

SCT 327-2 Wood and Wood based Products Development and Techniques

**Instructions to candidates**

Duration: 02 hours

Number of questions: Five (5) essay questions

Answer four (4) questions

Mark allocation: 100

1. Write short notes on the following

- a. Rays
- b. Allowable stress
- c. Tension wood and compression wood
- d. Tyloses
- e. Anisotropic nature of wood

(25 mark)

2.

- a. Discuss different methods of drying lumber and other solid wood products.
- b. Compare and contrast heart wood and sap wood.

(25 mark)

3.

- a. Explain the relationship amongst stress, strain and Modulus of Elasticity.
- b. Describe the factors effecting specific gravity within a species.

(25 mark)

4.

- a. List the requirements for an ideal wood preservative.
- b. Explain the factors affecting the strength of lumber products.
- c. Discuss the impact of extractives and inorganic materials on specific gravity of timber.

(25 mark)

5.

- a. Describe factors affecting the strength of lumber.
- b. Discuss the importance of using wood at proper moisture.

(25 mark)

