Civil engineering

I-Text book questions:

Answer the following questions:-

1-What is the difference between an arch dam and a concrete gravity dam?
2-How can the hydraulic jump affect on a dam?
3-What is meant by the terminology "spillway"?
4-Some water escapes by moving through the small openings in the concrete. This movement, which will weaken the structure, is called…………….
5-If a dam can resist all the forces that are applied, it has ………………..
6-The branch of civil engineering which deals with the disposal of wastes is called ………………………
7-The newspapers referred to Edison as the wizard of Menlo Park.
   "Wizard" means ………………….

II-Structure and Grammar:-

Do as shown in brackets:

1-Some one warned us not to go out alone. (Change into Passive)
2-Once I had understood the lesson, I answered the questions (till)
3-They finished their dinner then they drank coffee. (After)
4-IF the moon moves between earth and sun we (get) a solar eclipse. (Correct the verb)
5-It is a long time since I lubricated the gears. (for)

Choose the correct answer:

6-This tourist wants to know how long (does it take /it is taking /will it take /it takes) to go to the citadel.
7-Alittle boy named "Zaki"(is lost /lost /got lost /has lost) on the crowded beach last summer.
8-Had I known his address, I (would send /will have sent /would have sent /had sent) him a letter.
9-I listen to the radio, but I hardly (any /anyone /anything /anywhere /ever) watch television.
10-Everybody at the party was very (colorful /colorfully /colors /color) dressed.
Ill- Reading Comprehension
Read the following passage then answer the questions:

Everything on the earth is made up of molecules. These molecules are in the form of solids, liquids, and gases. These solids, liquids, and gases are called matter. As you can see, everything on the earth is called matter. Over 100 elements have been identified. Most of the common items that we use everyday are made of more than one element. Water has two elements: hydrogen and oxygen. Water and any other matter, can be in the form of a solid (ice), a liquid, or a gas (steam). Its form depends on its temperature. It is possible to transform or change the form of any matter by raising or lowering its temperature.

Metals in solid form are used extensively in the technical field. Steel is used in constructing buildings, bridges, and streets as well as in making small items to be used around the house. Aluminum is found in automobiles, housewares, and radio and TV sets. It is also used for all kinds of wiring, in tubing and connections, and in fittings. Copper and aluminum are commonly used for wiring since they are good conductors of electricity and can be bent easily to any shape. Silver is used in some technical areas because it is such an excellent conductor, but it's really too expensive to use except in special cases. There is very little silver in US coins today for the same reason. Most items in use today are made of alloys instead of pure metals. These substances are less expensive since the cheaper metals can be combined with the more expensive ones to serve the same purpose. Brass is a common alloy made up of copper and zinc.

(A) Choose the correct answer:
1- How many elements have been identified?
   A- 100           B- more than 100.          C- less than 100.
2- One of the uses of steel is:
3- Why isn't silver used very much in wiring?
   A- It's a good conductor.  B- It's expensive.  C- It's a bad conductor.

(B) Answer the following questions:
1- How can we change the form of any matter?
2- "Most items in use today are made of alloys instead of pure metals" explain why and give example(s).

(VI) Writing:
Rewrite the passage using one subject form:

First, I took a long glass tube. We close the tube at the top and it is then completely filled with water. Next you place it vertically in a large barrel half-full of water. When the bottom of the tube is opened, the water level in the tube only falls to a height of approximately 10 meters above the water level in the barrel. As a result, leave a vacuum in the upper part of the tube. The water in the tube is supported by the atmospheric pressure. We can therefore use the height of the column of water to measure atmospheric pressure. This is called Torricelli’s method of measuring atmospheric pressure and by which we can measure the weight of air above our heads.
Model Answer
Civil engineering

I. Text book

A. Answer the following questions:-

1- An arch dam curves upstream and is built at a point in the river where the force of the water can be transferred to the sides of the valley. A concrete gravity dam is a right-angled triangle which runs in a straight line across the valley and is heavy enough to resist the horizontal force of the water.

2- When the velocity of water suddenly increases, more water than usual flows towards the dam. This additional flow will cause a jump in the height of the water behind the dam. As a result the dam will have to withstand a greater amount of pressure. This greater pressure can weaken the dam.

3- Spillway is a channel or pipe through which excess water is conducted away from a dam.

4- seepage

5- stability

6- sanitary engineering

7- a man who is said to have magic powers (a magician).

II. Grammar and Vocabulary

Do as shown in brackets:

1- We were warned not to go out alone.

2- I didn't answer the questions till I had understood the lesson.

3- After they had finished their dinner they drank coffee.

4- get

5- I haven't lubricated the gears for a long time.

Choose the correct answer:

6- it takes

7- got lost

8- would have sent

9- ever

10- colorfully
III. Reading comprehension
Answer the following questions:

(A) 1- B- more than 100.
   2- A- constructing buildings.
   3- B- It's expensive.

(B) 1- By raising or lowering its temperature.
   2- Because alloys are less expensive since the cheaper metals can be combined with the more expensive ones to serve the same purpose e.g. Brass is an alloy of copper and zinc

IV- Writing a paragraph

Writing is assessed by the examiner.