

H. P. Board of Departmental Examinations
Departmental Examination of Engineering Officers of HPSEB Ltd.
of Himachal Pradesh Session October, 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 forms of communication used in the office? Explain every form in brief. [20]
- b) What are the various checks on delays of dealing the cases in the office? Explain in detail. [20]
- c) What are the various steps taken for Security of Official Information and Documentation? Describe in detail. [20]
- Q. II) a) What are the various functions of Chief Engineer (Material Management) in HPSEB Ltd.? Explain in detail. [20]
- b) Explain in detail the Inspection & Testing procedure and despatch of material being procured by Store Purchase Organisation in HPSEBL. [20]
- c) 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]
- Q. III) a) What is the role of Budget and Central Accounts Section in Finance & Accounts Wing in HPSEB Ltd? [20]
- b) How the main cash book is maintained and who is responsible to making the entries [20]
- c) What is the procedure of closing of works accounts on the completion of work and how the errors, if any, are required to be rectified? [20]

- Q. IV) a) What precautions are required to be observed, stores becoming surplus to avoid any losses in HPSEB Ltd.? [20]
- b) How the accounts are examined in HPSEBL? Explain in detail. [20]
- c) How the Tools and Plant Accounts are maintained in HPSEB Ltd. and what are the various formats used for the same? [20]
- Q. V) a) Classify different types of stores. What is the procedure of physical verification and who is competent for physical verification of each type of store? [20]
- b) How the Accounts of Deposits and Suspence Accounts are regulated. Describe in detail. [20]
- c) Who is responsible for keeping vigil over liabilities for their settlement? In what cases Liabilities are incorporated in accounts of works? [20]

PART-II FOR ENGINEERING OFFICERS (ELECTRICAL)

- Q. I) a) What are the conditions to be incorporated at the time of sanction of Load? [20]
- b) Explain in details conditions governing the extension of load. [20]
- c) What are the steps involved to release the connection to a consumer at 33 kV? [20]
- Q. II) a) Explain the procedure for dealing the cases where the full sanctioned load/ demand is not availed by the consumer? [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) What is the treatment of Meters in Accounts Stock, Works and Tools and Plants? [20]
- Q. III) a) Describe in detail the procedure/ steps involved for recovery of Arrears from a Defaulting consumer? [20]
- b) What are the Operation, duties and functions of Flying Squad Unit? [20]
- c) Who is responsible for the maintenance of consumer ledger and writing up of columns in respect of cash realisation? [20]

- Q. IV) a) How the supply voltage at the time of release of new connection to a consumer is decided? What are the standard voltage variation limits? [20]
- b) Explain the benefits and economics of Capacitors. Describe the guiding principles of installation of Capacitors. [20]
- c) Define the terms UNBALANCED LOAD, SEASONAL LOAD OF INDUSTRIES, DIVERSITY FACTOR, CAPTIVE GENERATOR, LOWER VOLTAGE SUPPLY SURCHARGE, CONNECTED LOAD FACTOR, CONTRACT DEMAND VIOLATION CHARGES, OPEN ACCESS, DISTURBING LOAD PENALTY and TEMPORARY CHANGE of CONTRACT DEMAND. [20]

PART-III FOR ENGINEERING OFFICERS (CIVIL/ MECHANICAL)

- Q. I) a) What are the important clearances required to be taken for setting of a small hydro plant in Himachal Pradesh? Explain in detail. [20]
- b) What are the basic and common components of medium/ high head mini hydro power project? Explain in brief. [20]
- c) Explain the durability of Concrete. What are the factors influencing the durability? What are the requirements for durability? [20]
- Q. II) a) What are the factors to be kept into mind while selecting the alignment of Tunnel and investigations required therein? What are the factors affecting the design of Hydraulic Tunnel? [20]
- b) What are the different methods of Tunneling and steps & sequences involved in the Tunneling operation? [20]
- c) Explain in brief the procedure of lining of Tunnel. [20]
- Q. III) a) Explain the utility of a model test and data required for this test for a Diversion Structure? [20]
- b) Explain the various aspects considered for proper maintenance and operation of Diversion Structures. [20]
- c) What are the main guidelines for the selection of suitable site for Barrage? [20]
- Q. IV) a) What are the reasons required for treatment in the foundations of Concrete Dam? Give broad classification of foundation treatment. [20]

- b) Explain the sequence wise stages of concreting beginning right from batching plant to complete curing highlighting the key stages where additional precautions are required to be taken. [20]
- c) Explain in detail the design of unlined canals. [20]