

STRUCTURED: 100 MARKS

STRUKTUR: 100 MARKAH

INSTRUCTION:

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

ARAHAN:

Bahagian ini mengandungi EMPAT (4) soalan struktur. Jawab SEMUA soalan.

QUESTION 1

SOALAN 1

CLO1
C1

- (a) “Fibre is one of the important fundamental components to produce a fabric”.

Based on the statement above, explain how the fibre factor influences the properties of the fabric.

“Fiber merupakan salah satu komponen asas yang penting untuk menghasilkan fabric”

Berdasarkan pernyataan di atas, terangkan bagaimana faktor serat mempengaruhi sifat-sifat fabric.

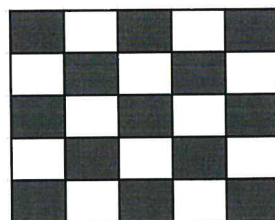
[3 marks]

[3 markah]

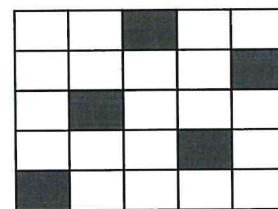
CLO1
C2

- (b) Based on the two types of fabric structure in Figure 1(a), identify which fabric has a loose structure. Give reasons why it happens.

Berdasarkan dua jenis struktur fabric dalam Gambarajah 1(a), kenalpasti fabric yang mempunyai struktur yang longgar. Berikan sebab mengapa ia berlaku.



Type A



Type B

Figure 1(a) / Gambarajah 1(a)

[5 marks]

[5 markah]

CLO1
C2

- (c) Figure 1(b) shows the sequence movement of a harness to produce a fabric. Based on the diagram, sketch the structure of the fabric being produced.

Gambarajah 1(b) menunjukkan pergerakan 'harness' menurut turutan bagi menghasilkan fabrik. Berdasarkan rajah, lakarkan struktur fabrik yang akan dihasilkan.

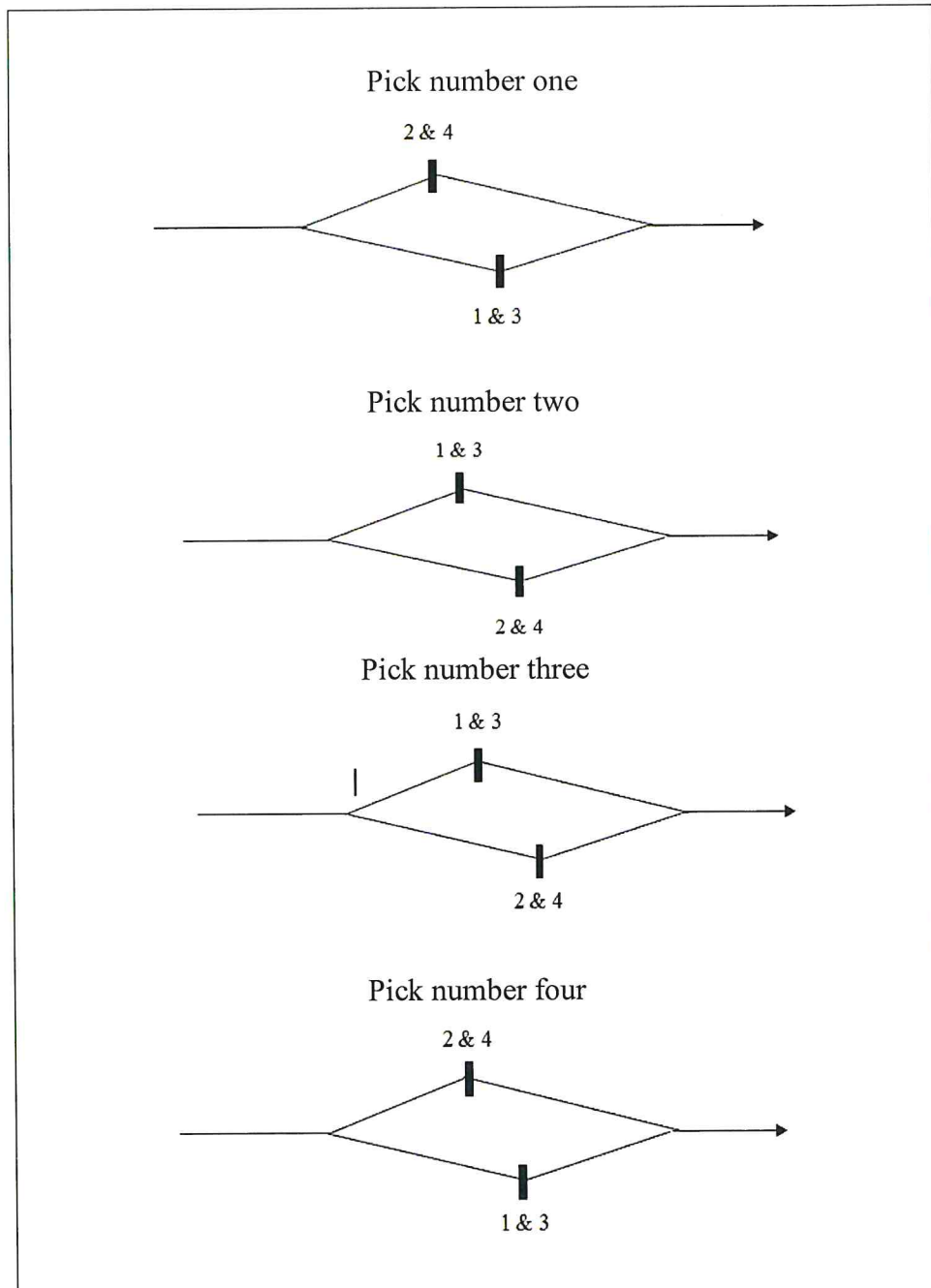


Figure 1(b) / Gambarajah 1(b)

[5 marks]
[5 markah]

CLO1
C3

- (d) Figure 1(c) shows a weaving plan using a straight draft method. Referring to the diagram, construct the woven plan by changing the use of a straight draft to a pointed draft.

Gambarajah 1(c) menunjukkan rancangan tenunan menggunakan kaedah 'straight draft'. Merujuk kepada gambarajah, bina pelan tenun dengan mengubah penggunaan 'straight draft' kepada 'pointed draft'.

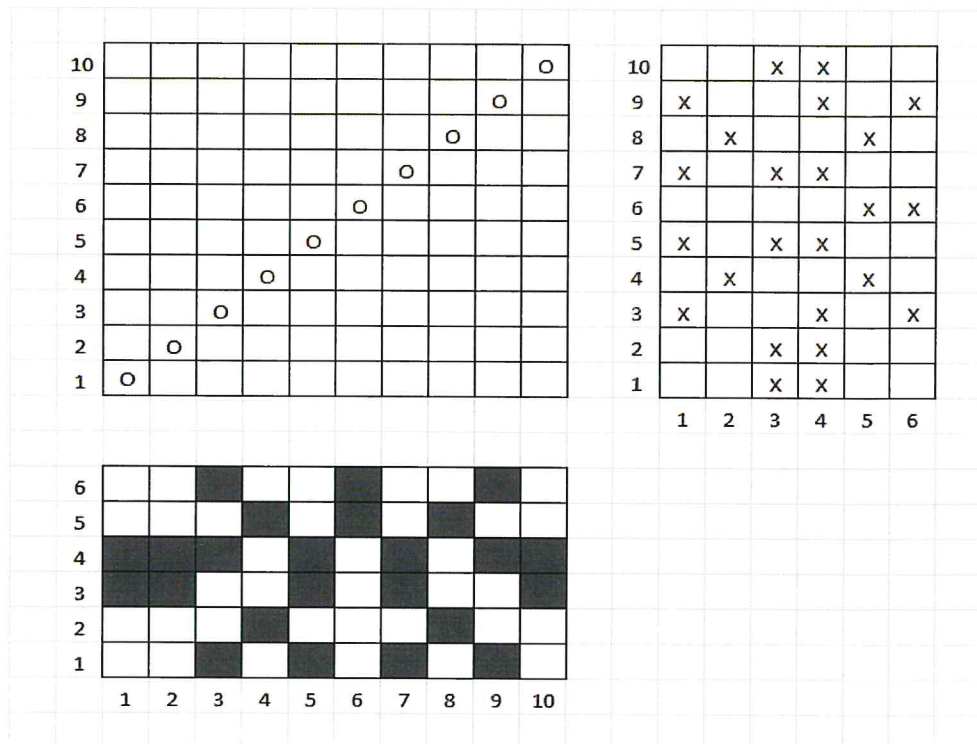


Figure 1(c) / Gambarajah 1(c)

[12 marks]
[12 markah]

QUESTION

SOALAN 2

CLO2
C1

- (a) Define irregular sateen.
Takrifkan 'irregular sateen'

[3 marks]
[3 markah]

CLO2
C2

- (b) Explain the main reason in constructing back warp weave.
Huraikan tujuan utama penghasilan tenunan 'back warp'

[5 marks]
[5 markah]

CLO2
C2

- (c) Figure 2 (a) shows the Huckaback woven structure for a towel. Based on the figure, explain the purpose of float on the towel surface.
Gambarajah 2 (a) menunjukkan struktur tenunan 'Huckaback' untuk tuala. Berdasarkan gambarajah, terangkan tujuan 'float' pada permukaan tuala tersebut.

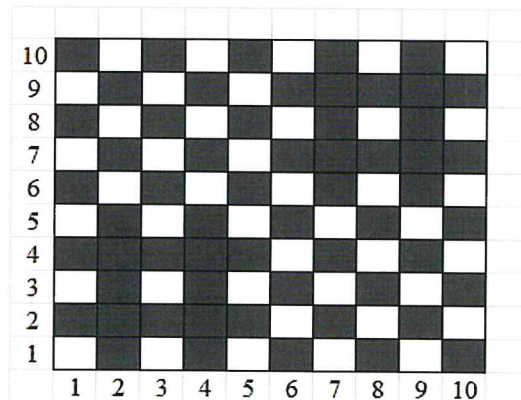


Figure 2 (a) / Gambarajah 2 (a)

[5 marks]
[5 markah]

CLO1
C3

- (d) Construct a back warp weave using twill 4/1 as the base. Complete the answer with the diagram of a weaving plan.
Bina tenunan 'back warp' dengan menggunakan twill 4/1 sebagai asas. Lengkapkan jawapan dengan rajah pelan tenunan.

[12 marks]
[12 markah]

QUESTION 3
SOALAN 3

CLO2
C1

- a) Define stitch length for a weft knit.
Nyatakan maksud 'stitch length' bagi fabrik kait.

[3 marks]
[3 markah]

CLO2
C2

- (b) Figure 3 (a) (i) shows **THREE (3)** types of cam used for a basic design in weft knit. Based on the fabric knit structure in figure 3 (a)(ii), arrange the probability of the cam to produce the fabric.

Gambarajah 3 (a)(i) menunjukkan TIGA (3) jenis 'cam' yang digunakan untuk rekabentuk asas fabrik kait. Berdasarkan struktur fabrik kait di Gambarajah 3 (a)(ii), susun kebarangkalian 'cam' bagi menghasilkan fabrik tersebut.



Figure 3 (a)(i) / Gambarajah 3 (a)(i)

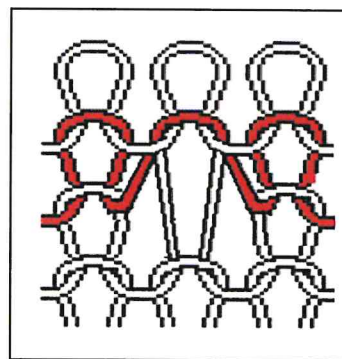


Figure 3 (a)(ii) / Gambarajah 3 (a)(ii)

[6 marks]
[6 markah]

CLO2
C2

- (c) Describe overlap and underlap in warp knit.
Terangkan 'overlap' dan 'underlap' dalam kaitan 'warp'.

[4 marks]
[4 markah]CLO2
C3

- (d) Based on Figure 3(c):
Berdasarkan Gambarajah 3(c):

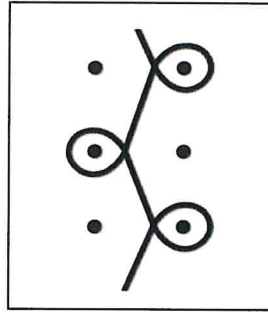


Figure 3(c)/Gambarajah 3(c)

- i. Write the lapping movement of the guide bar.
Tulis pergerakan 'lapping' bar panduan.
- ii. Explain the lapping movement based on the answer c(i).
Terangkan pergerakan 'lapping' berdasarkan jawapan c(i).

[12 marks]
[12 markah]

QUESTION 4
SOALAN 4

CLO2
C1

- (a) State **THREE (3)** uses of technical textile.
*Nyatakan **TIGA (3)** kegunaan bagi teknikal tekstil.*

[3 marks]
[3 markah]

CLO2
C2

- (b) Explain how dyeing in coloured yarn is done.
Terangkan prinsip kerja bagi 'sectional warping'.

[5 marks]
[5 markah]





CLO2
C2

- (c) Explain the working principles of sectional warping.
Terangkan prinsip kerja bagi 'sectional warping'.

[5 marks]
[5 markah]

CLO2
C3

- (d) Draw the colour pattern for twill weave 3/1 based on the data given from Table 2(a).
Lukis corak warna untuk tenunan twill 3/1 berdasarkan data yang diberi dari Jadual 2(a).

Warp 	1	1	1	1	1	=	5
	2	2	1	1	1	=	7
							12
Weft 	1						
	1						
	2						

[12 marks]
[12 markah]

SOALAN TAMAT