



SLIATE

SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

**Higher National Diploma in Technology (Agriculture)
Second Year, 2nd Semester Examination – 2016 (New)
AG2216: Building Construction and Farm Electrification**

Instructions for Candidates:
The question paper contains part 1 and part 11
Answer all the questions in part 1 and (03) questions
from part 11

No of pages : 04
No of Questions : 06
Time: 02(two) hours

Part-I

01

i. Write 03(three) mainly used building materials in the construction field.

(1.5marks)

- 1.....
- 2.....
- 3.....

ii. Write 03(three) ingredients of cement

(03 marks)

- 1.....
- 2.....
- 3.....

iii. What are the forces, mortar has to bear in brickwork?

(04 marks)

- 1.....
- 2.....
- 3.....
- 4.....

iv. Write two reasons for timber seasoning.

(04 marks)

- 1.....
- 2.....

02.

i. Give a definition for the Ohms law

(1.5 marks)

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ii. Name three (03) types of electric motors that can be used in a farm

(03 marks)

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iii. When there are 3 resistors in parallel in a circuit with 3 ohm, 6 ohm, and 4 ohm, find the total resistance

(04 marks)

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iv. If the voltage in the above circuit is 4.4V, find the current (I) flowing in the circuit. (04 marks)

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Part II

03.

- i. Define the term “bearing capacity” of the soil (03 marks)
- ii. State 03 methods of improving bearing capacity of soil (06 marks)
- iii. Name 03 types of foundations and briefly explain the functions of a foundation (06 marks)
- iv. Explain the difference between Flemish and English bonds of brick bonding (10 marks)

04.

- i. Write short notes on following
 - a. Slump test
 - b. Reinforcement
 - c. Cantilever beam (15 marks)
- ii. Briefly explain the steps in process of concreting (10 marks)

05.

- i. Write three (03) types of superstructures in a building. (03 marks)
- ii. Give the timber classification with example timber trees (06 marks)
- iii. Briefly explain light alloys as building material (06 marks)
- iv. Explain the process of painting (10 marks)

06.

- i. What are the members in sloping roof (03 marks)
- ii. Briefly state the plastering materials that can be used in the building construction (06 marks)
- iii. Briefly explain the way of applying drainage system in a building. (06 marks)

iv. Draw the diagram/symbols for the followings

a. Straight sliding door

b. Window hinged at side

c. One way switch

d. Two way switch

(10 marks)