Unit 4 – Hydrogen Distribution and Safety

TEST PAPER

Name :- …………………………………………

Date :- ……………………………………….
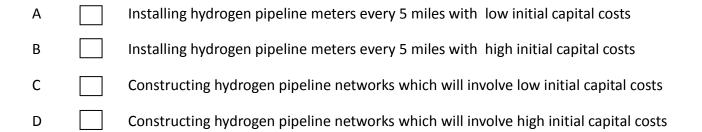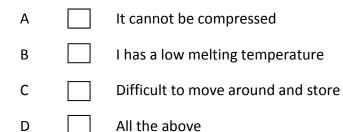
Instructions: -

- **Try to answer all questions**
- **Read each question carefully and choose the correct answer: A,B,C or D**
- **Make sure you only mark one answer for each question**

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TEST

1) Scaling up hydrogen infrastructure for mass hydrogen distribution and delivery will lead to:-

A ☐ Installing hydrogen pipeline meters every 5 miles with low initial capital costs

B ☐ Installing hydrogen pipeline meters every 5 miles with high initial capital costs

C ☐ Constructing hydrogen pipeline networks which will involve low initial capital costs

D ☐ Constructing hydrogen pipeline networks which will involve high initial capital costs

2) Identify one disadvantage of using hydrogen energy?

A ☐ It cannot be compressed

B ☐ I has a low melting temperature

C ☐ Difficult to move around and store

D ☐ All the above

(1.1)

3) Hydrogen is expensive as it requires:-

A ☐ A lot of work to free if from other elements

B ☐ A lot of work to join it with other elements

C ☐ A lot of work to free if from other molecules

D ☐ A lot of work to join it with other molecules

(1.1)

4) The least expensive way to deliver large volumes of hydrogen is by:-

A ☐ High pressure tube trailers

B ☐ Liquefied hydrogen tankers

C ☐ Pipeline

D ☐ Canisters

(1.2)

5) Cryogenic liquefaction enables hydrogen to be transported:-

A ☐ More efficiently over longer distances by truck, railcar, ship, or barge

B ☐ More efficiently over shorter distances by truck, railcar, ship, or barge

C ☐ More efficiently over longer distances by pipeline

D ☐ More efficiently over shorter distances by canisters

(1.2)

6) When handling a hydrogen cylinder?

A ☐ Do not open the hydrogen cylinder valve before connecting it

B ☐ Do not put the cylinder outside

C ☐ Do not open the hydrogen cylinder valve if it's raining
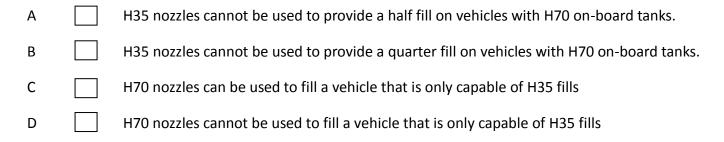
D ☐ Do not put the cylinder on its side

(2.1)

7) Which statement is correct?

A ☐ Hydrogen is sold by mass(kg) and dispensed under pressure at either 350 or 700 bar

B ☐ Hydrogen is sold by mass(kg) and dispensed under pressure at either 950 or 1250 bar

C ☐ Hydrogen is sold by volume (m3) and dispensed under pressure at either 350 or 700 bar

D ☐ Hydrogen is sold by volume (m3) and dispensed under pressure at either 950 or 1250 bar

(2.1)

8) Which statement is correct?

A ☐ H35 nozzles cannot be used to provide a half fill on vehicles with H70 on-board tanks.

B ☐ H35 nozzles cannot be used to provide a quarter fill on vehicles with H70 on-board tanks.

C ☐ H70 nozzles can be used to fill a vehicle that is only capable of H35 fills

D ☐ H70 nozzles cannot be used to fill a vehicle that is only capable of H35 fills

(2.1)