

H. P. Board of Departmental Examinations
Departmental Examination of Engineering Officers of HPSEB Ltd.
of Himachal Pradesh Session ~~Nov~~, 2019
PAPER-I (WORKS, STORE & COMMERCIAL ACCOUNTS/ MANUALS)

Time Allowed: 3 (Three) 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/ Tariff Orders only are allowed.

PART- I (WORKS ACCOUNTS & STORES MANUAL)

- Q. I) a) What are the various Commercial Terms and Conditions incorporated in a Supply Order/ Contract Agreement? Explain in detail. [20]
- b) What are the benefits/ concessions given to the registered firms with HPSEB Ltd.? How the firms are Suspended, Black Listed and Banned from the supply of Material? [20]
- c) What is the procedure of Arbitration and Legal Proceedings in handling the Contracts in HPSEB Ltd.? [20]
- Q. II) a) Explain the procedure in detail required to be adopted before taking up any work. [20]
- b) How the prices of Stores are fixed by the Divisional Officers for maintaining the stores in HPSEB Ltd.? Explain in brief the accounting procedure for the material received for the specific work. [20]
- c) What is the procedure followed in dealing the cases related to the disposal of unserviceable, obsolete and surplus stores? [20]
- Q. III) a) Explain the procedure of maintaining and Upkeep of Quantity Ledger and Stock Value Ledger in HPSEBL? [20]
- b) How the appropriations in the budget estimates are done? Who is responsible for watching the progress of expenditure? Explain. [20]
- c) Define the terms Book Transfer, Budget Estimates, Technical Sanction, Accounts of Deposits and Suspense Accounts. [20]

- Q. IV) a) What are the different groups in Finance & Accounts wing in HPSEB Ltd. Explain the functions of Chief Accounts Officer. [20]
- b) What is the role of Budget and Central Accounts Section in Finance & Accounts Wing in HPSEB Ltd. Explain. [20]
- c) Explain the working of Compilation Section and Banking & Cash Sections in HPSEB Ltd. [20]
- Q. V) a) What is the procedure followed for the custody of cash in a Sub-division/ Division? How the Cash Books are maintained by the Sub Divisional Officers. [20]
- b) What is the procedure of physical verification of stores and who is competent for physical verification of each type of store? [20]
- c) What is Stock Measurement Book? Explain the use and upkeep of Stock Measurement Book. [20]

PART-II FOR ENGINEERING OFFICERS (ELECTRICAL)

- Q. I) a) How the Dispute Settlement Committees works in HPSEB Ltd.? Explain in detail the working of different level committees. [20]
- b) Define the different consumer categories in HPSEB Ltd. and how will you prioritise the applications for grant of electric supply? [20]
- c) What procedure is to be followed when a meter is reported to be damaged or burnt by the consumer? [20]
- Q. II) a) What are the Operations, duties and functions of Flying Squad Units? Describe in detail. [20]
- ~~b) What are the general principles to regulate the enforcement of responsibility for losses sustained by HPSEBL through fraud or negligence of individuals? [20]~~
- c) How the assessment and charging of energy pilferage is done from the consumers found stealing of Energy? [20]
- Q. III) 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) How the consumer is billed where the meter is found inaccurate? [20]
- c) What are the steps involved to release the connection to a consumer at 33 kV? [20]

- Q. IV) a) What are the documents required to release the new connection to a Consumer. Explain the conditions leading to disconnection of electricity. [20]
- b) How the standard supply voltage is decided before releasing the connection? What are the basic parameters considered for deciding the supply voltage? Explain in detail. [20]
- c) Define the terms Diversity Factor, Open Access, Disturbing Load Penalty, Additional Surcharge, Power Factor Surcharge, Lower Voltage Supply Surcharge, Two Part Tariff, Contract Demand Violation Charges, AT&C Losses, Wheeling Charges. [20]

PART-III FOR ENGINEERING OFFICERS (CIVIL/ MECHANICAL)

- Q. I) a) Which major clearances are required to be obtained by an Independent Power Producer (IPP) for commencing the construction of the micro hydel project. [20]
- b) Prepare a sample technical specification for a high head Francis Turbine and Associated Equipment. List out the major Guaranteed Technical Particulars. [20]
- c) Give the brief explanation of basic and common civil components of a high head development of Mini Hydro Scheme. [20]
- Q. II) a) What is the utility of models tests in judging the performance of turbines? Please explain. [20]
- b) Explain in detail the Hydraulic Losses in the Head Race Tunnel. [20]
- c) What are the different methods of Tunnelling? What are the steps and their sequence involved in Tunnelling Operation? [20]
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- Q. III) a) What are the advantages & disadvantages of having barrage/ weir in Mountainous & Sub-mountainous Regions? Explain in brief the points to be considered while selecting a barrage vis-a-vis weir. [20]
- b) What are the main guidelines for the selection of suitable site for Barrage? [20]
- c) What are the various instruments required to be installed in a Barrage or Weir? Explain in brief. [20]

- Q. IV) a) What is the criteria for selection of surface type power house or underground power house. On the basis of what parameters, the dimensions of power house is finalised, explain? [25]
- b) Explain in detail the Hydraulic Losses in the Penstock. [20]
- c) What do you understand by surges and air locking in hydraulic Tunnels? [15]