

SIR ARTHUR LEWIS COMMUNITY COLLEGE
DIVISION OF TECHNICAL EDUCATION AND MANAGEMENT STUDIES

DTEMS PAST PAPERS
TECHNICAL STUDIES

EXAMINATION SESSION : MAY 2013 – Final Examination

TUTOR(s) : Cosmos Alexander

PROGRAMME TITLE : **Electrical Installation**

PROGRAMME CODE : 3EE – ELN - ELN

COURSE TITLE : **IEE Wiring Regulations**

COURSE CODE : **ELE 131**

CLASS : Year 2

DATE : Thursday 9th May, 2013

TIME : 1:00 pm

DURATION : 2 ½ Hours

ROOM : TRB-LAB

INVIGILATOR : R. Jn. Baptiste, C. Gedeon



#16



INSTRUCTIONS

- Answer any five questions
- Write legibly.
- Number all questions attempted properly.
- All working must be shown.
- All submitted work must be in ink/pen (preferably Blue or Black)

1. (a) Explain Space factor and give an example. [08]
(b) Give the requirements for excess current protection [08]
(c) What is the purpose of the IEE REGULATIONS? [04]
2. (a) Give the requirements for isolation and switching. [10]
(b) Give the requirements for protection for safety. [10]
3. (a) Explain the reason for earthing. [06]
(b) Explain and show the difference types of earthing systems use in electrical installation. [10]
(c) Explain earth bonding. [04]
4. (a) Explain the earth fault loop impedance system. [10]
(b) Give the requirements for two types of special installations. [10]
5. (a) Give the requirements for residual current device. [10]
(b) Give the requirements for installing accessories in a residential building. [10]
6. (a) Give the requirements for temporary installation [10]
(b) Explain what is meant by breaking capacity of a fuse or circuit breaker. [10]
7. (a) Define the following: -
(a) CPC (b) Switch (c) Ambient Temperature
(d) PME (e) Point (f) Protective Conductor
(g) Luminaire (h) Isolator (i) Residual Current
(j) PEN Conductor. [10]
(b) Give the requirements for labeling. [10]
8. (a) Explain the principle operation of an RCD. [10]
(b) Explain the procedure for inspection and testing on a single and three phase installation. [10]