QUIZ- Version-MTM Standards Induction for the Signal *Construct* Roles Version 1.1, 2018

Applicant Name: _____

RSW number _____

It is a requirement of the MTM Signals, CS&C, and Project Competency Management system for all RSW to be familiar with, and understand where to locate technical standards, signalling standard documents and plans, technical information, competencies and MTM latest updates.

A acceptance or pass mark of **80% or greater** is required for this "Question and Answer" Quiz (require minimum of **16 or more correct** answers)

These questions are not to be regarded as proof of competency with MTM. (This is reviewed and assessed as a separate exercise with the RSW).

For your information.

MTM standards, and other MTM technical information is found at the website, https://documentportal.metrotrains.com.au/Pages/default.aspx

Note. In response to PTV's Industry Announcement regarding the VRIOGS Retirement from 30th June 2018, MTM has rebadged selected VRIOGS to ensure a smooth, transparent transition from the retirement of VRIOGS to a full suite of MTM Engineering Standards/Specifications applicable to Melbourne Metropolitan Rail Network. The technical contents of the rebadged VRIOGS are still relevant to Melbourne Metropolitan Rail Network.

Always check the latest L1-CHE-GDL-005 Engineering Standards Listing for Engineering Standards applicable to MTM network. It is available on Chief Engineer's Policies and Procedures page on the Depot or the MTM's Document Portal. If you find an MTM document referencing a VRIOGS, please refer to the latest L1-CHE-GDL-005 Engineering Standards Listing for a translation, which is available on Chief Engineer's Policies and Procedures page on the Depot or the MTM's Document Portal.

Standard drawings, VRIOG standards and other plans are found at the link (registration with DMS is required to access this website), https://dms.ptv.vic.gov.au/Dms/Account/LogIn?ReturnUrl=%2fDms%2f

The Metro Trains Melbourne Academy, competency and RSW site containing all competency information and MTM competency documents such as Statement of competency forms,Checklists, competency matrix, Competency Manuals, Signal Standards induction (Quiz) and update bulletins are found at the website, http://www.metrotrains.com.au/rail-safety-worker-competence

Questions

Question – 1

In the MTM L1-CHE-SPE-297 standard, name the clause and specified Category in relation to Environmental Factors and temperature.

1. Clause 4.2 – Category B4
2. Clause 5.1
3. Clause 5.5
4. Clause 4.4 – Category B4

Question – 2

In the MTM L1-CHE-MAN-003 Signals Rail Safety Worker Competence name the clause that relates to Subject Matter Experts (SME) and the document that Metro issue to all SME's.

1. Clause 12.4 – Metro letter of authorisation
2. Clause 7.4 – Metro Statement of Competency
3. Clause 14.1 – Metro Work Experience Record
4. Clause 6.7.1 – Metro Checklist

Question – 3

In the MTM document L1-NPD-PRO-002 Works Readiness Procedure what is the correct business rule that relates to the issued for construction (IFC) design for all signalling works, and the "T" number of weeks that IFC design must be approved before the deadline?

1. Business rule #1 and 5 weeks
2. Business rule #2 and 3 weeks
3. Business rule #3 and 4 weeks
4. Business rule #4 and 8 weeks

Question – 4

In the MTM document L1-CHE-PLA-004 MSPM 030600-01 Signal Cable Management Strategy, what section can the cable insulation values be found and also the values for existing cable core to core to earth insulation?

1. Section 8.3 (c)
2. Section8.4 (2a)
3. Section 10 table 1
4. Section 10 table 2

Question – 5

In what MTM document can the requirements for Removal of redundant signalling wiring and equipment be found?

1. MTM L1-CHE-SPE-069
2. MTM L1-CHE-SPE-073
3. MTM L1-CHE-SPE-043
4. MTM L1-CHE-STD-070

Question – 6

In which MTM document can the list of the MTM Chief Engineers Standards be found?

1. L1-CHE-GDL-005
2. L1-CHE-GDL-009
3. MTM L1-CHE-SPE-069
4. L1-NPD-PRO-002

Question – 7

In which two MTM documents can the signalling principles and configuration requirements, and the signal sighting standards be found?

1. L1-CHE-STD-036 and L1-CHE-STD-073
2. L1-CHE-STD-036 and L1-CHE-STD-004
3. L1-CHE-STD-072 and L1-CHE-STD-064
4. L1-CHE-STD-004 and L1-CHE-STD-070

Question – 8

In which MTM standard can the Requirements for MTM construction of cable route and signalling civil works be located?

1. L1-CHE-STD-043
2. L1-CHE-STD-036
3. L1-CHE-GDL-017
4. L1-NPD-PRO-002

Question – 9

In the MTM document L1-CHE-STD-016 MEST 000002-05 Track Bonding for Signalling and Traction Return Current, which section refers to signalling bonding?

1. Section 8.1
2. Section 9.2
3. Section 16
4. Section 18

Question – 10

In the MTM document L1-CHE-SPE-154 3.3 Kv Essential Services Distribution System, where can the signal power supply section be located?

1. Section 7.6
2. Section 10.2
3. Section 11.1
4. Section 13

Signal Construct Questions

Question – 11

In the MTM document L1-CHE-STD-004 Signal Sighting Standard, where can the height of the A arm signal aspect be located and what is the height?

1. Section 8.2 and 6 metres above rail
2. Section 8.3 and the A arm signal aspect should be placed at 4.5 metres from the top of the adjacent rail
3. Section 8.3 and the A arm signal aspect should be placed at 5.5 metres from the top of the adjacent rail
4. Section 8.4 and at 6.5 metres above rail

Question – 12

In the MTM document L1CHE-STD-036 Signalling Principles and Configuration Requirements, where can the position of signals in relation to overhead wiring air gaps and section switches be located?

1. Section 6
2. Section 7.1 (4)
3. Section 7.1 (9)
4. Section 7.6

Question – 13

In which document can the MTM Chief Engineers directive on the 54 hour suspension for contaminated rail be found?

1. L1-CHE-GDL-004
2. L1-CHE-GDL-008
3. L1-CHE-INS-035
4. L1-CHE-GDL-005

Question – 14

In the MTM standards name the standard that relates to CSEE track circuits and the section related to installation.

1. MTM L1-CHE-SPE-277 section 3
2. MTM L1-CHE-SPE-307 section 10
3. MTM L1-CHE-SPE-288 section 7
4. MTM L1-CHE-SPE-307 section 6

Question – 15

In which document can the MTM requirement for spares for new assets be located?

1. L1-CHE-GDL-001
2. L1-CHE-STD-004
3. L1-CHE-STD-006
4. L1-CHE-GDL-009

Question – 16

In the MTM document L1-CHE-INS-035 what is the correct clause that relates to a signalling interlocking being installed in a Relocatable Equipment Building (REB)?

1. Clause 16c)
2. Clause 9 d)
3. Clause 7c)
4. Clause 8a)

Question – 17

What MTM standard relate to the earth resistance being measured at the main earth terminal block, and that it shall not exceed XX ohms at any location under all weather conditions.

1. MTM L1-CHE-SPE-069 and 0.5 ohms
2. MTM L1-CHE-SPE-279 and 1 ohm
3. MTM L1-CHE-SPE-070 and 5 ohms
4. MTM L1-CHE-SPE-255 and 10 ohms

Question – 18

In what MTM document can the requirements for Metropolitan Train Stabling be found?

1. L1-CHE-STD-043
2. L1-CHE-STD-001
3. L1-CHE-STD-004
4. L1-CHE-STD-009

Question – 19

In what MTM document can the allowable type signal masts within Metro areas be located?

1. L1-CHE-GDL-009
2. MTM L1-CHE-SPE-070
3. L1-NPD-PRO-002
4. L1-CHE-GDL-074

Question – 20

MTM L1-CHE-STD-070 - Specification for Signalling Supply, Construction and Installation
In regards to mechanical digging equipment, they shall not be utilised within X,XXX mm of an existing signalling service

1. 2,200
2. 2,500
3. 2,000
4. 2,250

Score _____ / 20

Note-requires 80% correct answers to pass (16 or more correct answers)

Assessment Result

Circle the assessment outcome

Passed

Not Passed

Comments

MTM Approved Signals Assessor to complete as assessor of the Standards Induction

RSW number _____

Signature: _____

Name: _____

Date: _____

RSW Applicant to complete as acceptance of Standards induction assessment

Signature: _____

Name: _____

Date: _____