

SULIT



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

JABATAN KEJURUTERAAN AWAM

PEPERIKSAAN AKHIR

SESI II : 2021 / 2022

DCQ40204: BUILDING WORK MEASUREMENT 4

TARIKH : 5 JULAI 2022

MASA : 11.30 AM – 1.30 PM (2 JAM)

Kertas ini mengandungi **ENAM (6)** halaman bercetak.

Bahagian A: Struktur (3 soalan)

Bahagian B: Esei (1 soalan)

Dokumen sokongan yang disertakan : 2 Set Lukisan

JANGAN BUKA KERTAS SOALAN INI SEHINGGA DIARAHKAN

(CLO yang tertera hanya sebagai rujukan)

SULIT

Notes:**Nota:**

- (a) Measurement of work shall be based on the principles laid down in the Malaysian Standard Method of Measurement Works 2nd edition (SMM2)

Pengukuran kerja mesti berdasarkan prinsip-prinsip yang ditetapkan dalam Kaedah Standard Malaysia Pengukuran Kerja edisi ke-2 (SMM2)

- (b) Make assumption when details or specification are not provided or unclear. All assumptions shall be clearly stated in the answer scripts.

Buat andaian apabila maklumat atau spesifikasi tidak diperuntukkan atau tidak jelas. Semua andaian mesti dinyatakan dengan jelas di dalam kertas jawapan.

- (c) Marks will be given for the knowledge of the subject and systematic setting of dimensions, adequacy and accuracy of description and dimensions.

Markah akan diberikan berdasarkan pengetahuan tentang subjek dan sistematik dimensi, kecukupan dan ketepatan penerangan dan dimensi.

SECTION A : 50 MARKS
BAHAGIAN A : 50 MARKAH

INSTRUCTION:
ARAHAN :

This section consists of **THREE (3)** questions. Answer **ALL** questions.

*Seksyen ini mengandungi **TIGA (3)** soalan. Jawab **SEMUA** soalan.*

QUESTION 1

SOALAN 1

Type of pile	No of point	No of pile caps	Notes
P2	2	18	1. 250x250mm Precast Concrete pile 2. Initial and extension length pile shall be 6.00m , with 18.0m penetration depth 3. MS Shoe shall be 250mm x 250mm x 8.5kg and MS Head shall be 250mm x 250mm x 3kg 4. Test pile shall be carry out in sequence with group testing to be carry out first. The test load to twice working load shall be maintained for 24 hours. Load test shall be carry out for 1 no. on a 5 pile group and 2 no. on a 6 pile group. 5. Working load shall be 45 tonnes per pile.
P5	5	4	
P6	6	6	

Table 1.0/ Jadual 1.0

Based on the Table 1.0, answer all the questions below.

Berdasarkan Jadual 1.0, jawab semua soalan di bawah.

CLO1
C2

- (a) Describe Clause E.5.1 (iv) for piling works.
Huraikan Fasal E.5.1 (iv) untuk kerja-kerja cerucuk.

[3 marks]
 [3 markah]

- CLO1
C3 (b) Prepare the quantity measurement for piling works related to E.5.7 and E.5.9 **ONLY**.
*Sediakan pengukuran kuantiti bagi kerja-kerja cerucuk yang berkaitan dengan Fasal E.5.7 dan E.5.9 **SAHAJA**.*

[14 marks]
[14 markah]

- CLO1
C4 (c) Conclude all measured quantities in **Question 1(b)** as the bill of quantities.
*Rumuskan semua kuantiti terukur dalam **Soalan 1(b)** sebagai senarai kuantiti.*

[8 marks]
[8 markah]

QUESTION 2

SOALAN 2

Based on the Drawing No. **DCQ40204/SF/01**, answer all the questions below.

*Berdasarkan Lukisan No. **DCQ40204/SF/01**, jawab semua soalan di bawah.*

- CLO1
C2 (a) Describe the method of measurement for mirror.
Huraikan kaedah pengukuran cermin.

[3 marks]
[3 markah]

- CLO1
C3 (b) Prepare the quantity measurement for sanitary fittings.
Sediakan pengukuran kuantiti bagi lekapan sanitari.

[14 marks]
[14 markah]

- CLO1
C4 (c) Conclude all measured quantities in **Question 2(b)** as the bill of quantities.
*Rumuskan semua kuantiti terukur dalam **Soalan 2(b)** sebagai senarai kuantiti.*

[8 marks]
[8 markah]

QUESTION 3**SOALAN 3**

Based on the Drawing No. **DCQ40204/SF/01**, answer all the questions below.

Berdasarkan Lukisan No. **DCQ40204/SF/01**, jawab semua soalan di bawah.

CLO1
C2

- (a) Describe the method of measurement related to temporary boxing in concrete tabletop.

Huraikan kaedah pengukuran berkaitan kekotak sementara pada meja konkrit.

[3 marks]
[3 markah]

CLO1
C3

- (b) Prepare the quantity measurement for concrete tabletop (excluding finishing works).

Sediakan pengukuran kuantiti bagi meja konkrit (tidak termasuk kerja-kerja kemas).

[14 marks]
[14 markah]

CLO1
C4

- (c) Conclude all measured quantities in **Question 3(b)** as the bill of quantities.

*Rumuskan semua kuantiti terukur dalam **Soalan 3(b)** sebagai senarai kuantiti.*

[8 marks]
[8 markah]

SECTION B : 25 MARKS**BAHAGIAN B : 25 MARKAH****INSTRUCTION:****ARAHAN :**

This section consists of **ONE (1)** essay question. Answer the questions.

*Seksyen ini mengandungi **SATU (1)** soalan esei. Jawab semua soalan tersebut.*

QUESTION 1**SOALAN 1**

Based on the Drawing No. **DCQ40204/SWV/01**, answer the questions below.

*Berdasarkan Lukisan No. **DCQ40204/SWV/01**, jawab semua soalan di bawah.*

CLO1
C3

- (a) Prepare the quantity measurement for soil, waste, and vent pipe element.

Sediakan pengukuran kuantiti untuk elemen paip najis, air sisa dan pengudaraan.

[15 marks]

[15 markah]

CLO1
C4

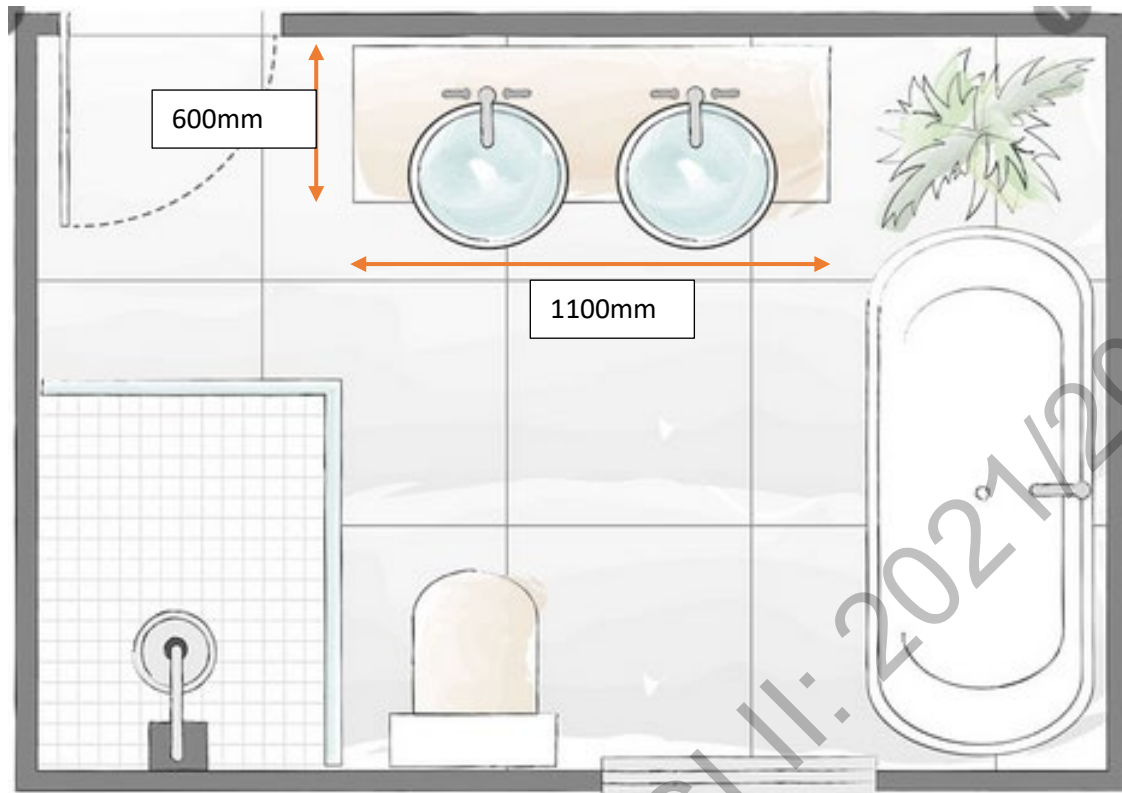
- (b) Conclude all measured quantities in **Question 1(a)** as the bill of quantities.

*Rumuskan semua kuantiti terukur dalam **Soalan 1(a)** sebagai senarai kuantiti.*

[10 marks]

[10 markah]

SOALAN TAMAT



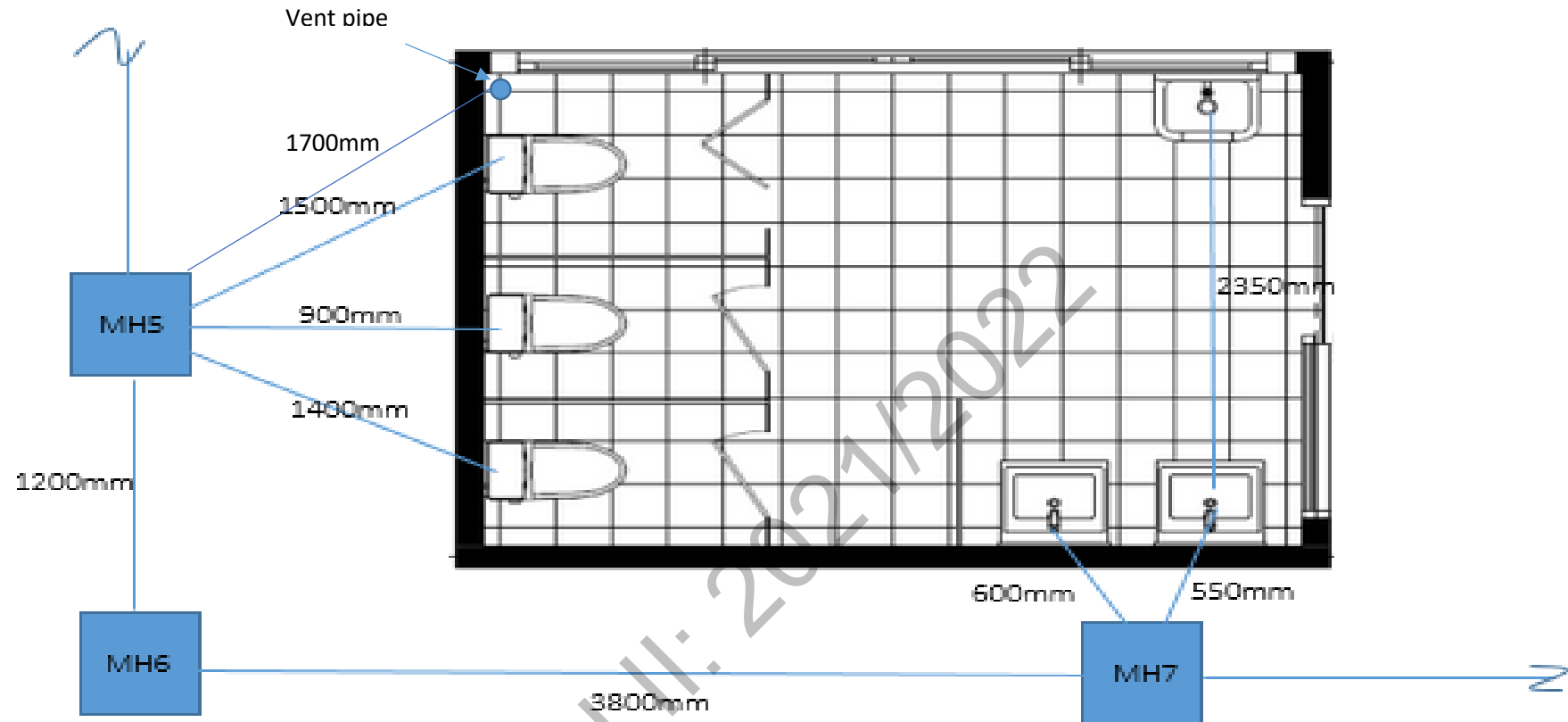
Note: Sanitari fittings

1. All sanitary fittings and accessories (American Standard or other equal and approved) unless otherwise stated shall be in white vitreous China.
2. Mirror shall be 2 nos of 600mmx600mm first quality 6mm thick polished plate glass mirror fixing to and including 13mm thick waterproofed plywood backing with aluminium frame and rubber gasket all round and chrome plated screws including plugging and screwing plywood backing to tiled wall
3. Basin size shall be 300mm dia
4. Bath tub size shall be 1050mmx500mm

Note: Concrete Counter top

1. Thickness of concrete counter top shall be 150mm.
2. Concrete shall be grade 30
3. Fabric reinforcement shall be grade A7
4. Finishes shall be marble laid in 13mm thick backing screed.

Project title :-	Drawing No.
Proposed single story bungalow at Teluk Rumba, Kelantan	DCQ40204/SF/01



Note:

1. Soil pipe shall be 100mm diameter upvc
2. Waste pipe shall be 75mm diameter upvc
3. Depth of excavation shall be 750mm from ground level.
4. Vent pipe shall be 100mm diameter upvc fixed to wall
5. High of wall shall be 3500mm
6. Cowl wire shall be fixed on the top of 100mm diameter pipe 900mm from roof level.

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