



Name: .....

Code no: .....

**1- A- Read the following passage and then answer the questions:** **(8 marks)****A- Answer the following questions**

1. Trapped in underground rocks
2. Matt enjoys being an engineer because he gets to solve problems. He likes thinking about "how to approach complex issues and develop intelligent solutions." He also likes seeing his designs built in the real world.
3. Matt needs to figure out how many gas pipes are needed, how big the pipes need to be, and how much gas needs to travel through the pipes

**B Choose the best answer :-**

- 1- D- make sure the pipes can carry the maximum amount of gas used by customers throughout the year
- 2- B- guess

**2- Say True or False with Correction** **(5 marks)**

- 1- False Rainbow is a result of condensed water, which refract sunlight.
- 2- False Irrigation takes up 90 percent of water in developing countries.
- 3- True
- 4- False Water sticks to itself because of its polar nature
- 5- False transpiration comes from land planets and animals.

**3- Fill each space with one of the following words:** **(5 marks)**

low – join – lukewarm — high- organic -  
 inorganic –hail – hydrologic – split- fresh

- 1- Lukewarm
- 2- Split
- 3- Low
- 4- Hail
- 5- Organic

**4- Answer the following questions: -****(10 Marks)**

- 1- Water functions as solvent to many chemical substances and cooling industrial, transportation and agriculture
- 2- the boiling point of water is directly related to the barometric pressure as example the water boil in the top of Mt .Everest at 68 C compared to 100 C at sea level . while in the deep ocean or near geothermal vent water boiling points can be hundreds and the

water remain liquid

3- due to the easy accessibility via water and result expansion of trade .

4- - *Hydrophilic* ( water loving ) : substances that will mix well and dissolve with water ( salts , sugars , acids , alkalis and some gases ( oxygen , carbon dioxide )

- *Hydrophobic* ( water fearing ) : substances that don't mix well with water ( fats and oils )

5- Water is transparent , and thus aquatic plants can live within water because sunlight can reach them .

5- Write a paragraph of ten lines on:-

(6 Marks)

" Egyptian Authorities are going back to the playbook to solve the problem of the century: where do we get more drinking water ? ,

Discuss this scientific fact related to the article you have studied

Any reasonable answers are accepted

**6- Translate into Arabic:-**

Any reasonable answers are accepted

**(6 Marks)**

*Good luck*