Egypt-Japan University of Science and Technology Sample Entrance Exam (Undergraduate)

| Faculty of Engineering / International Business |
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| And Humanities | Subject: Logical Thinking

Question 1 : Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures?

Problem Figures:

(A) (B)
(C)
(D)
(E)
(1)


Answer Figures:
(2)
(3)
(4)
(5)

Question 2: Choose the image that completes the pattern.


Which of the shapes below replaces the missing box above?


Question 3: Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures?:

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A

B

C

D

E

Ouestion 4 : Four friends in the sixth grade were sharing a pizza. They decided that the oldest would get the extra piece. Randy is two months older than Greg, who is three months younger than Ned. Kent is one month older than Greg. Who should get the extra piece of pizza?
A. Randy
B. Greg
C. Ned
D. Kent

Question 5 : Read the following statements, and then decide which of the given conclusions logically follows from the two given statements?

Statements:
All trees are plants. All plants are green.
Conclusions:

1. Some plants are trees.
2. All green are plants.
3. Some green are trees.
A. Only (1) and (3).

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B. Only (2).
C. Only (2) and (3).
D. Only (1)

Question 6: A farmer plants only five different kinds of vegetables: beans, corn, kale, peas, and squash. Every year the farmer plants exactly three kinds of vegetables according to the following restrictions:

- If the farmer plants corn, the farmer also plants beans that year.
- If the farmer plants kale one year, the farmer does not plant it in the second year.
- In any year, the farmer plants no more than one of the vegetables the farmer planted in the previous year.
If the farmer plants beans, corn and peas in the first year, which of the following combinations must be planted in the third year?
A. Beans, peas, and squash
B. Beans, kale, and peas
C. Beans, corn, and squash
D. Kale, peas, and squash

Ouestion 7: Suppose you are given two clay balls of equal size and shape. The two clay balls also weigh the same. One ball is flattened into a pancake-shaped piece. Which of the statements is correct?
A. The pancake-shaped piece weighs more than the ball.
B. When something is flattened it loses weight.
C. The two pieces still the same.
D. The ball weighs more than the pancake-shaped piece.

Ouestion 8: Suppose that you test which kind of food your pet prefers. You offer the pet three different kinds of food: $\mathrm{X}, \mathrm{Y}$, and Z , at each meal, and presenting them all at the same time. After three weeks of observation, your data collection indicate that the pet ate the kind Z often than the kinds X or Y . What can you conclude from these results?
A. Your pet preferred kind Z, but you do not why.
B. Kinds X and Y taste bad.
C. Kind Y was the second favorite food for the pet.

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D. Kind Z is a bit cheaper.

Question 9 : Suppose that you are a scientist, and you wonder how you can increase the amount of crops in your country. You plan to study the factors that you think one of them might affect the amount of the crops produced. Which of the following suppositions could you test?
A. The greater the amount of fertilizer, the larger the amount of the crops produced.
B. As the amount of rainfall increases, the more effective of the fertilizer.
C. The greater the amount of the crops, the larger the profits for the year.
D. As the amount of corn produced increases, the cost of production increases.

Question 10 : Read the following statement, and then choose (A) if the argument is logically strong, or (B) if the argument is weak?

Statement: Should there be uniforms for students in the colleges in Egypt as in the schools?

## Arguments:

I. Yes, this will improve the atmosphere of the colleges as all the students will be decently dressed.
A. Strong Argument
B. Weak Argument
II. No. The college students should not be restricted and they should be left to choose their clothes for coming to the college.
A. Strong Argument
B. Weak Argument

