masonry pillars.

5x2 = 10

#### 2. THEORY OF STRUCTURES

Gravity structures- Dam & Retaining Walls (Rectangular & Trapezoidal sections), Conditions of stability, Different types of failure of a Dam, Critical load on Columns – Euler's Rankine's & B.I.S. Code formula.

#### CONCRETE STRUCTURES

Working stress method of design of simply supported R.C.C. rectangular beams, Cantilever slabs, Singly reinforced T-Beams — Design of Reinforcements, Design of axially loaded R.C.C. short columns, Isolated R.C.C. square footing of column.

5x2 = 10

# 3. CONSTRUCTION MATERIALS & PRACTICE BUILDING MATERIALS

Bricks – Traditional & Modular, Size & Weight, I.S. Classifications, Testing of Bricks, Mortar & Concrete – Different types, Usual proportions, Specific uses, Slump of concrete, Recommended values of slump for various works, Water – Cement ratio – its effect on strength of concrete, Curing of concrete, Sources and uses of stone, Sand & lime, Mosaic Tiles & Roof Tiles, period of curing timbers, Commonly used timber in engineering works & their specific uses.

#### CONSTRUCTION

Foundation, Object, Shallow & Deep Foundation, Names of different types, their uses in specific locations, Brick Masonry works. General principles & precautions, reinforced Brick work, its advantages, damp proofing – materials used, causes & effect of dampness, roofs and roof coverings – different types – uses at specific locations, flooring, doors & windows – different types – uses at specific locations, Stairs, different types (names only), their uses. Formwork – materials used, characteristics of good formwork, rules for emoval of formwork, Common construction equipments.

5X2=10

### 4. FIELD SURVEYING

Metric surveying chain, types – different types, uses, Triangulation and Traversing, Tie line, Check line & Base line offsets – different types, Field book entry, Right angle setting in field with instruments and with chain or tape. Compass – different types, uses, bearing, W.C.B.& R.B., Fore & Back bearing, Local attraction, Declination, Dip, Closing error of a compass traverse, cause, adjustment, permissible error in compass surveying.

Plane Table survey - suitability, advantages & disadvantages, methods of plane

tabling, equipments necessary.

Leveling, types of level & leveling staff (names only), temporary adjustment of level, reduction of level, level book entry, reciprocal and profile leveling, correction for curvature & refraction, contouring, definition of contour, contour interval & horizontal equipment, characteristics of contour lines, uses of contour map, methods of contouring (name only).

Theodolite Survey - different types of theodolite, important terms in connection with theodolite, uses of a theodolite, theodolite traversing, latitude & departure, closing error in a theodolite traverse, adjustments, permissible limits of error. Curve setting – degree & radius of a curve, their inter-relation, elements of a simple curve, classification of curves.

#### 5. ESTIMATING, COSTING & CONTRACTS

Specification of works and materials, Estimates, different Types, general items of works, Units of measurement for building works as per I.S. Code, method of measurement for different items of work and materials, present market rates of materials & unit rate of items of work, floor area, carpet area and plinth area, F.A.R., Rate analysis – factors governing it, schedule of rates, analysis of rates for different items of works of a building.

Contracts – different types, contract documents, submission & opening of Tender, earnest money, security deposit, measurement book, work order book, imprest and temporary advance, material at site account, suspense account.

5x2=10

# 6. PUBLIC HEALTH ENGINNERING WATTER SUPPLY

Source of water, ground water (Springs, infiltration galleries & wells), Acquifer, Tube-Wells – methods of boring, development of Tube-well, determination of tube diameter, length and diameter of a strainer, Motor & hand pump. Water requirements per capita demand, domestic, industrial & fire demands, Population forest.

 $5 \times 1 = 5$ 

#### 7. IRRIGATION

#### PRINCIPLES OF IRRIGATION

Necessity & benefits of irrigation - its ill effects, types of irrigation systems, methods of irrigation - surface irrigation, sprinkler irrigation and sub-surface irrigation.

#### **HYDROLOGY**

Measurement of rainfall - Symon's rain gauge, average rainfall over an area by arithmetical mean method, Thiessen polygon method and Isohyetal method, Run off - factors affecting it.

# WATER REQUIREMENT OF CROPS

Duty, Delta and base period - their inter-relations, factors affecting duty, methods of improving duty, commanded area, capacity factor, time factor, outlet factor, crop ratio, overlap allowance.

#### CANALS

Classification of canals, canal linings - Types and advantages, different parts of irrigation canals - their functions, designs of canal sections for a given discharge (using Kennedy & Kutter's formula), Design of canal sections by using Manning Formula, Canal structures.

#### WELL IRRIGATION

Shallow and deep wells, yield from a well, advantages & disadvantages of well irrigation.

### TUBEWELL IRRIGATION

Piped Water Irrigation, Design of Pipelines and losses.

#### CROSS DRAINAGE WORKS

Aqueduct, super passage, siphon aqueduct, level crossing.

#### HEAD WORKS

Object, layout and functions of head works, classification of dams, different types of earthen dams, causes of failure of earthen dams and safety measures, difference between weir, barrage and dams.

#### FLOOD CONTROL

Methods. of flood control, reservoirs, flood walls, channel improvements, floodways Cause & effect of flood.

### RIVER TRAINING WORKS

Objectives, different types, guide bank, spurs, groynes, pitching, revetment, rip-rap.  $5 \times 2 = 10$ 

#### 8. RURAL ROADS

#### INTRODUCTION

Classification of rural roads as per I.R.C., terrain classification as per I.R.C.

#### ROAD GEOMETRICS

Road alignment, vertical and horizontal curves. Cross-sectional elements, recommended land width for different classes of roads, recommended speeds,

Camber-objective-recommended values of camber for different types of roads, Gradients for roads in different terrains, Grade compensation at curves on hill roads, super-elevation-objects, transition curves objects, sight distance, different types, perception time, brake-reaction time, lag time, lag distance. Equipments used in road construction.

**EARTH WORK** - Cutting, filling angle of repose, allowance for settlement, profile, benching, head & lift, borrow pit & spoil bank.

#### ROAD AGGREGATES

Different types, requirements of good road aggregates, testing of road aggregates (names of tests & their objectives).

### RURAL ROADS CONSTRUCTION

Road structure, component parts, functions, soil stabilization methods, Road Drainage. Water bound macadam roads - materials required - advantages & disadvantages. Bitumen - sources - types, Asphalt, Tar. Bituminous Road Types - Surface dressing (single & double coat), Grouting (semi grout & full grout), premix type (premix chipping carpet, premix macadam & premix concrete) - Functions, constructions, quantities of materials required for each type. Cement concrete Roads: Pavement joints, necessity types, joint sealer, joint filler, dowel bar, tie bar, mud pumping, Culverts & Bridges - differences - component parts - wing wall, Abutment and Piers. Classification of Bridges, Span, Flood discharge, Waterway, Scouring, Depth of Foundation, Clearanceand Free Board, Maintenance of Bridges.

 $5 \times 2 = 10$ 

# 9. SOIL MECHANICS & FOUNDATION ENGINEERING Classification of soil.

Index, properties of soil.

Phase diagram for dry, moist and saturated soil, Definition - void ratio, porosity, water content, degree of saturation, Unit weight, Sp. Gr., Density, bulk density, dry density, submerged density, air content etc. Consistency of soil - Moisture content & volume relationship, Definition - Atterberg Limit, plasticity index, density index shrinkage ratio. Permeability of soil - Darcy's law, coeff of permeability, factors affecting permeability. Compaction - Dry density by Proctor's compaction. Consolidation - Difference between compaction & consolidation, compression index, coeff of compressibility, volume compressibility, coeff of consolidation, settlement of foundation.

Shear strength - Definition of shear strength arid shear parameters.

Earth Pressure - Active and passive earth pressure, coeff of passive earth pressure - Rankine's earth pressure theory, Angle of repose, pressure intensity diagram, Resultant thrust. Foundations - Shallow & deep foundations, types of shallow foundation (names & uses only) types of deep foundation (names & uses only), Bearing capacity, Terzaghis bearing capacity formula, assumptions & problems, plate load test. Pile foundation - formula related to pile foundation, Dynamic, Engineering News formula, Hiley's formula, static formula. Soil Stabilization - Principles, types - Mechanical stabilization, cement Stabilization, lime stabilization, bitumen, stabilization by grouting.

 $5 \times 2 = 10$ 

The finally selected candidates in respect of Sl. No 2 to 6 shall be deemed to be on probation on completion of a continuous temporary service for two years after his/her joining. He/she shall be confirmed and made permanent on satisfactory completion of a period of probation for one year.

In case of Assistant Engineer, the successful candidates will be on renewable contract for a maximum period of

two years.

#### **GENERAL INSTRUCTIONS**

- Scanned recent passport size photograph & scanned signature of the candidate should be uploaded with application form.
- ❖ Before the final selection, the candidates have to submit the certificate in original in support of their claim -
  - · Academic Qualifications.
  - Desirable Qualifications (where ever applicable)
  - · Certificate regarding Birth
  - Caste Certificate (where ever applicable)
  - · Certificate on Disability (where ever applicable)
  - Certificate of Employment Exchange ( Exempted Category Cell )( wherever applicable )
  - Relevant documents of Ex -Serviceman (where ever applicable).
- Online application will only be received from <u>08/12/2016</u> to <u>23/12/2016</u> in the District Website i.e. www.hooghly.gov.in

## GENERATION OF ADMIT CARD & DATE OF EXAMINATION

- Admit Card for written examination with date and venue shall be available from 18/01/2017 & to be downloaded from District's Website at www.hooghly.gov.in.
- Under no circumstances admission will be allowed without the Admit Card and one photo bearing document like EPIC or Admit Card of Madhyamik (if it is photo bearing) or Driving License or PAN Card or Aadhar Card or Bank Pass Book with photograph.
- \* Tentative date of examination <u>05-02-2017</u>.

#### GROUNDS OF REJECTION OF APPLICATION FORM

- Application received through online shall be entertained. No application shall be received after 5.30p.m. of the last date i.e. 23-12-2016.
- Application form without the scanned signature & scanned photograph of the applicant shall be rejected.
- Application incomplete in any respect shall be rejected.
- If it is found during verification of testimonials at any stage that the candidate has acquired qualification as stated above at any date after the date of publication of this advertisement, his/her candidature shall summarily be rejected.
- No hard copy of application to be sent to this office.
- Use of Pager, Mobile Phone, Calculator etc. and any type of electronic gadgets inside examination hall is strictly prohibited and use of the same will lead to cancellation of candidature without giving an opportunity of being heard.
- Any attempt of furtherance of candidature or application by communication, influence or other unfair means can lead to disqualification of candidature and rejection of application.

#### Note:

1) Total vacancies as stated above is purely provisional and subject to revision.

2) If any change takes place in the vacancy position or any other issues directly related with this notification will be brought to the notice of candidates in manner as decided by the Zilla Parishad Staff Recruitment Committee.

District Magistrate, Hoghly

Executive Officer, Hooghly Zilla Parishad.

Chairman of Zilla Parishad Staff Recruitment Committee Hooghly.