



UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2023/2024**

- COURSE NAME : FURNITURE FINISHING AND PACKAGING
- COURSE CODE : BPP 31003
- PROGRAMME CODE : BPP
- EXAMINATION DATE : JULY 2024
- DURATION : 3 HOURS
- INSTRUCTIONS :
1. ANSWER ALL QUESTIONS
 2. THIS FINAL EXAMINATION IS CONDUCTED VIA
 Open book
 Closed book
 3. STUDENTS ARE **PROHIBITED** TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK

THIS QUESTION PAPER CONSISTS OF **THREE (3)** PAGES

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- Q1**
- (a) List **THREE (3)** sanding machines used in the wood furniture manufacturing industry. (3 marks)
 - (b) Explain **TWO (2)** purposes of selection correct sandpaper grit sizes for wooden furniture with examples. (6 marks)
 - (c) List **THREE (3)** procedures in preparing a rubberwood surface for lacquering. (3 marks)
 - (d) Discuss **TWO (2)** types of film finishes used in woodworking. (4 marks)
 - (e) Discuss **THREE (3)** advantages of using epoxy as a finishing material in furniture manufacturing, particularly for items requiring a durable surface. (6 marks)
- Q2** Recently, EcoFurniture Sdn. Bhd has started using acacia wood for their dining tables due to its durability and attractive grain. However, they are facing challenges with the finishing process. Some issues include poor coverage and inconsistent application techniques, leading to subpar final products. They need to ensure high-quality finishes to meet international standards and maintain their reputation in the market.
- (a) Identify **TWO (2)** commonly used finishes for wooden furniture. (2 marks)
 - (b) Outline **THREE (3)** finishing procedures for an acacia wood dining table, specifying the type of finish and application techniques. (12 marks)
 - (c) Prepare **THREE (3)** steps required before applying finishes to furniture. (9 marks)
 - (d) Determine **THREE (3)** issues of poor coverage during the finishing process at EcoFurniture Sdn. Bhd. (6 marks)

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Q3 Elegant Woods Ltd., known for its high-quality chair. Recently, the company has encountered several complaints from customers about uneven finish coverage on their wooden furniture products. Customers have reported various issues, such as visible streaks, inconsistent color patches, and areas that appear to be missing a finish entirely. These issues not only compromise the aesthetic appeal of the chair but also affect its durability and overall quality. As a result, the company is keen to identify the underlying causes of these problems and implement effective solutions to ensure consistent and high-quality finishes on all their products.

Based on above scenario,

- (a) Determine **THREE (3)** problems of uneven finish coverage on the chair. (9 marks)
- (b) Propose **THREE (3)** approaches to prevent the issue as stated in **Q3(a)**. (12 marks)

Q4 ArtisanWood Exports is exploring different materials for packaging of their fragile carved teak dining tables for export. They need to choose between cardboard, plastic, and plywood to ensure the best protection during international shipping. Each material has its own strengths and wellness attributes that could impact the durability and safety of the packaging.

- (a) Explain **THREE (3)** common issues faced during the packaging process. (6 marks)
- (b) Describe **THREE (3)** functions of different types of packaging involved in shipping furniture. (6 marks)
- (c) Illustrate with elaboration a comprehensive packaging strategy to ensure safe delivery of the products. (16 marks)

- END OF QUESTIONS -

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