



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2017/2018**

COURSE NAME : FURNITURE FINISHING AND PACKAGING
COURSE CODE : BPP 31003
PROGRAMME CODE : BPP
EXAMINATION DATE : JUNE / JULY 2018
DURATION : 2 HOURS 30 MINUTES
INSTRUCTION : ANSWER ALL QUESTIONS

TERBUKA

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

Q1 Spray booths are fire and health protection enclosures scientifically designed to provide a positive movement of air through the spray area.

- (a) List **TWO (2)** main types of spray booths with the examples. (4 marks)
- (b) Identify **TWO (2)** advantages of using types of spray booths as listed in **Q1(a)**. (4 marks)
- (c) Interpret **THREE (3)** drying and curing mechanisms of finishing materials. (9 marks)
- (d) Interpret **THREE (3)** drying and curing methods in finishing. (12 marks)

Q2 Sanding is an activity involving making surface smooth by using abrasives. It also removes foreign particles on the wood substrates. Sanding will be carried out before finishing to remove defects from the wood surface that will affect the appearance and performance of finishes.

- (a) State **THREE (3)** defects caused by sanding process. (3 marks)
- (b) Identify **THREE (3)** abrasive grains types suitable for wood applications. (3 marks)
- (c) Illustrate the structure of sandpaper with the labels. (5 marks)
- (d) The wood surfaces for making furniture should be completely free from faults or defects. Interpret **THREE (3)** faults in timber surfaces with method to remove. (6 marks)
- (e) Differentiate the characteristics between belt and disk sanding machines. (8 marks)

TERBUKA

- Q3** The product data sheets and Safety Data Sheet should always be carefully reviewed before starting a finishing work.
- (a) Two-component products must be mixed well before use. Identify the mixing ratio of two-component solvent-borne paint by parts. (3 marks)
 - (b) Explain **TWO (2)** problems and solutions in applying wood finishes. (4 marks)
 - (c) Discuss **FOUR (4)** characteristics of uncured coatings. (8 marks)
 - (d) Illustrate **THREE (3)** tests of to determine the cured coating of wood finishes. (9 marks)
- Q4**
- (a) Name the standard that provides guidance for establishing measures to reduce the risk of pests associated with all types of wood packaging material. (2 marks)
 - (b) A common layout for warehouse or chamber fumigation with methyl bromide is as provided in **Q4**. Explain methods for dosing in **Figure Q4**. (6 marks)

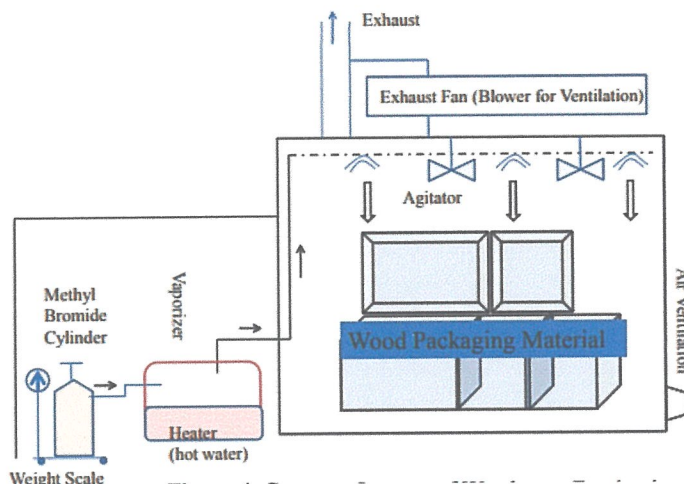


Figure Q4: Common layout of warehouse fumigation

- (c) Interpret **FOUR (4)** materials properties used for packaging. (8 marks)
- (b) Discuss the factors that affecting the packaging design selection. (6 marks)

- END OF QUESTIONS -

TERBUKA