I G N O U

CCPD

Assignment Booklet

Certificate of Competency in Power Distribution

(Electrical Technicians)

Programme Code:

CCPD

Course Code:

OEE-001

OEE-002

School of Engineering and Technology

Indira Gandhi National Open University

Maidan Garhi, New Delhi – 110 068

NOTE: Student are required to submit Assignment booklet for theory courses OEE-001 ,OEE-002 and Practical Workbook for practical course OEEL-001 separately.

Dear Student,

This booklet contains the assignments for the CCPD Programme for the theory courses of OEE-001; OEE-002. It is for your kind information that each theory course has one assignment, which is based on course material of these courses. You are also advised to write your responses after comprehensive study your subject.You can answer in English or Hindi,

This to inform that minimum duration of this programme is 6 months and maximum duration is 2 years.

You need to submit the assignments as under:

For January Session- By 30th April/May **; For July Admission Session-** By 30th October/November
You are advised not to wait for the last date to submit your assignments.

You can submit your assignment booklet for theory courses(OEE-001 and OEE-002) **-**

At your concerned Study Centre/ Regional Centre. Student are advised to get the acknowledgement/receipt while submitting assignment at Study Centre/Regional Centre concerned in order to fill up assignment submission details in your term end examination form. We strongly feel that you should **retain a photocopy of your assignment** answer sheet to avoid any unforeseen situation.

For Formatting of Your Assignments

- **On the top of the first page of your Tutor Marked Assignment (TMA) answer sheet**, please write the details exactly in the following format :

Enrolment No. _____	**Course Code**: _____
Name: _____	Course Title : _____
Date : _____	Address : _____
Regional Centre/ Study CentreCode:	Mobile Number: E Mail: Signature:

- Please follow the above format strictly to facilitate evaluation and avoid delay.
- Use only foolscap size writing paper (but not of very thin variety) for writing your answers.
- Leave 3 cm margin on the left, top and bottom of your answer sheet.
- Your answer should be logical and coherent.
- While solving problems, clearly indicate the question number along with the part being solved. Recheck your work before submitting it.

NOTE: Practical Workbook (Training/Internship/Field Visit) of Practical courseOEEL-001 is to be submitted separately at SED ,IGNOU,New Delhi. (refer page 5-14)

Wishing you all good luck!

Laser Typesetting by SOET, IGNOU, New Delhi.

Printed at:

CCPD

TUTOR MARKED ASSIGNMENT

COURSE CODE: OEE-002

POWER DISTRIBUTION SYSTEM – BASICS

Maximum Marks: 100
Weightage : 30%

Last Date of Assignment Submission: For June TEE by 30th April/May; For December TEE by 30th Oct/ Nov

Note: All questions are compulsory and carry equal marks.

Q.1 (a) Describe the equipments required for the construction of a 66-33 /11 KV substation.

(b) Explain general maintenance practices for substation and distribution lines.

Q.2 (a) Describe construction of power cables. Also, explain various types of faults in power cables.

(b) What are feeders? Explain about configuration of feeders and draw layouts.

Q.3 (a) Explain transformer construction with suitable diagram.

(b) What are important reasons for transformer failure, explain?

Q.4 Write various types of cable jointing methods and also explain important cable jointing instructions.

Q.5 (a) Describe power distribution in brief. Write specific use of main equipment required for distribution lines in overhead lines.

(b) What are the advantages of High Voltage Distribution Systems (HVDS) compared to low voltage distribution system.

Q.6 (a) Explain the term AT&C loss.

(b) Write about various factors affecting commercial losses.

Q.7 (a) Explain various meter installation practices adopted to guard against meter tampering.

(b) Explain role of energy accounting and auditing in preventing revenue loss.

Q.8 (a) Elaborate Indian electricity rules regarding electrical safety for handling of electrical supply lines and apparatus.

(b) Write down provisions laid out in Indian Electricity Rules regarding:

(i) Clearance from buildings of low and medium voltage lines and service lines, and

(ii) Intimation of Accidents

Q.9 Explain various short term and long term plans for technical loss reduction in distribution systems.

Q.10 (a) Explain the metering techniques used for LT and HT consumer metering.

(b) Appreciate the role and significance of technological interventions in metering, billing and collection for the utility's revenue protection.