

H. P. Board of Departmental Examinations
Departmental Examination of Engineering Officers of HPSEB Ltd.
of Himachal Pradesh Session April, 2014

PAPER-I (WORKS, STORE & COMMERCIAL ACCOUNTS/ MANUALS)

Time Allowed: 3 Hours

Maximum Marks: 300

Note:-

- i) Attempt any five questions. Three from Part-I and Two each from Part-II or Part-III as applicable.
- ii) Part-I is Compulsory for all Engineering Officers.
- iii) Part-II is meant for Electrical Engineers.
- iv) Part-III is meant for Civil/ Mechanical Engineers.
- v) Bare Acts/ Codes/ Rules/ Manuals only are allowed.

PART-I (Works Accounts & Stores Manual)

- Q. I)** a) Explain the various conditions and the accounts procedure followed in issuing the material to the Contractors. [20]
- b) How the transactions with other Departments and Governments are done? Explain the procedure of Inter Divisional Transfers. [20]
- c) Explain monthly and yearly closing of accounts. How the unsettled accounts are reviewed during a year? [20]
- Q. II)** a) What is the procedure of Arbitration and Legal Proceedings in handling the Contracts in HPSEB Ltd.? [20]
- b) Explain in detail the procedure of Condemnation and Disposal of unserviceable and obsolete stores in HPSEBL. [20]
- c) How the purchases through Director General of Supplies are made? Describe in detail. [20]
- Q. III)** a) Under which Account Code and Head, Revenue from Sale of Power is accounted in HPSEBL. Describe the various items with sub heads and account codes covered under Revenue from Sale of Power. [20]
- b) What is the procedure of ear marking, sanctioning, payments etc. of advances to the employees for purchase of Plots/ Construction of Houses/ Flats? [20]

- c) What are the general instructions for checks are to be applied to the Bills and personal claims of pay and allowance of staff? Explain in detail. [20]
- Q. IV) a) How the recording of measurements, checking of measurements are done in the Measurement Book and how the payments for works are made? [20]
- b) What are the general principles to regulate the enforcement of responsibility for losses sustained by board through fraud and negligence of individuals? [20]
- c) How the work is commenced in the absence of detailed estimate? Describe in detail. [20]
- Q. V) a) What is the procedure of maintaining and Up keep of Quantity Ledger and Stock Value Ledger in HPSEBL? [20]
- b) How the verification of material is done which is issued direct to the Major Works being constructed departmentally? [20]
- c) What are the precautions to be observed by the officials entrusted with the duty of signing cheques on behalf of the Board? [20]

PART-II FOR ENGINEERING OFFICERS (ELECTRICAL)

- Q. I) a) What do you understand by the terms **Unauthorised Use of Electricity** and **Theft of Electricity**. How the Sections 126 and 135 are invoked in these cases? [20]
- b) What is the procedure to Grant of Electric Connection in the absence of consent from the Landlord? [20]
- c) What is the Procedure to Supply of Power to Local Bodies for Public Lighting? [20]
- Q. II) a) How the Recovery of Arrears from Defaulting Consumers is done? Please explain. [20]
- b) How the assessment and charging of energy pilferage is done from the consumers found stealing of Energy? [20]
- c) What are the steps to be taken in the Sub-Division for checking the consumer accounts by the SDC and AE/AEE? [20]

- Q. III) a) Describe in detail in procedure/ steps involved for release of connection to a consumer with load more than 2MW? [20]
- b) What action is to be required in case, the consumer withdraw to take load after issuance of PAC/ Sanction of load or delays in building the load up to sanctioned load. [20]
- c) What is the procedure of remittance of Public Money to Bank? Please Explain. [20]
- Q. IV) a) What is the procedure of taking the securities from the Consumers and how the maintenance of their accounts is done? [20]
- b) What do you understand by Power Factor improvement? Explain the benefits and economics of Capacitors. Describe the guiding principles of installation of Capacitors. [20]
- c) Define the terms OPEN ACCESS, SERVICE LINE, WHEELING, COGENERATION, LOWER VOLTAGE SUPPLY SURCHARGE, HIGHER VOLTAGE SUPPLY REBATE, PEAK LOAD VIOLATION CHARGE, DEMAND CHARGES, DISTURBING LOAD PENALTY and POWER FACTOR SURCHARGE. [20]

PART-II FOR ENGINEERING OFFICERS (CIVIL/ MECHANICAL)

- Q. I) a) Explain the criteria for selecting surface type power house or underground power house. On what basis and parameters, the dimensions of power house are finalised, explain? [20]
- b) What do you understand by the setting height of unit? Explain the circumstances when setting height of the unit is +ve and -ve? [20]
- c) What is the utility of models tests in judging the performance of turbines? Please explain? [20]
- Q. II) a) What are types of losses occurring in hydraulic tunnels? Describe in detail. [20]
- b) How the estimation of Rock Loads and Pressures is done before excavation of tunnels? Please explain. [20]
- c) Explain different types and process of grouting in tunnels. What do you understand by Tunnel Portals and Tunnels Plugs? [20]

- Q. III) a)** What are the various factors considered in planning and layout of Barrages? Please explain. [20]
- b)** What are the basic parameters required to be decided before taking up the detailed hydraulic design of barrages? [20]
- c)** What are the various causes of failure of Barrages and Weirs? Please explain in detail. [20]
- Q. IV) a)** What are the principles considered for Alignment of Channels? Please explain. [20]
- b)** Explain the various maintenance procedures adopted for Unlined and Lined channels. [20]
- c)** What are the various factors considered for the adequate drainage and pressure release arrangements during design of Lined Canals? [20]