



KEMENTERIAN PENDIDIKAN TINGGI
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI

BAHAGIAN PEPERIKSAAN DAN PENILAIAN
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI
KEMENTERIAN PENDIDIKAN TINGGI

JABATAN KEJURUTERAAN AWAM

PEPERIKSAAN AKHIR

SESI II : 2025/2026

DCW50222 : TIMBER TRADE

TARIKH : 06 MEI 2026

MASA : 2.30 PETANG - 4.30 PETANG (2 JAM)

Kertas soalan ini mengandungi **LAPAN (8)** halaman bercetak.

Bahagian A: Struktur (2 soalan)

Bahagian B: Struktur (4 soalan)

Dokumen sokongan yang disertakan : Lampiran

JANGAN BUKA KERTAS SOALAN INI SEHINGGA DIARAHKAN

(CLO yang tertera hanya sebagai rujukan)

SECTION A : 50 MARKS
BAHAGIAN A : 50 MARKAH

INSTRUCTION:

This section consists of **TWO (2)** structured questions. Answer **ALL** questions.

ARAHAN:

*Bahagian ini mengandungi **DUA (2)** soalan berstruktur. Jawab **SEMUA** soalan.*

QUESTION 1

SOALAN 1

- CLO1 (a) Identify **FIVE (5)** roles of the Wood Industry Skills Development Centre (WISDEC).
*Kenalpasti **LIMA (5)** peranan Pusat Pembangunan Kemahiran Industri Kayu (WISDEC).*

[5 marks]
[5 markah]
- CLO1 (b) Trade is essentially a voluntary exchange between two parties that need each other's resources such as goods and services. Identify the importance of trade to the nation.
Perdagangan pada asasnya adalah pertukaran sukarela antara dua pihak yang memerlukan sumber masing-masing seperti barangan dan perkhidmatan. Kenalpasti kepentingan perdagangan kepada negara.

[10 marks]
[10 markah]
- CLO1 (c) International trade is crucial because countries rely on other countries to import goods that are not easily accessible within their own countries. Based on the statement, interpret **FIVE (5)** components or parties involved in ensuring that international trade functions smoothly.
*Perdagangan antarabangsa adalah penting kerana negara bergantung kepada negara lain untuk mengimport barangan yang tidak tersedia di negara mereka sendiri. Berdasarkan pernyataan ini, huraikan **LIMA (5)** komponen*

atau pihak yang terlibat dalam memastikan perdagangan antarabangsa berfungsi dengan lancar.

[10 marks]

[10 markah]

QUESTION 2
SOALAN 2

- CLO1 (a) Identify **FIVE (5)** modes of transportation that are commonly used in domestic trading.
*Kenalpasti **LIMA (5)** pengangkutan yang biasa digunakan dalam perdagangan tempatan.*

[5 marks]

[5 markah]

- CLO1 (b) Identify **FIVE (5)** equipment used by the timber grader and the function of each piece of equipment during the timber grading process.
*Kenalpasti **LIMA (5)** peralatan yang digunakan oleh pemeringkat kayu dan fungsi bagi setiap peralatan tersebut semasa proses penggredan kayu dilakukan.*

[10 marks]

[10 markah]

- CLO1 (c) Current issues affect the development of the wood-based industry in Malaysia. Interpret the impact of the wood supply issue and the foreign worker issue on the wood-based industry in Malaysia.
Isu semasa memberi kesan kepada perkembangan industri berasaskan kayu di Malaysia. Tafsirkan kesan isu bekalan kayu dan isu pekerja asing terhadap industri berasaskan kayu di Malaysia.

[10 marks]

[10 markah]

SECTION B : 50 MARKS
BAHAGIAN B : 50 MARKAH

INSTRUCTION:

This section consists of **FOUR (4)** structured questions. Answer **TWO (2)** questions.

ARAHAN:

Bahagian ini mengandungi EMPAT (4) soalan berstruktur. Jawab DUA (2) soalan.

QUESTION 1

SOALAN 1

- CLO1 (a) Describe the meaning of trade.
Huraikan maksud perdagangan.

[5 marks]
[5 markah]
- CLO1 (b) As a businessman, you need to choose the best way to market your products. Explain how retail trade and wholesale trade can be used to market your products.
Sebagai ahli perniagaan, anda perlu memilih cara terbaik untuk memasarkan produk anda. Terangkan bagaimana perdagangan runcit dan perdagangan borong boleh digunakan untuk memasarkan produk anda.

[10 marks]
[10 markah]
- CLO1 (c) Several agencies are directly involved in the development of the wood-based industry in Malaysia. Explain how the Malaysian Timber Industry Board (MTIB) and the Forest Research Institute Malaysia (FRIM) contributes to the development of the wood-based industry in Malaysia.
Terdapat beberapa agensi yang terlibat secara langsung dalam pembangunan industri berasaskan kayu di Malaysia. Terangkan bagaimana Lembaga Perindustrian Kayu Malaysia (MTIB) dan Institut Penyelidikan Perhutanan Malaysia (FRIM) menyumbang kepada pembangunan industri berasaskan kayu di Malaysia.

[10 marks]
[10 markah]

QUESTION 2
SOALAN 2

- CLO1 (a) Identify **FIVE (5)** types of information listed in a bill of lading.
Kenal pasti LIMA (5) jenis maklumat yang terdapat dalam bil muatan.
[5 marks]
[5 markah]
- CLO1 (b) International Commercial Terms (INCOTERMS) are used in international trade. Explain how importers and exporters apply INCOTERMS in their responsibilities during a trade transaction.
INCOTERMS digunakan dalam perdagangan antarabangsa. Terangkan bagaimana pengimport dan pengeksport menggunakan INCOTERMS dalam tanggungjawab mereka semasa urus niaga perdagangan.
[10 marks]
[10 markah]
- CLO1 (c) In an international trade, different delivery terms are used to define responsibilities between buyers and sellers. Interpret the terms Ex Works (EXW) and Delivered Duty Paid (DDP).
Dalam perdagangan antarabangsa, pelbagai terma penghantaran digunakan untuk menentukan tanggungjawab antara pembeli dan penjual. Huraikan terma Ex Works (EXW) dan Delivered Duty Paid (DDP).
[10 marks]
[10 markah]

QUESTION 3
SOALAN 3

- CLO1 (a) Classify **FIVE (5)** grades and grade marks for scantling wood.
*Kelaskan **LIMA (5)** peringkat dan tanda peringkat gred untuk kayu beruti.*
[5 marks]
[5 Markah]
- CLO1 (b) Explain grades and grade marks for timber under the Special Market Specification according to the Malaysian Grading Rules (MGR) as listed below:
Terangkan peringkat dan tanda peringkat gred bagi kayu dalam Spesifikasi Kayu Pasaran Khas merujuk kepada Peraturan Pemeringkatan Kayu Malaysia (MGR) seperti disenaraikan di bawah:
- i. Door and window frame
Pintu dan bingkai tingkap
 - ii. Shorts
Kayu pendek
 - iii. Strips
Kayu jalur
 - iv. Scantlings
Kayu beruti
 - v. Baulks
Balak segi
- [10 marks]
[10 markah]

CLO1

- (c) Refer to Figure B3 (c), calculate the clear face cutting and grade a piece of wood with 9" width and 16' length that contains the defects (i) knot and (ii) borer holes.

Merujuk kepada Rajah B3 (c), kirakan jumlah potongan muka bersih dan gredkan sekeping papan yang berukuran 9" lebar dan 16' panjang yang mengandungi cacat-cacat (i) buku kayu dan (ii) lubang penggerek.

9" x 7' 6"	(i)	4" x 6'6"
	(ii)	5" x 8'

Figure B3 (c) / Rajah B3 (c)

[10 marks]

[10 markah]

QUESTION 4**SOALAN 4**

- CLO1 (a) The Malaysian timber industry is one of the major revenue contributors to the Malaysian economy. Identify **FIVE (5)** major exports of Malaysian wood products.
- Industri perkayuan Malaysia merupakan salah satu penyumbang utama sumber ekonomi Malaysia. Kenalpasti **LIMA (5)** eksport utama produk kayu Malaysia.*
- [5 marks]
[5 markah]
- CLO1 (b) To strengthen market credibility, timber products must comply with the recognized standards and certification systems. Explain the roles of the Malaysian Standard (MS) and the Malaysian Timber Certification Scheme (MTCS) in ensuring timber quality.
- Untuk memperkukuh kredibiliti pasaran, produk kayu mesti mematuhi piawaian dan sistem pensijilan yang diiktiraf. Terangkan peranan Malaysian Standard (MS) dan Malaysian Timber Certification Scheme (MTCS) dalam memastikan kualiti kayu.*
- [10 marks]
[10 markah]
- CLO1 (c) Timber industry is now confronting numerous issues and challenges in sustaining its competitive advantage in the current economy, which is extensively driven by innovation and technological capabilities. Interpret the current issues face by the wood industry worldwide.
- Industri kayu kini menghadapi pelbagai isu dan cabaran untuk mengekalkan kelebihan kompetitif dalam ekonomi baru semasa, yang didorong oleh keupayaan inovasi dan teknologi. Huraikan secara terperinci isu-isu semasa industri kayu dunia.*
- [10 marks]
[10 markah]

SOALAN TAMAT

Table 1: Grading requirement for GMS

GRADE	(I) PRIME	(II) SELECT	(III) STANDARD	(V) SERVICEABLE
h) Cutting Requirements	*Surface area 3 to <5 5 to <8 8 to <11 11 to <14 14 & up minimum size of cuttings: 4" x 5' or 5' x 4'	Percentage clear 100% (12/12) 75% (9/12) 75% (9/12) 75% (9/12) 75% (9/12) 75% (9/12) minimum size of cuttings: 4" x 3' or 3' x 4'	*Surface area 2.5 to <5 5 to <8 8 to <11 11 to <14 14 & up (CFC includes bright sapwood) minimum size of cuttings: 3" x 3' or 4" x 2'	Percentage clear 66 2/3% (8/12) 66 2/3% (8/12) 66 2/3% (8/12) 66 2/3% (8/12) 66 2/3% (8/12) (SFC admits brittle heart) minimum size of cuttings: 3" x 3' or 4" x 2'
i) Grading Requirements	No. of CFC 1 1 1 2 2 3 3 4 minimum size of cuttings: 4" x 5' or 5' x 4'	Percentage clear 100% (12/12) 75% (9/12) 75% (9/12) 75% (9/12) 75% (9/12) 75% (9/12) 75% (9/12) 75% (9/12) minimum size of cuttings: 4" x 3' or 3' x 4'	No. of CFC 1 1 2 3 4 5 (CFC includes bright sapwood) minimum size of cuttings: 3" x 3' or 4" x 2'	No. of SFC 1 2 3 4 5 (SFC admits brittle heart) minimum size of cuttings: 3" x 3' or 4" x 2'
IV. SOUND (or BHND – Borer Holes No Defect)	As for Prime, Select, and Standard grades except that pin and unstained shot holes are admitted in the cuttings, as defined in Rule 24, item 24.3.			
VI. UTILITY	As for Serviceable grade except that wane is not to exceed one quarter the width of the piece; cuttings will admit any sound defects not materially affecting the strength of the piece.			
* Surface area of piece in square feet				

(Source: The Malaysian Grading Rules for Sawn Hardwood Timber 2009 Edition, MTIB)