ASSAM PUBLIC SERVICE COMMISSION Jawaharnagar, Khanapara, Guwahati-22.

SYLLABUS (Degree standard)

Syllabus for screening test for Recruitment to the post of Assistant Engineer (Electrical) under PW (Building & NH) Department of Govt. of Assam. The educational standard is of degree standard.

> Full Marks: 100 Time: 2 (two) hours

Section-A: General Studies (Multiple Choice Objective Type Questions)

- i) Current Events of National & International importance.
- ii) History of India & History of Assam.
- iii) World Geography including India & Assam.
- iv) Indian Economy, Indian National Movement.
- V) Mental Ability.
- vi) Role and Impact of Science & Technology in India
- vii) Indian Polity, Political System of India.
- viii) Indian Culture.

Full Marks: 100 Time: 2 (two) hours

Section-B; Electrical Engineering (Multiple Choice Objective Type Questions)

Primary and Secondary cell, Dry-accumulators, Solar Cells, Steady State Analysis of D.C and A.C Networks, Network Theorems, Network Functions, Laplace techniques, transient response, frequency response, three-phase network, inductively couple circuits.

Electrostatics and magneto static field analysis, Maxwell's equations, Wave equations and Electromagnetic Waves.

Basic Methods of measurement, Standards, error analysis, indicating instruments, Cathode-ray oscilloscope, measurement of voltage, current, power resistance, capacitance, frequency, time and flux.

Safety precautions, Power & Energy, Condensers, D.C Generators, D.C Motors. House wiring (Both Surface & recess), Transformers, Alternators, A.C. Three phase & single phase motors, synchronous motors, illumination(specially LED & Solar), Generation, Transmission & Distribution of Electricity; Switch gear & Protection such as (a) Vertical And Horizontal DB (b) MCB (c) RCCB (d)ELCB (e) MCCB (f) RCBO (g)Change over switch (h) Air Circuit Breaker; Earthing, Underground cable (Both LT & HT), Lift, Inverter & U.P.S., Compact Sub-Station.

> Principal Controller of Examinations (i/c), Assam public Service Commission. Jawaharnagar,Khanapara,Guwahati-22.