

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

Instructions to candidates

Duration: Two (02) hours

Number of questions: Four (04) essay questions

Answer all questions

Mark allocation: 100

1. Write short notes on the following.

- a. Full cell processes
- b. Tyloses
- c. Shrinking and Swelling of timber
- d. Allowable stresses
- e. Knots

(25 mark)

2.

- a. Discuss the effects of moisture content on specific gravity of wood.
- b. Describe the relationship of wood density to growth rate difference tree species.
- c. Describe different methods of determining specific gravity of a wood sample.

(25 mark)

3.

- a. What are tension and compression wood?
- b. Describe the formation of reaction wood.
- c. Discuss different ways of preventing the decay of wood products.

(25 mark)

4.

- a. Describe the shear stress and strain of a material.
- b. Discuss factors affecting the strength of wood.
- c. Describe considerations in the use of wood preservatives.

(25 mark)

