

Model Solution S-10/2016/P-1
(Works Accounts) for civil candidates

Ans:-1

Direct Expenses $60,000+12,000+8,000+1,10,000 = 1,90,000/-$

Deprecation $70,000/-$

Interest $\frac{(700000+50,000) \times 13.5}{2} = \frac{4,00,000 \times 13.5}{100} = 54,000/-$

Supervision Charge $1,10,000 \times 10\% = 11,000/-$

Departmental Charges

$60000+12000+8000 = 80,000 \times 27.5/100 = 22000/-$

Rate for Board's work $\frac{1,90,000+70,000}{70,000} = \text{Rs.3.71 Per KM}$

Rate of Private Use $\frac{1,90,000+70,000+54,000+11,000+22,000}{70,000} = 4.96 \text{ Per KM}$

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Ans:-2 (a) The material received from suppliers should be examined to see if it has been received in good condition. For material received in O.K. condition, an entry should be recorded in the works M.B./or Stock M.B. (now Goods Receipt Note).

For Shortage the firm should be requested to make good the shortages. When the replacement material is supplied another entry should be recorded in the Work MB or Goods Receipt Note. If the supplier does not make good the shortages the Bill of the supplier should be passed as per purchase order for the quantity received in good condition. Penalty/recovery of any dues or penalty should be recovered from the bill.

In case the material supplied is not as per specifications or there are breakages or damages these should be entered in the Defective Goods Receipt Note (DGN form MAT 19) A copy of DGRN should be sent to the purchasing authority/paying authority & the firm.

In case the material is not acceptable at all it should be entered in rejected goods register (MAT-18). The firm should be asked to rectify the defects or replace the defective material.

In case the firm is not responsible, the claim should be lodged with the Railways, Carriers, Insurance Co. or Board employee/any other person responsible. The case should be pursued with the suppliers Carriers, Insurance Co. and the purchasing authority for recovery of amount claimed.

Ans:-2 (b) Works are commonly carried out as piece work. The agreement for a piece work should be in the form of work order (in form CE-19). Such agreements are not contracts and should only contain a description of the work to be done & the rate to be paid for. No reference should be made in the work order regarding the quantity to be executed or to the time within which the job is to be completed. A specification of the work to be done should be issued with the work order.

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Ans:-3

(i) Vehicle/Lorry Log Book

In order to keep proper control on running of a vehicle a Lorry Log Book is maintained for each vehicle (jeep-staff car-truck etc.).

Detail of all journeys undertaken daily are recorded in it showing date/time & Kilometer reading at commencement & end of the journey, total K.M. travelled, purpose of journey (official/private). These entries are authenticated by the Officer In-charge of the vehicle. At the end of the month an abstract of the journey is prepared. When the expenditure is to be booked to works/other Divisions. Adjustment is carried out by JV. For private journeys & unauthorized journeys the adjustment is made by debit to Misc. Advance Account.

(ii) Dismantlement Register

Some material is usually retrieved when:

a permanent work is dismantled

a work is augmented or

a work is replaced

So immediately after dismantlement an inventory of material dismantled should be prepared. The same should be entered in the Register of Dismantlement.

The inventory should be verified by the SDO & entry in register attested.

Serviceable material & scrap should be returned to stores through store return warrant (S.R.W). Unserviceable material shall be returned to stores as scrap.

(iii) Register of Scrap

This register is maintained in stores. Whenever a work is dismantled, serviceable material is returned to stores. Unserviceable material is also returned to stores as scrap. This scrap is accounted for without value in form MAT-55. From time to time Xen/SDO Stores notifies the quantity of scrap to Disposal Cell. CE Disposal arranges disposal of scrap through auction. Entry of receipt & disposal of scrap is recorded in the Register of scrap maintained in stores.

(iv) Out Turn Statement

Where vehicles are used in Construction Divisions or on projects, the expenditure on running of the vehicle-Truck/Tractor-Trailer or crane/etc. is charged to the work/project on which it is used. Similarly for running of vehicles for transportation of stores under C.O.S. the expenditure on running is charged to the relevant head.

For carrying out this adjustment an abstract of journeys is prepared showing No. of KM run for each work/job. A rate per KM is got sanctioned from the competent authority. Charging of the cost of running to particular work (s) is through the outturn statement.

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Ans:-4 (a)

Imprest is a standing advance allowed to the subordinate to meet with day to day expenditure on petty items. The imprest holders occasionally, monthly or earlier when he needs the money renders the A/c of expenditure incurred, in form C&B-9, gets the expenditure approved & secures re-coupment of the money spent. On the other hand a temporary advance is allowed to a subordinate to make payment against vouchers already passed & for making payment to labour at the site of work. After making payment the A/c of advance is rendered like imprest but the expenditure is not recouped, it is adjusted & A/c closed.

Whenever an Imprest or temporary Advance is required to be issued cash or Bank payment voucher (CPV/BPV) is prepared, got checked from Divisional Accounts Section & approved by the Xenwhereafter the Divl. Supdt. makes the payment by cash or cheque. Entry of which is made in Imprest ledger. After the imprest holder renders the A/c (in form C&B-9) it is again checked by Divl. Supdt. (A/cs) approved by competent authority and recouped by Head cashier/Divl. Supdt. by cash or by cheque as required. The entry of recoupment is recorded in cash book while making payment. If the account is to be adjusted/closed a JV is required to adjust the account. Entry in cash book should not be made.

In case of temporary advance the A/c of expdr. after its approval is adjusted by journal voucher without recording any entry in the cash book. Entry in cash book is required only if the advance holder has to return some unspent balance in which case entry is for the balance returned & not for the expdr. incurred which is adjusted by JV only. A receipt in BA-16 should be issued while accepting unspent balance by the cashier.

Account of the Imprest should be closed as early as possible when the amount is not required but the A/c must be closed on transfer of the imprest/advance holder & in all cases before the close of the financial year i.e. by 31st March.

Ans:-4 (b) Following types of payment are allowed to be made without any entry in the measurement book:-

- (i) Payments of wages to work charged staff
- (ii) Small payments upto Rs.10/-
- (iii) Payments which are unsuceptible of measurement such as washing of bed sheets, towels, curtains of rest house, octroi charges, municipal taxes, electricity charges and railway freight etc.
- (iv) Payment against lumpsum contract

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Ans:-5(a) The initial records upon which the accounts of the works are based are:-

1. Muster Roll in Form DFR (PW 18)
2. Measurement Book.
3. Register of initial work account.

Muster Roll

A muster roll is the basic record of daily wage labour employed on the execution of works carried out departmentally. Daily attendance of the labour is marked on the Muster Roll & initialed. After the close of the month or occasionally employee wise no. of working days & their wages for the period are calculated. The JE is required to send a daily report indicating no. of labourers employee & quantity of work done by them. The officer in-charge of the Sub-Division or other higher authorities while on inspection are required to check the no. of persons engaged on the work & append his signatures on the Roll as a token of check/authentication.

The measurement of quantity of work done by the labour is recorded on the roll itself as well as in MB. The Muster Roll, Daily Reports & MB are then sent to the SDO for approval and authorizing payment. The signatures of the labourers in token of having received the payment are taken on the Muster Roll itself.

Measurement Book

An MB is the most important record being the basis of all accounts of quantities of work done by daily labour or through the contractor or of materials received. All payments for work done and for all supplies are made on the basis of measurements recorded in the Measurement Books.

Register of Initial Work Account (IWR)

The register is maintained for all major works estimated amount of which is more than Rs.2 lac. IWR is the important record of all types of expenditure booked to a major work may be issue of material, storage charges, transportation charges, loading & unloading charges, labour charges & contingencies of the work IWR has been divided into six parts as under:-

Part-I To show estimated requirement and actual procurement of principal items of material (Quantity & value thereof), other items of expenditure during the month are shown in lumpsum but item wise at the bottom of Part-I

Part-II It is the detailed account of petty items of materials purchased or drawn from stores. Total Expenditure of Part-II is transferred to Part-I at the end of the month

Part-III Progress of work done by work-charged & daily labour is recorded in this part.

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Part-IV It is the statement of Materials used on the work i.e. consumption of material measured on the completion of the work.

Part-IVA Statement of material used on works (As shown by physical verification during construction)

Part-V Statement of materials dismantled from the works & its disposal showing returned to stores transferred to other works & that used on the same work giving ref. to item no/page/month of receipt in part-I or II.

Part-VI Comments/remarks of the Inspecting officers during their visit to the site of work.

Ans:-S(b)

- (i) The basic difference between the two is that file store data while folders store files and other folders. The folders often referred to as directories, are used to organize files on your computer. Unlike files the folders themselves take up virtually no space on the hard drive. Files have various extensions like .doc, .xml, jpg etc. but folders have no extension.
- (ii) Read only memory or ROM is a form of data storage in computer and other electronic devices RAM (random access memory) is referred to as volatile memory and data is lost when the power is turned off whereas ROM is non volatile and the contents are retained even after the power is switched off.

Answer Question no. 1(A)

1	To convey technical sanction to detailed estimate for domestic, commercial and industrial service connection	Xen/RE=Full Power AE/AEE=Rs 1 Lacs JESI/c sub office=Rs 20000	DOP Sr no.23 Provided that-Works are of productive nature and financial justified or cost of unjustified portion is recovered in full. In cases where no justification is required to be worked out the fixed/variable charges as applicable are recovered in advance. Expenditure is met from within the budget provision to the main/minor head concerned under .
2	To convey administrative approval for works expenditure for augmentation of sub-station and transmission lines mains & sub mains.	CEs=Full Power SEs=Rs20 Lacs Xen/RE=Rs8Lacs AES/AEES I/c sub Divn=1Lacs	DOP Sr no.12 Provided that – 1) works are of productive nature or are necessary for the full development of the project but which are not themselves directly remunerative 2) Expenditure is met from within the budget provision the main/minor head concerned under
3	To approved administratively and convey technical sanction to detailed estimate for special repair of Boards vehicle chargeable to revenue.	CEs=Full Power SEs=Rs50,000 Xen/RE=Rs 10000/	DOP Sr no.34 If special repair are carried more than once in a year, sanction of the higher authority be obtained.

Answer Question no. 1(b)

PREPARATION AND SANCTION OF ESTIMATES: Domestic and Non Residential Consumers (LT Supply)

All the applications received in a Sub Division/Sub-Office will be passed on to JE everyday for visiting the sites and preparing the estimates. He will prepare a sketch showing the S/Sin. concerned, mains/sub-mains and service line up to the premises. The estimate will be submitted by him to the AE/AEE/XEN (DS) within three days and AE/AEE/XEN (DS) will sanction the estimate for each application and issue the demand notice within specified time period as mentioned in Regulation - 6 of Supply Code. In all cases the estimates shall contain the following information and properly scrutinized before sanction of estimate by the competent authority. For drawl of material group estimate may be prepared.

a) A map or tracing in pencil showing and giving the following information:

1. Location, name and demand of the consumer.
2. Size and capacities of the nearest Sub-Station, high Tension and low tension mains.
3. Calculations showing the size of proposed service lines and of extensions (if any) to HT and LT Mains.
4. Report giving proposal to feed the prospective consumer in which careful reference should be made to the existing load of the system and effect of adding thereto the prospective consumer's load both as regards capacity and as regards voltage regulation.
5. Calculations showing the maximum voltage variation anticipated on the consumer's premises.
. For drawl of material group estimate may be prepared.

b) Assess cost of service connection:

Only One JE shall release general service connection in a Sub-Division during a period of 6 months. AE/AEE/XEN (DS) concerned can extend this period up to 1 year if considered necessary. All connected work/formalities relating to release a connections during these six months shall be completed by him.

After completion of 6 months, another JE may be allocated the work of general service connections and the previous JE maybe given time to complete the entire balance work pertaining to his 6 months, such as completion of accounts, return of surplus material, if any, to store and checking of measurements etc. JE allotted the work of subsequent 6 months will only draw the material from stores after all the material required for releasing connection in the previous 6 months has been issued to the J.E. allotted GSC for these 6 months. Certificate to this effect will be sent to the store by AE/AEE/XEN (DS) as under and only then material to next JE

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will be issued. "Material required against Estimate No. _____ pertaining to _____ 6 months has been got issued by Shri _____ JE and further no material be issued against this estimate."

iii) The release of connection is to be ensured as per time schedule mentioned in the Regulation No. 6 of Supply Code

. The work of releasing DS/NRS connections may be got completed through private contractors (duly authorized by competent authority) as per instructions of the PSPCL.

All other categories of Applicants i.e. DS / NRS (HT Supply), Agriculture, Industrial, Street Lighting, Bulk and Railway Traction Supply etc. In all such cases, the estimates will be prepared on individual basis and got sanctioned from the competent authority.

While forwarding the estimate for sanction, information required at "a" ibid be submitted alongwith the application and estimate.

The estimate shall be prepared and sanctioned by office of CE/TL in case of 33 kV and EHT works and sent to AE/AEE/XEN (DS) concerned directly for further necessary action. The estimates in other cases shall be framed by the AE/AEE/XEN (DS) and forwarded to sanctioning authority directly to avoid delay. SE (DS) may evolve suitable procedure at his own level for sanction of estimates in time. 15.

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Answer Question no. 2(a)

Compensation in case of fatal/non fatal accident is paid under the following categories:-

- 1) Death;
- 2) Permanent total disablement;
- 3) Permanent partial disablement; and
- 4) Temporary disablement – total or partial.

1) Compensation for Death: Where death results from an injury, the amount of compensation shall be equal to 50 percent of the monthly wages of the deceased workman multiplied by the relevant factor, or Rs. 1,20,000 whichever is more.

2) Compensation for Permanent Total Disablement: Where permanent total disablement results from an injury, the amount of compensation payable shall be equal to 60 percent of the monthly wages of the injured workman multiplied by the relevant factor, or Rs. 140,000, whichever is more.

3) Compensation for Permanent Partial Disablement: i) In the case of an injury specified in Part II of Schedule I, such percentage of the compensation which would have been payable in the case of permanent total disablement as is specified therein as being the percentage of the loss of earning capacity caused by the injury; and in other words, the percentage of compensation payable is proportionate to the loss of earning capacity permanently caused by the Scheduled injury. Thus, if the loss of earning capacity caused by an injury specified in Part II of Schedule I is 30 percent, the amount of compensation shall be 30 percent of compensation payable in case of permanent total disablement. ii) In the case of an injury not specified in Schedule I such percentage of the compensation payable in the case of permanent total disablement as is proportionate to the loss of earning capacity (as assessed by the qualified medical practitioner) permanently caused by the injury

4) Compensation for Temporary Disablement: A half monthly payment of the sum whether total or partial results equivalent to 25% of monthly wages of the from the injury workman to be paid in the manner prescribed.

Answer Question no. 2(b)

- a)14.621- General Service Connection
- b)24.110 =Cash in Hand
- c)28.401=Amount recoverable from employee
- d)28.870=Looses under investigation
- e)61.901= Service/fuse charges

Model solution Answer Question no. 3(A)

As per standing order issued by PSEB work charged employees are entitled to following kinds of leaves.-

1 Rule 10(1)-**Leave with wages** -leave at the rate of $1/20^{\text{th}}$ of the period spent on duty in a calendar year on the works will be admissible to the workcharged employee Subject to following-

Maximum of leave may be accumulated upto =30 days

For calculation of leave period, half pay leave, leave without wages, suspension period, unauthorized leave will not be taken into account.

2 Rule 10(3) -**Leave without wages**-Worker is entitled to 30 days leave without wages in a calendar year.

Rule 10(3) -**Leave without wages** upto 60 days may be given to workcharged employee during a calendar in case of serious illness or accident cases causing serious injury which is not covered by workman compensation Act.

Subject to satisfaction of Executive Engineer Leave without wages upto 60 days may be given to workcharged employee during a calendar in case of serious illness of relative, death of relative or in any other emergency

In case of accident which is covered by the workman compensation he is entitled for disability leave..

Rule 10(3) -Leave without wages beyond 90 days(either once or in speels) may be given to workcharged employee during a calendar in specified diseases by S.E on production of certificate from prescribed authority. This leave may not exceed 18 months at a time.

Rule 10(4)- 3 days leave with wages is admissible to workcharged employee who donates blood in any hospital maintained by PSEB.

Rule 10(5)-5 days Leave with wages for under going family planning sterilization operation is admissible to workcharged employee

Competent Authority-

Rule 10(1)-Leave with wages-

SDO/AEE/AE=7 days at a time

Sr xen/xen=full power

Rule 10(3)-Leave without wages-

SDO/AEE/AE=15 days only one time time

Sr xen/xen=full power

leave for donating blood= Xen full power

Leave for under going family planning sterilization operation=Xen full power

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Answer Question no. 3(b)

It is a fundamental rule that no work shall be commenced unless a properly detailed design and estimate have been sanctioned, allotment of funds made and order for its commencement issued by competent authority.

If in any case, whether on grounds of urgency or otherwise, Divisional Officer is required to carry out a work for which no estimates have been sanctioned or for which no financial provision exists (whether estimates have been sanctioned or not) the orders of the officer authorizing the work should be conveyed in writing. On receipt of such written orders the officer who is directed to carry out the work should immediately intimate to the Accounts Officer concerned that he is incurring a liability for which there is no provision or inadequate provision of funds and should, at the same time, state approximately the amount of the liability which he will likely to incur by compliance of the written orders which he has received. The Accounts Officer will then be responsible for bringing the facts instantly to the notice of higher financial authority, with a view to necessary steps being taken either to stop the progress of the work or to regularize its execution.

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Model solution Answer Question no. 4(A)

The Measurement Book is a most important record being the basis of all accounts of quantities, whether a work done by daily labour or by the piece, or by contract or of materials received which have to be counted or measured. The description of the work must be lucid, so as to admit of easy identification and check and should contain such a complete and reliable record of facts as to be conclusive evidence in a court of law.

- ii) For large works a separate Measurement Book may be set apart.
- iii) Each set of measurements should commence with entries stating:-

In the case of bills for works done.

- a) Full name of work as given in estimate.
- b) Situation of work, exact locality;
- c) Name of contractor;
- d) Number and date of his agreement of work order;
- e) Date of written order to commence work;
- f) Date of actual completion of work; and
- g) Date of Measurement.

In the case of bills for supply of materials:-

- A) Name of suppliers;
- B) Number and date of his agreement or order.
- C) Purpose of supply. Name of work as given in estimate.
- D) Date of written order to commence supplies;
- E) Date of actual completion of supplies; and
- F) Date of Measurement.

and should end with the dated signatures of the person making the measurements.

A suitable abstract should then be prepared which should collect, in the case of measurements for work done, the total quantities of each distinct item of work relating to each sanctioned sub-head.

- iv) The pages of the book should be machine-numbered and no page should, on any account be torn out of a book, nor should any entry be erased or disfigured so as to be illegible. If a mistake be made, it should be corrected by cancelling the incorrect words or figures with a single stroke of the pen or pencil and by writing the correct words or figures separately; and the corrections thus made should be initialed and dated by the responsible officer. All signatures and initials made in the measurement book should be dated.

- v) All measurement must be neatly recorded in the authorized form of Measurement Book, and in no other. The entries should be made, if possible, in ink but when this is not possible and entries have to be made in pencil, the pencil entries should not be inked over but left untouched. The entries in the "Contents or Area" column should, however, be made in ink in the first instance and not inked over.
- vi) As all payments for work or supplies are based on the quantities recorded in the Measurement Book, it is incumbent upon the person taking the measurements to record the quantities clearly and accurately. If the measurements are taken in connection with running contract account on which work has been previously measured, he is further responsible (1) that reference to the last set of measurements is recorded, and (2) that if the entire job or contract has been completed, the date of completion should be duly noted in the prescribed place. If the measurements taken are the first set of Measurements on a running account or the first and final measurement, this fact should be suitably noted against the entries concerned and in the latter case, the actual date of completion noted in the prescribed place.
- vii) Entries should be recorded continuously in the Measurement Book and no blank pages should be left. Any pages left blank inadvertently must be cancelled by diagonal lines; the cancellation being attested and dated.
- viii) The Measurement Book being primarily the initial record made on the spot by personal measurement by a responsible Executive Officer or subordinate of quantities or work done or materials received and only secondarily and incidentally a record of expenditure incurred on the basis of quantities it is obvious that in a case where the service to be paid for is not susceptible of Measurement, such as octroi duty, municipal taxes, electric charges and railway freight, etc. or where it is not possible to determine the quantity of work done, entries need not be made in Measurement Books.
- ix) When any measurements or series of measurements are cancelled, the cancellation must be supported by dated initials of the officer ordering the cancellation, or by a reference to his order, initialed by the officer who made the measurements. In either case the reason for cancellation should be recorded.
- x) The index provided at the commencement of each book should be carefully kept up to date and the inner title page in the Measurement Book showing the number of the book, name of officer etc., must invariably be filled in, as well as the entries on the outside liable.
- xi) The sub divisional clerk ordered by the disbursing officer is responsible for the arithmetical check of all calculations entered in a Measurement Book, and must initial (with date) each account in the book in token of having so checked it. Assistant sub divisional clerks are authorized to check Measurement Books and prepare bill of contractors provided that in

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following cases Measurement Books should be checked and bills prepared by the sub divisional clerk personally:-

- 1) Final Bills of all running accounts.
- 2) First and final bills for amounts exceeding Rs. 500/-

xii) The officer making the measurements must calculate the "Contents or Area" of each measurement and enter it in ink, and abstract the result himself. The Measurement Book should then be submitted to the paying officer for his orders. If he is satisfied that a bill should be prepared and that the name of the estimate has been correctly entered, he will check the rates, if entered, or fill in the correct rates and before handing the Measurement Book to his clerk should write below on each account an order to his clerk to check and prepare the bill for the same. The Sub divisional Officers should invariably date their orders to the clerks to check and bill the measurements entered in a Measurement Book.

xiii) When an officer or subordinate is required to submit his Measurement Book with his accounts to the Divisional or Sub divisional Officer, he should be supplied, if necessary, with a second book for alternate use.

xiv) From the Measurement Book all quantities should be clearly traceable into the documents on which payments are made. When a bill is prepared for the work or supplies measured, or the invoice of materials received from other Divisions or Departments is verified and signed by the Sub Divisional Officer, every page containing the detailed measurements must be invariably scored out by a diagonal red ink line, and when the payment is made (by cheque cash, etc. or book transfer) an endorsement be made in red ink on the abstract of the measurements quoting the number and date of the voucher of payment or of the Advice of Transfer Debit. The endorsement should be initialed and dated.

xv) The disbursing officers should not sign in full, or permit any contractor to do so on duplicate copies of bills, even though duly headed "Duplicate" or "Office Copy."

xvi) It is inadvisable to record short measurements with the object of retaining a portion of the value of the work done by a contractor as security. It is preferable to work complete measurements of work done and to make formal such deductions from the contractor's bill as may be necessary.

xvii) The voucher for payment must invariably bear a reference to the number and page of the Measurement Book in which the measurements are recorded, also the number and date of work order for the supply.

xviii) When submitting a bill for signature, the Sub divisional clerk will draw in red ink one diagonal line across each page of the measurement book on which are recorded the detailed measurements in token of his having made the required arithmetical check and having compared the total with the connected abstract.

xix) At the time of signing the bill, the "Officer preparing the bill" will scrutinize the measurement book and make sure that the sub divisional clerk has drawn the red ink lines mentioned above and has appended his dated initials in token of having exercised the cent per cent arithmetical check. He will then draw in ink one diagonal line across each page of the measurement book on which is recorded the connected abstracts of measurements.

xx) When receiving back the measurement book and bill the sub divisional clerk will scrutinize the abstract for any omission from this procedure.

xxi) No Measurement Book shall change hands i.e. from one subordinate to another or to a clerk or in office and vice-versa without an endorsement being made after the last measurement handed and signed and dated by both parties. The endorsement will give the name of person who hands over and that of the person who receives the Measurement Book.

xxii) On the occasions of transfers it will be the special duty of the Sub Divisional Officers to see that (1) measurement books with the relieved officer at the time are recorded in the transfer papers by the number they bear and are (2) acknowledged by the Relieving Officer and that (3) necessary corrections are made in the name of the officer on the fly leaf of the Measurement Book and (4) the register of Measurement Books as well.

xxiii) In case a Measurement Book is lost, an immediate report should be made of the facts of the case and this report must be promptly forwarded to the Board together with the explanation of all parties concerned or responsible for the loss.

F-Check and scrutiny of Measurement Books

35.9 Once every half year, i.e., during May and November and before transfer, the Sub Divisional Officer should make a complete check of every current measurement Book in the sub divisional and have them completed in all respects, as far as possible, up to date. He should certify to this effect below the last entry in each Book, noting also any items which still remain to be completed. At the next inspection the Sub Divisional Officer will not have to go through the same pages of the books again except to see that the in completed parts have or have not since been completed.

ii) During the inspection of a sub divisional by the Executive Engineer, the Divisional Accountant should similarly check a percentage of the Measurement Books and record the following certificate.

"Checked and found correct and complete except for certain items detailed in the Audit Note sent to the Sub divisional, Officer.....Sub Division with the Executive Engineer's Inspection Note No.....Dated.....19.....".

This will enable each inspection to be started from the point reached the previous year.

All measurement books in use must be sent once in a year to the divisional officer on such dates as the divisional officer may fix for the personal scrutiny of Divisional officer and should be returned to the sub division concerned within fifteen days.

iii) When these books reach the divisional office the Head Clerk should first of all compare them with his register of Measurement Books and report, if any missing. The Head Clerk will at the same time make any necessary corrections in his register and bring to notice any evident inaccuracies in the name of officer on the fly-leaf of the Measurement Book. He will then hand them over as quickly as possible to the Divisional Accountant.

iv) The Divisional Accountant will then check the books to see whether instructions in paragraph 37.2 to 37.4 and 37.9 of CEFA have been complied with. He will himself check not less than 10 per cent of the value of the total measurements recorded in each book since the last review. Such checks should cover complete sets of measurements, payments based on the entries reviewed should be traced into the various accounts documents and verified. Similarly supplies or issues of materials should be traced into the various accounts and verified.

v) The Divisional Officer will then take steps to obviate in future any neglect of the above instructions which may have come to light, and will at the same time retain for record in his office any books which he considers to be full up, or nearly so, or which he deems to have been in use long enough. The blank pages, if any, should be cancelled by the Divisional Officer under his dated initials before such Measurement Books are filed. Such books, when once filed for record in the divisional office, must not be allowed to pass out of the office again for reference, except under the strictest precautions to guard against their loss. And on so passing out of the divisional office they must not be allowed to pass into the personal custody of any body of a rank lower than a Sub divisional Officer.

vi) The Superintending Engineer is required to make it his special duty during his tours to see that measurement books are carefully kept and measurement properly record and that they are complete records of the actual measurements of each kind of work done for which certificates have been granted. He should also see that any orders of the Board regarding check measurements are duly observed.

Answer Question no. 4(b)

When an accounting unit transfer material or render services or execute work on behalf of another accounting unit or transfer cash, the originating accounting unit will raise the demand for such transfer or execution of work through bill called IUT bill. In other works inter unit bill will be raised when transactions are between offices linked to the different accounting units.

Inter units bill are raised in the following cases:-

- (1) Transfer of coal & oil and fuel from one Thermal Plant to other.

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- (2) Transfer of material and material related transaction between accounting units.
- (3) Transfer of capital expenditure and fixed assets
- (4) Cash remittances by various Divisions, Sub-Divisions units to Board's/PSPCL Main Bank Account.
- (5) Funds transfer from Head Office.
- (6) Head office disbursement
- (7) Employee related transaction between various division/accounting unit.

After completion of monthly account, accounting unit will raise IUT on the basis of the transaction appearing in the account. IUT bill prepared will specify the following information:-

- (1) Date
- (2) Serial number
- (3) Name & location code of transfer or all/Division.
- (4) Name of location code of transferee all/Division.
- (5) Account code as per chart of accounts related to the type of inter unit transaction i.e. Fuel, Material etc.
- (6) Particular of transactions including details and number of supporting documents.
- (7) Amount

Model Solution ES 5-10/2016 Paper I (For Electrical Candidates)

Model solution Answer 5(1)

Lorry log book

In order to maintain proper control on running of vehicle lorry book is maintained for each vehicle. Detail of all journey under taken daily are recorded in it showing date/time and K.M ,reading at commencement and at the end of journey ,total KM run for the purpose of journey. These entries are authenticated by the officer in-charge of the vehicle .At the end of the month an abstract of the journey is prepared. In order to keep control over the consumption of Petrol, Mobil oil, grease and other expenses in the vehicle a detailed daily account is maintained in the lorry Maintenance Register. Total KM run by the vehicle during the month during the year is divided by total consumption of Petrol/diesel so as to obtain the average consumption of vehicle.

ANS 5(2) Connected Load Register

Purpose of Register: In every sub-division and sub-office, connected load register in E.B.form CS-15 shall be maintained for the following purposes:

- i) Balancing the load on feeders / phases,.
- ii) Anticipating the necessity for augmenting the capacities of feeders, switches, transformers etc.
- iii) Compilation of connection / connected load data.

Recording Entries: Connected Load Registers will be maintained by J.E. and entries will be made therein in accordance with the following instructions.

- 1) The opening entry in the register should be made on 1st April from the connection return for the month of March. If the registers have already been put into force, the totals of the registers up to 31 st March shall be verified with the actual load and then carried over to 1st April of the next year.
- 2)) A separate register should be used for each sub-station. For Sub-stations of smaller capacity only one register may be used by allotting a portion of it for each sub-station. Capacity of the transformer should be written at the top.
- 3) For the purposes of controlling the balancing of load on various feeders and different phases in a feeder, the connected load of each 3-phase consumer should be proportioned amongst the three phases in a feeder.

Model solution ES 5-10/2016 Paper-I (For Electrical candidates)

In order to keep the connected load registers up to date entry of connected load shall be made in this register before any SCO/DCO is signed by AE/AEE/XEN(DS) or R.A. It will be obligatory on the part of RA/AE/AEE/ XEN(DS) to check the cross entry of connected load on the SCO or DCO by indicating the page No. of the connected load register where the details of connected load have been entered before any SCO or DCO is signed for issue.

- h) i) The exact particulars of each consumer connected or disconnected should be entered in columns 1 to 7.
- i) ii) Connections will be entered in blue ink and disconnections in red ink. 33.4 Month-wise Totals: Each register shall be totaled on the last working day of the month and the connection / connected load return prepared from this register
- j) Official Responsible for Correctness: The register shall be initialed by the J.E. daily in token of the correctness of that day's entries and signed monthly by the AE/AEE/XEN (DS) after the totals have

Model solution--- Answer 5(3)

Dismantle Register

Some material is usually retrieved when a permanent work is dismantled, a work is augmented, or a work is replaced. So immediately after dismantlement an inventory of material dismantled should be prepared. The same should be entered in the register of dismantlement. The inventory should be verified by the SDO and the entry in the register should be attested. Serviceable material & scrap should be return to stores through SRW. Unserviceable material shall be return to stores as scrap.

Register of Scrap

This register is maintained in the stores whenever a work is dismantled, serviceable material is return to stores and Unserviceable material is also return to stores as a scrap. From time to time Xen/SDO stores notified the quantity of scrap of disposal cell. COS arranges disposal of scrap through auction. Entries of receipt and disposal of scrap is recorded in the register of scrap maintained in stores.

Model solution ES 5-10/2016 Paper I (For Electrical Candidates)

Model solution--- Answer 5(4)

Service Register

Service Register is an important record maintained by D/s sub Division to control the release of connection. Service Register will contain the following important Particular

REQUISITION FORM with date, load, category

A&A FORM with date, load, category

Whether new application or Additional load

Name of consumer

ADDRESS

Feeding Sub Station Whether urban or rural

PRIORITY (if applicable)

Detail of connected load/ demand appl

Type of Industry

SERVICE ESTIMATE

Particulars of Demand Notice

Payment Received

Wring Contractor 's Test Report

PSPCL 's Test Report

Whether NOC received from PUDA/PPCB/local authority

Installation order

Account No' Pollution Control Board Local Authority

Entry in Service Connection Register: The applications / requisitions for General, Industrial, BS, RT, Single point supply and Street Lighting supply, whether for permanent or temporary connections, should be entered in the same Service Register in the order in which these are received. In other words, separate Service Register (or sections of the same register) shall not

Model solution ES. 5-10/2016 Paper-I (For electrical candidates)

be maintained for different classes of consumers or the different groups of consumers (i.e. groups classified according to the particular substation to which consumers may be respectively connected.)

With a view to ensure that release of connections for different categories of applicants is rational, separate seniority lists be made out from the Service Register for (i) General(ii), Agricultural and (iii) Industrial connections.

1(a)

Instructions contained in Cash and Bank Manual requires Official Handling Cash at the end of the day to prepare pay-in-slip (three copies) for the collection to be deposited into Bank the next morning and place the same alongwith cash, cheques and demand drafts in the Cash Chest. Separate pay-in-slips are to be prepared for

- i) Amount to be deposited in cash.
- ii) All cheques and demand drafts (DDs) drawn on the bank with which the depositing office has the collection account.
- iii) All cheques/DDs drawn on all other local banks.

1(b)

Revenue Accountant has to, on the next day of deposit-

1. Receive the bank credit advice in duplicate (existing form A) along with the scroll of cash collections (existing form B) from the Bank.
2. If Bank credit advice is delayed, depute a person to collect the same from bank.
3. Forward forms A and B to the cashier.

1(c)

Duties of Cashier (at distribution subdivision) are as under:-

Same day-

1. Check vertical as well as horizontal totals of Form B to ensure arithmetical accuracy.
2. Tally amount of bank credit advice (form A) with total of form B.

Next Day

3. Enter details as per form B in Remittance Register and MRIBS.

Same Day

4. Record the entries as per form B in the Monthly Bank Collected Abstract (form SOP-11) following procedure laid down in Chapter 30 of Sale of Power Manual.
5. Prepare a CRV for collections as per the Bank Credit Advice and enter the voucher in cash column on receipt side of the CB. Make also a contra entry in cash column on payment side of Cash Book.

6. Put up the CRV alongwith MBCA and C.B. to UDC revenue.

First Week of Next Month-

7. Receive bill in triplicate from the Bank for commission for collection of revenue and cost of revenue stamps affixed to receipts, verify bill and forward to R.A.

1(d) Duties of SDO/Sr.Xen for daily closing of Cash Book

End of the day-

Ensure that pay-in-slips have been made for all collections to be deposited into bank the next morning.

Check that pay-in-slips prepared are complete in all respects including

- 1) Date and number of cheques/DDs on the reverse of pay-in-slip.
- 2) Drawee bank's name and station etc.

Fortnightly or more frequently if desired-

Carry out physical verification of cash in hand and verify with closing balance indicated in C.B. if shortage of cash is detected, get a CPV prepared immediately. Approve the CPV and get it entered by official handling cash in the cash payment column of C.B, debiting the account of concerned employee. If excess of cash is detected get a CRV prepared immediately, approve the same and get it entered by official handling cash in the cash receipt column of C.B crediting 'Other Income' account.

Ans 2 (a)

Calculation of Connected Load for NRS Consumer under VDS Scheme 22/2014

Sr. No.	Description	No.	Wattage	Load
1.	Light Points	28	40	1120
2.	Fan	16	60	960
3.	Wall Sockets	22	60	480
4.	Power Sockets (Single Phase)	3	1000	2000
5.	Power Sockets (Three Phase)	1	6000	6000
6.	A.C. (Non Std.)	2	2500	5000
	Total			15560
	Less: Sanctioned Load			4560
	Unauthorized Load			11000 W
	or			11 KW

Recoverable Charges:

1. Service Connection Charges @ Rs. 900/KW for 11 KW	9900
Less: 20% rebate under VDS	1980
Net recoverable Service Connection Charges	7920
2. Initial Security @ Rs. 700/KW for 11 KW	7700
Total Recoverable Amount	15620

Ans 2 (b)

No. of days	=	60 days
Unit Consumed	=	4930-4465
	=	465
Electricity concession admissible	=	100 units p.m x 60/30
	=	200
Chargeable units for SOP	=	465-200
	=	265 units



Charges as per CC No. 25/2016-Tariff revised on 29.07.2016

1. Energy Charges	=	200X4.52	=904
	=	65x6.14	=399
2. MMC charges not applicable			
3. E.D - @ 13% on SOP of total units consumed			
SOP/E.C for E.D.	=	200x4.52= 904	
	=	65X6.14=	399
	=	200x6.14=	<u>1228</u>
		2531x13%	= 329
4. Infrastructure Development Fee	2531X5%		= 127
5. Octroi @ Rs.0.10 p.u. = 465x0.10			= 47
6. Meter Rent= 8x2x1/2			= 8
7. Service Charges = 5x2			= <u>10</u>
Total Amount payable with in due date			<u>1824</u>

Ans 3 I. Essential Services" mean the services which affect the general public at large and will interalia include Hospitals, Railway Stations / Installations, Railway Traction, Defence and Military Installations, Radio / TV Installations, Water Supply and Sewerage Installations, Postal and Telegraph / Telecom Installations, Telephone Exchanges/ Installations and News Services Installations.

Ans 3 II. Contract Demand shall mean (i) the maximum demand in KVA sanctioned to a consumer in case of Large Supply, Railway Traction and Bulk Supply categories. (ii) In case of Domestic Supply and Non-Residential Supply with load exceeding 100 KW, it would mean the maximum demand in KVA sanctioned to a consumer. (iii) in case of single point supply to a Co-operative Group Housing Society/ Employer, it would mean the maximum demand in KVA sanctioned to a consumer.

In the case of other categories of consumers, Contract Demand will be computed in the manner approved by the Commission.

Ans 3 III Demand Factor is the ratio of the maximum coincident demand of a system, or part of a system, to the total connected load of the system.

Demand Factor = Maximum demand / Total connected load

For example, an over sized motor 20 Kw drives a constant 15 Kw load whenever it is ON. The motor demand factor is then $15/20 = 0.75 = 75\%$.

Demand Factor is expressed as a percentage (%) or in a ratio (less than 1).

Demand factor is always ≤ 1

Demand Factor always changes with the time to time or hours to hours of use and it will not remain constant. The connected load is always known so it will be easy to calculate the maximum demand if the demand factor for a certain supply is known at different time intervals and seasons. The lower the demand factor, the less system capacity required to serve the connected load.

Ans 3 IV. Energy Consumption Variation register: Careful examination/study of cases of low and appreciable variation in energy consumption shall provide clues for investigating theft of electricity cases. In order to have an effective control/check over the mal-functioning of the meters/theft of energy by properly maintaining/monitoring energy variations registers for different category of consumers, following guidelines shall be implemented strictly.

i) Maintenance of the Registers: Officials/Officers responsible for maintaining energy variation register shall be as under:-

a) GSC(DS and NRS) Revenue Supdt RA/ARA

b) SP/MS/Street Lighting AAE or JE where AAE is not posted.

c) LS/BS/RT AE./AEE/XEN Incharge of S.Divn. and

AEE./Comml. in case of Special Divn.

Issue of Energy Variation Register: Three separate registers be maintained in each subdivision. These registers duly numbered and attested by the Divn. Supdt. Shall be issued by the operation Division and record shall be maintained like SMB's Sr.XEN/Addl.SEs (DS) Incharge of (DS) Division shall check/append initials on the registers while on tour for ensuring compliance of these instructions.

Ans 3 V. Connected load means the sum of the rated capacities of all the energy consuming apparatus in the consumer's installation. This shall not include the standby or spare energy consuming apparatus installed through the changeover switch.

(7)

Ans 4 (a)

As per Electricity Supply Instruction 92.3 The disconnected consumers who are defaulters of PSPCL may sell their premises /property without any intimation to PSPCL. If this happens, the chances of recovery of defaulting amount become remote. Therefore, it is desirable that the field officers may intimate the revenue authorities like SDM/Tehsildar regarding the amount to be paid by the consumer to the PSPCL so that if any transaction regarding sale or purchase of the property takes place, the revenue authorities may be in a position to recover the outstanding amount due to the PSPCL at the time of such a sale or purchase and pass on to PSPCL.

Compliance of these instructions need to be monitored by Sr.field officers and in case it is noticed that the Sub divisional Officers/Officials have not taken due care in informing the revenue authorities, then in that case if recovery is not possible due to sale/purchase of the premises/property, the said amount would be recoverable from the officer/official responsible for not intimating to the revenue authorities.

4(b)

As per Electricity Supply Instruction 93.3 regarding Allowing Installments for Supplementary Assessment: The consumer may sometimes find it difficult to make payment of such arrears in lump sum and may make representation for allowing the payment of such arrears to be made in installments. Such a representation must come from the consumer within the grace period i.e. within 10/15 days of the receipt of the bill. A notice to this effect shall be incorporated on the bill itself. However, it may be clarified that the representation shall not entitle stay to the consumer from the payment of installment(s). In fact the consumer seeking installments shall deposit not less than 25% of the billed amount so as to show his earnestness to pay the assessed amount in installments.

Competency of installments: On receipt of the above representation, the Sr.XEN/ASE(DS) may allow the consumer to make payment of the arrears in monthly installments up to 10. Normally, not more than 5 installments be allowed. The 1st installments shall start from 15th day from the date of receipt of the bill and other installments shall be payable every month regularly failing which the premises of the consumer shall be liable for disconnection. SE/Dy.CE(DS) may however, increase the number of installments up to 15 in extreme hardship cases. Interest at short term PLR rate of SBI shall be payable on the amount of installments for the period after due date.

4 (c)

As per Electricity Supply Instruction 93.5 No installments for Current Bills: The concerned (DS) officers are not competent to grant stay or to allow installments against payment of the current energy bills.

i) Levy of LPS for failing to make payment: The total discount/surcharge where applicable shall be divided in equal installments and in case the consumer does not make payment of installments by the due date, the discount be forfeited/surcharge be levied in respect of that installment only.

ii) The default in payment of installments on the part of the consumer, shall render his premises liable for disconnection.

iii) There may also be some cases where the PSPCL may not have rendered the current energy bills regularly in the past and the consumer is asked to make payment of the bills for more than billing cycle in lump sum. In such cases, the current energy bills shall be rendered separately and recovered as a regular feature. The remaining amount other than the current energy bill shall be billed separately and the payment of the same may be allowed to be made in installments:-

1. AE./AEE/XEN(DS) : Up to three installments

2. Sr.XEN/ASE(DS) : Up to Six Installments

3. SE./Dy.CE(DS) : Up to Ten installments.

The aforesaid benefit of payment in installments is to be allowed on the express request of the consumer if the amount of arrears is heavy as compared to the normal monthly energy bills. The number of installments shall be decided on the basis of merits of the case.

Ans 5 (a)

As per Electricity Supply Instruction 101.1 (c) Manner of Service of Provisional Order of Assessment: -

Government of Punjab vide its notification no. 1/78 /04-EB (PR)/565 dt. 25/8/2009 has notified the rules to prescribed manner for serving the order of provisional assessment and means delivery of notice, order or document.

Manner of Service of Provisional Order of Assessment – The order of provisional assessment, made by the assessing officer under the Act, shall be served upon the person concerned in the following manner, namely:-

(i) by delivery through registered post with acknowledgement due or through courier; or

(ii) by affixing at the conspicuous place of the premises where he ordinarily resides or carries on business in the presence of two witnesses, if there is no person in the premises to whom it can be served or if such person refuses to accept or otherwise evades the service; or

(iii) by publication in the newspaper having circulation in the area of the person concerned where he ordinarily resides or at the last place of his residence or business, as the case may be; or

(iv) by fax or e-mail to owners of industrial units only.

d) The consumer/person not satisfied with provisional assessment order shall be entitled to file objection before the assessment officer within 7 days. The Assessemtn Officer will follow the procedure lay down in Reg-36 of the Supply Code and pass a final order of assessment (Format at annexure-2 of this section) within 30 days of the service of provisional assessment order. The consumer/person will deposit the assessed amount within 7 days of the receipt of final assessment order.

Ans 5 (b) As per Electricity Supply Instruction 101.2, grounds for establishing the THEFT OF ELECTRICITY are as under:

(a) A consumer or any person shall be guilty of theft of electric energy and shall be deemed to have committed theft within the meaning of Sec. 135 of Electricity Act 2003, whoever, dishonestly:

i. taps, makes or causes to be made any connection with overhead underground or under water lines or cables or services wires or service facilities of the PSPCL or

ii. tampers a meter, installs or uses a tampered meter, current reversing transformer, loop connection or any other device or method which interferes with accurate or



proper registration calibration or metering of electric current or otherwise results in a manner whereby electricity is stolen or wasted or

iii. damages or destroys an electric meter, apparatus, equipment, or wire or causes or allows any of them to be so damaged or destroyed as to interfere with the proper or accurate metering of electricity, or

iv. uses electricity through a tampered meter or

v. uses electricity for the purpose other than for which the usage of electricity was authorized, so as to abstract or consume or use electricity shall be punishable with imprisonment for a term, which may extend to three years or with fine or both.