H. P. Board of Departmental Examinations

Departmental Examination of Engineering Officers of HPSEB Ltd.

of Himachal Pradesh Session October, 2013

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-l 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) What is the Accounting Procedure for the material received for the specific work? How the prices of Stores are fixed by the Divisional Officers maintaining stores in the HPSEB Ltd? [20]
 - b) What is Stock Measurement Book? Explain the use and upkeep of Stock Measurement Book. [20]
 - c) How the Annual Estimates for HPSEB Ltd. are prepared for Motor Lorries and Cars indicating direct and indirect charges. Explain with example.
 [20]
- Q. II) a) Describe the various modes of Purchase. How the Tenders are processed, explain in detail.
- b) Prepare a sample Purchase Order giving Commercial Terms & Conditions in detail to be incorporated in the Contract Agreement. [20]
 - c) Explain the testing & inspection procedure and Despatch of Material after issue of Purchase Order. [20]
- Q. III) 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 and Banking & Cash Sections in HPSEB Ltd. [20]

Q. IV)	a)	How will you classify the different type of stores? What is the procedure
		for physical verification of each type of store? [20]
	b)	How the Tools and Plant accounts are maintained in HPSEB Ltd. and
	383	what are the various formats used for the same? [20]
	c)	What are Precautions taken against losses of stores? [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)	Explain how the Accounts of Deposits and Suspense Accounts are
		regulated. [20]
	c)	Explain the procedure to release the payments to Suppliers and
		Contractors by field units. [20]
		PART-II for Engineering Officers (Electrical)
Q. I)	a)	What do you understand by the Centralised Billing System in HPSEB
		Ltd How the recovery of arrears is done from the defaulting
		consumers? [20]
	b)	What is the procedure for taking Securities from consumers &
		maintenance of their accounts? How the adjustment or refund of
		Consumers Security Deposit is done? [20]
	c)	What are the various remedial methods are taken for prevention of
		theft? How the supply to the consumer, who caught stealing energy is
		reconnected? [20]
Q. II)	a)	What are the Operations, duties and functions of Flying Squad Units?
		Describe in detail.
	b)	Define the different consumer categories in HPSEB Ltd. and how the
		priority of granting the electricity connection to different categories of
		consumers is done? [20]
	c)	Define the terms - Open Access, Connected Load Factor, Contract
		Demand, Diversity Factor, Demand Charges, Wheeling Charges, High
		Voltage Supply Rebate, Disturbing Load Penalty, Seasonal Load
		Industries and Power Factor. [20]

Q. III)	a)	How will you decide the supply voltage at the time of release of new
(negretic		connection to a consumer. What are the standard voltage variation
		limits?
	b)	What are the steps involved to release a connection to a consumer at
	~ /	33kV?
	c)	For a consumer of connected load of more than 100 kW, how the billing
	U)	is carried out? [20]
Q. IV)	a)	What are the reasons for disconnection of supply to a consumer on
G(. 1 V)	ω,	Temporary and Permanent basis and how the supply is restored? [20]
32 M	b)	In the event of reporting of damaged/ burnt meter, what procedure is
	D)	followed?
	c)	What is the procedure of dealing with the cases where the full
	0)	sanctioned load is not availed by the consumer? [20]
		PART-II for Engineering Officers (Civil/ Mechanical)
Q. I)	a)	What are the major clearances required to be obtained by an IPP for
		commencing the construction of the project. [20]
	b)	Give the brief explanation of basic and common civil components of a
		high head development of Mini Hydro Scheme. [20]
	c)	Prepare a sample technical specification for a high head Francis
		Turbine and Associated Equipment. List out the major Guaranteed
		Technical Particulars. [20]
Q. II)	a)	What is the utility of a Model Test and Data required for a Model Test
		of Diversion Structures? [20]
	b)	What aspects are considered for proper Maintenance and operation of
		Diversion Structures? [20]
	c)	What are the different types of Fish Pass.? Explain in detail. [20]
Q. III)	a)	What are the factors considered for the alignment and economic
		diameter studies of tunnels? [20]
	b)	What do you understand by surges and air locking in hydraulic
		Tunnels?
	c)	Describe the sequence of Operation for Construction of Tunnels.
	50	Explain in brief the terms Rock- Bolting and Shotcreting. [20]

Explain in detail the design of Unlined Canals? [20] What is the necessity of lining in Canals? What are the different types [20] of lining? What are the main factors considered in Planning and Investigation of [20] Canals? no semulation and vibrate to recipient to a consumer on the two and the two an