

# Tutor Copy Only

## End-point Assessment

### Mock Assessment Model Answer Paper A

#### Gas Network Team Leader – Main Layer

Company: Northern Gas Networks

Duration: 1 hour 30 minutes

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**Q1 Precautions must be taken when PE jointing in air temperatures below what temperature?**

- a) - 5°C
- b) - 2°C
- c) 0°C
- d) 1°C

X

**Q2 Once the surface of a PE pipe to be jointed has been prepared, what must you not do?**

- a) Prepare fittings
- b) Touch the surface
- c) Fit the coupler
- d) Support the pipe with clamps

X

**Q3 What is the minimum separation distance between service top tees fitted to a main?**

- a) 50mm
- b) 100mm
- c) 150mm
- d) 75mm

X

**Q4 Butt fusion machines must not be used in which circumstances?**

- a) In any atmosphere above 6% gas in air
- b) In gaseous or potentially gaseous atmospheres
- c) Outside of buildings
- d) Inside buildings

X

**Q5 When must checks be applied to the heating plate of a butt fusion machine?**

- a) At the start of the job
- b) Only when damage is suspected
- c) Before the power supply is connected
- d) At the end of the job

X

**Q6 Any PE pipes to be butt fused must be what?**

- a) The same length
- b) The same diameter
- c) The same SDR
- d) The same diameter and SDR

X

**Q7 What is the purpose of removing the external bead and carrying out visual checks?**

- a) To confirm the bead width is OK
- b) To confirm the bead is even
- c) To check the bead for contamination
- d) So it can be sent away for checking

X

**Q8 How is a bead width checked?**

- a) With a steel ruler
- b) With a bead width gauge
- c) By eye
- d) With a calliper gauge

X



**Q9 What must you not do to an electrofusion fitting?**

- a) Connect it to the main
- b) Leave it in it's protective bag until ready for use
- c) Scrape the surface containing the heating element
- d) Check it for signs of damage

X

**Q10 When checking the quality of an electrofusion weld, what should you check for?**

- a) Check the fusion indicators have risen
- b) Check the fusion indicators
- c) Confirm there is wire showing from the end of the fitting
- d) Check the fusion indicators have risen and no melted PE is coming out

X

**Q11 Where a Hydraulic re-rounding clamp is used on larger diameter pipes, how long should it be left closed for?**

- a) 30 minutes
- b) 20 minutes
- c) 10 minutes
- d) 5 minutes

X



**Q12 Before scraping takes place, you must clean the surface of the pipe, what should not be used to do this?**

- a) Dry Rags
- b) Alcohol wipes
- c) Wet rags
- d) Paper towel

X

**Q13 Threaded joints must only be made on steel pipework up to what maximum diameter and pressure?**

- a) 50mm - Low Pressure
- b) 80mm - Low pressure
- c) 50mm up to 2 bar
- d) 80mm up to 2 bar

X

**Q14 When inserting a main the surface damage of the new main must not exceed what percentage of the pipe wall thickness?**

- a) 5%
- b) 10%
- c) 15%
- d) 20%

X

**Q15** When "pushing" a main why must each pipe / coil be marked at appropriate intervals as it is inserted?

- a) To determine how much is left to push
- b) So you know where the PE insertion head is
- c) To determine if there is enough pipe
- d) To estimate the time left to complete the job

X

**Q16** When live inserting a main, the main has been flow stopped, what must be fitted to the section to be inserted?

- a) A live head
- b) A cap end
- c) A gland box
- d) A suitably restrained cap end

X

**Q17** Prior to insertion, the new PE main is subject to an integrity test of what pressure?

- a) Not greater than 40 mbar
- b) Not greater than 100 mbar
- c) Not greater than 350 mbar
- d) 1.5 x Operating pressure

X

**Q18** Which of the following pipes would have the thickest pipe wall?

- a) SDR26
- b) SDR11
- c) SDR21
- d) SDR17.6

X



**Q19** When preparing to use a mole to lay a main, what should you do where the depth of utility plant cannot be verified?

- a) Cable locate
- b) Consult drawings
- c) Dig trial holes to determine depths
- d) Mark the position of identified plant

X

**Q20** Before drilling a connection from an under-pressure tee what activity must be carried out?

- a) Let by test on the valve
- b) Pressure test of the UPT
- c) The UPT is tested with approved leak detection solution
- d) Pressure test to the UPT and a let-by test to the valve

X

**Q21** What is used to provide temporary continuity of gas supplies during a flow stop operation?

- a) A by-pass
- b) A rider
- c) A back rail
- d) A feeder

X

**Q22** Single squeeze off can only be used on low pressure mains up to what diameter?

- a) 90mm
- b) 125mm
- c) 180mm
- d) 355mm

X

**Q23 What is the purpose of the vent installed between squeeze offs?**

- a) To confirm the squeeze off has sealed.
- b) To release any trapped gas
- c) To make sure the gas is at atmospheric pressure
- d) To release any excess pressure

X

**Q24 What is the minimum test pressure of a low-pressure gas main?**

- a) 75mbar
- b) 100mbar
- c) 250mbar
- d) 350mbar

X

**Q25 What is the maximum temperature stabilisation period for a Low Pressure 355mm gas main?**

- a) 10 minutes
- b) 30 minutes
- c) 1 hour
- d) 2 hours

X

**Q26 What is the maximum permitted pressure loss of a low pressure main when using an electronic gauge?**

- a) 1mbar
- b) 2mbar
- c) 3mbar
- d) 0mbar

X





**Q27 At what percentage above the test pressure should a pressure relief device operate when testing a low pressure main?**

- a) 5%
- b) 10%
- c) 15%
- d) 20%

X

**Q28 What is the correct colour for a medium pressure test - standpipe?**

- a) Orange
- b) Blue
- c) Red
- d) Yellow

X

**Q29 Under what circumstances are you not allowed to fuse PE tapping tees to a PE main?**

- a) When making a service connection
- b) When preparing to commission a main
- c) During a pressure test
- d) When preparing to test a PE main

X

**Q30 On completion of a pressure test, why should the pressure be released from the extremity of the main?**

- a) To confirm the entire main was tested
- b) To minimise noise at the test point
- c) To allow the purge of gas in to the main
- d) To clear any water or debris in the main

X

**Q31 You are setting up traffic control using a give and take system. Under which of the following parameters can this system be used?**

- a) Where the speed limit is 60mph or less
- b) Where the maximum coned area length is 80m or less
- c) Where the maximum traffic flow is 42 vehicles over 3 minutes
- d) Where the speed limit is 30mph or less

X

**Q32 You arrive on site that already has a streetworks' signing and barrier system in place, when must you check it for compliance with the red book?**

- a) Never as it will be set out OK
- b) From time to time throughout the day
- c) When you arrive, before any work commences
- d) As you leave the site

X

**Q33 Vehicles used on streetworks activities should have what?**

- a) Roof mounted flashing amber lights
- b) Amber flashing lights
- c) Chevron markings covering the whole rear of the vehicle
- d) Rear chevron markings and roof mounted flashing amber lights

X

**Q34 When should plant avoidance equipment be used?**

- a) Once the excavation has started
- b) Before any excavation work is undertaken
- c) Only when there are visible signs of plant in the ground
- d) On completion of the works on site

X

**Q35 Which of the following would be deemed a routine operation?**

- a) A new 90mm MP main
- b) Testing and purging a 400mm LP main
- c) 90mm branch saddle connection to a 180mm LP main
- d) 25mm Connection from a 63mm main

X

**Q36 Which of the following statements is true about riders?**

- a) They are used to maintain supply
- b) They are used for commissioning
- c) They are used to purge out of
- d) They are only used to pressurise mains

X

**Q37 Which of the following would be a non-routine operation?**

- a) 90mm LP branch from a 415mm parent main
- b) 8" bag stop operation on an LP main
- c) 90mm branch from a 180mm MP main
- d) Single squeeze off on a 63mm MP service

X

**Q38 When could asbestos be considered as safe?**

- a) When it is buried but damaged
- b) When undamaged and in good condition
- c) When a small amount is being removed
- d) When exposed to atmosphere with minor damage

X

**Q39 What is the first principle of the Manual handling regulations?**

- a) Assess the load
- b) Share the task with a colleague
- c) Reduce the weight of the load
- d) Avoid manual lifting where possible

X

**Q40 You are working in an excavation that is 3.5 metres deep. A full support system is in place, which of the following safety regulations will apply to the excavation?**

- a) Health Safety and Welfare Regulations
- b) Pressure System Safety Regulations
- c) Gas Safety Management Regulations
- d) Working at Height Regulations

X

**Q41 Which of the following is True?**

- a) An individual's behaviour is a major contributory factor to safety
- b) Hazardous substances are the most common causes of injury
- c) PPE will protect individuals from any level of harm
- d) The only potential harm from electricity is burns

X

**Q42 From what level onwards must breathing apparatus be worn?**

- a) 10%LEL
- b) 15% LEL
- c) 20% LEL
- d) 25% LEL

X

**Q43 What colour and shape are COSHH symbols?**

- a) Square – Orange and Black
- b) Round – Red border
- c) Triangle - Yellow
- d) Diamond - Red Border

X

**Q44 In the workplace, who is responsible for maintaining health and safety?**

- a) Employees
- b) Employers
- c) Everyone
- d) The HSE

X

**Q45 Which of the following would require a permit to work?**

- a) Pressure testing a low pressure main
- b) Working in the highway
- c) Working in a deep excavation
- d) All lifting operations

X

**Q46 The CDM regulations require persons working on gas pipelines to do what?**

- a) Notify all works to the HSE
- b) Provide safety packs and instructions
- c) Raise site specific risk assessments
- d) Have permits to work

X

**Q47** Where a COSHH symbol is an exclamation mark ! what does this indicate about the substance?

- a) It is toxic
- b) It is hazardous to the environment
- c) It is a warning such as a skin irritant
- d) It is corrosive

X

**Q48** What are the major contributing factors of HAVs?

- a) The overall level of vibration
- b) The magnitude of and exposure to vibration
- c) The duration of exposure to vibration
- d) Working in cold weather

X

**Q49** Which is the correct order for priority actions when dealing with a reported gas escape?

- a) Safeguard life, safeguard property, locate and secure the escape, carry out final site investigation, report status of work
- b) Locate and secure the escape, safeguard life, safeguard property, report status of work, carry out final site investigation
- c) Safeguard life, safeguard property, locate and secure the escape, report status of work, carry out final site investigation
- d) Report status of work, locate and secure the escape, safeguard life, safeguard property, carry out final site investigation

X

**Q50** What is the typical Oxygen low alarm level of a personal monitor?

- a) 19.5%
- b) 21%
- c) 20.5%
- d) 23%

X