

High Speed Rail Infrastructure Advanced Technician - Track EPA Mock Knowledge Test Mark Scheme (M-EPA-HSRITR4001)

Answers for the multiple-choice questions (Q1-Q20) on the High Speed Rail Infrastructure Advanced Technician - Track mock test (M-EPA-HSRITR4001) are:

Question	Correct answer
1	B
2	B
3	B
4	A
5	C
6	A
7	B
8	D
9	B
10	B

Question	Correct answer
11	A
12	C
13	D
14	C
15	A
16	C
17	C
18	A
19	B
20	D

Answers for the multiple-choice questions (Q21-Q25) on the High Speed Rail Infrastructure Advanced Technician - Track mock test (M-EPA-HSRITR4001) are:

You are designing and planning a new track installation project. There are several pieces of legislation, specific to the construction and rail industry, that you must follow.

- 21) Identify the primary piece of legislation you must follow and describe why it applies to high-speed rail projects. (4 marks)
- 22) Identify 2 other pieces of legislation that also apply to high-speed railway projects and describe why they are relevant. (6 marks)

Q	Answers include:	Max Marks	Criterion
21	1 mark for identifying CDM, up to 3 marks for a suitable description of why it applies	4	KTR 1.1
	Construction Design and Management (CDM) Regulations 2015 apply to the construction of any project including track installation that is likely to take more than 500 person-days, last longer than 30 working days and have more than 20 workers working simultaneously at any point in the project. http://www.legislation.gov.uk/ukxi/2015/51/regulation/6/made	4	
22	1 mark for each suitable piece of legislation identified (max 2), up to 2 marks for each suitable description of why they are relevant (max 4)	6	KTR 1.1
	The Planning and Compulsory Purchase Act 2004 might be required to plan for spatial risks with large projects. https://www.hse.gov.uk/societalrisk/accountability-societal-risk-major-hazard-sites.pdf	3	
	The Control of Noise at Work Regulations 2005 will be required once construction work begins, as the installation is likely to create noise. As works begin, consider the management and control of noise in the workplace. https://www.hse.gov.uk/pUbns/priced/l108.pdf	3	

It is important that temporary works are carefully designed, planned, coordinated and supervised.

- 23) Explain the purpose of temporary works on high-speed rail construction projects. (4 marks)
- 24) Describe the temporary works that may be required for providing access from a main road to a high-speed rail construction site. (3 marks)
- 25) What considerations need to be made before temporary works begin on a track installation? (3 marks)

	Answers include:	Max Marks	Criterion
23	1 mark for each suitable point (max 4)	4	KTR12.1
	<p>Temporary works provide engineered solutions to support permanent works during the construction process or to support plant and equipment or provide access. Typically, a temporary road will be built to allow transport of goods and materials to and from the site. Excavations must be made to embed pipework such as services and drainage and scaffolding erected for safety reasons during the construction process.</p> <p>https://www.hse.gov.uk/construction/faq-temporary-works.htm</p> <p>https://www.hse.gov.uk/construction/safetytopics/excavations.htm</p> <p>https://www.hse.gov.uk/comah/sragtech/techmeastraftic.htm</p>	4	
24	1 mark for each suitable point (max 3)	3	KTR12.1
	<p>Temporary roads may need to be built during the construction phase to enable transport to access the site from public highways.</p> <p>Roads should be designed to accommodate the largest vehicles that use them in respect of pavement construction, width, radius, gradient, clearance and visibility.</p> <p>Access routes on-site are required for pedestrians, cyclists and road traffic.</p>	1 1 1	

25	1 mark for each relevant point (max 3)	3	KTR12.1
	<p>A temporary works coordinator is appointed for the project.</p> <p>Temporary works are only carried out in accordance with the methods, drawings or specifications previously approved by the authorised representative.</p> <p>For all temporary works likely to affect the safety of the railway the designs will be submitted in accordance with the standards set by Network Rail.</p> <p>Design calculations will be supported by forms, where it is deemed that failure of the temporary works could affect the safe operation of the railway.</p>	3	