#### **SZABIST**

## MS and PhD in Computer Sciences

# **Sample Question Paper**

Total Marks: 100 Time: 90 Min.

The Entrance Test will comprise of online multiple choice questions (MCQs). You will select one answer from the choices given below each question. Different questions will be asked from each of the following areas:

- 1. English (30)
- 2. Quantitative (30)
- 3. Subject Knowledge (40)

## **SECTION I-ENGLISH**

## **I. Choose Correct Pair of Words**

- Q. He is usually \_\_\_\_\_\_, but today he appears rather \_\_\_\_\_.

  A. Happy, Humorous

  B. Strict, unwell
  - D. Easy, Comfortable

C. Tense, restless

E. None of the above

Correct answer: E

### II. Analogy

- Q. Fox: Cleverness
  - A. Goat: Kid
  - B. Man: Manikin
  - C. Monkey: Man
  - D. Peacock: Pride
  - E. None of the above

Correct answer: D

#### III. Synonyms

## Q. Opposite

- A. Reverse
- B. Upheaval
- C. Pungent
- D. Trash
- E. None of the above

Correct answer: A

## IV. INCOMPLETE SENTENCES

Q. My child was too \_\_\_\_\_\_ to understand the philosophical thoughts.

- A. Young
- B. Brave
- C. Vulnerable
- D. Faint
- E. None of the above

**Correct Answer: A** 

#### V. COMPREHENSION

Questions 5 is based on the following passage

Q. Scientists have been studying volcanoes for many years. They want to find ways to predict when volcanoes will erupt. Such knowledge could help protect people from a volcano's sudden burst of hot lava and ash. Although scientists can't say exactly when a volcano will erupt, they know that a slight change in the shape of the earth is one warning sign. Another is that some volcanoes emit a gas called sulfur dioxide before they erupt.

This story is mainly about

- A. becoming a scientist
- B. natural disaster
- C. the blessing of volcanoes
- D. predicting volcanic eruptions
- E. none of the above

**Correct Answer: D** 

# SECTION II-QUANTITATIVE REASONING

|    | In 1990 the populations of town A and town B were the same. From 1990 to 2000 the dation of town A increased by 60% while the population of town B decreased by 60%. It the population of town B was what percent of population of town A? |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A. | 39%                                                                                                                                                                                                                                        |
| B. | 36%                                                                                                                                                                                                                                        |
| C. | 40%                                                                                                                                                                                                                                        |
| D. | 60%                                                                                                                                                                                                                                        |
| E. | 25%                                                                                                                                                                                                                                        |
| Co | rect Answer: E                                                                                                                                                                                                                             |
| Q. | A country has a population growth rate of 10% per year. The population in 2010 was 200 Million, what was the population in 2012?                                                                                                           |
| A. | 210                                                                                                                                                                                                                                        |
| B. | 220                                                                                                                                                                                                                                        |
| C. | 240                                                                                                                                                                                                                                        |
| D. | 249                                                                                                                                                                                                                                        |
| E. | 242                                                                                                                                                                                                                                        |
| Co | rect Answer: E                                                                                                                                                                                                                             |
|    | SECTION III- Subject Knowledge (Computer Science)                                                                                                                                                                                          |
| Q. | Select the binary number which is equivalent to a decimal number - 5                                                                                                                                                                       |
| a) | 11111111111001                                                                                                                                                                                                                             |
| b) | 1111111111111111                                                                                                                                                                                                                           |
| c) | 1111111111111                                                                                                                                                                                                                              |
| d) | 111111111111000                                                                                                                                                                                                                            |
| e) | one of the above                                                                                                                                                                                                                           |
| Co | rect Answer: B                                                                                                                                                                                                                             |

| Q.                |      | Select the decimal number which is equivalent to a hexadecimal number $400$ |  |  |
|-------------------|------|-----------------------------------------------------------------------------|--|--|
| a)                | 409  | 96                                                                          |  |  |
| b)                | 2048 |                                                                             |  |  |
| c)                | 1024 |                                                                             |  |  |
| d)                | 512  |                                                                             |  |  |
| e)                | noi  | ne of the above                                                             |  |  |
|                   |      |                                                                             |  |  |
| Correct Answer: C |      |                                                                             |  |  |
| Q.                |      | Each node in a linked list has two pairs of and                             |  |  |
|                   | a)   | Link field and information field                                            |  |  |
|                   | b)   | Link field and avail field                                                  |  |  |
|                   | c)   | Avail field and information field                                           |  |  |
|                   | d)   | field Address field and link                                                |  |  |
|                   | e)   | None of the above                                                           |  |  |
| Correct Answer: A |      |                                                                             |  |  |
|                   |      |                                                                             |  |  |
| Q.                |      | When does top value of the stack changes?                                   |  |  |
|                   | a)   | Before deletion                                                             |  |  |
|                   | b)   | While checking underflow                                                    |  |  |
|                   | c)   | At the time of deletion                                                     |  |  |
|                   | d)   | After deletion                                                              |  |  |
|                   | e)   | None of the above                                                           |  |  |
| Correct Answer: D |      |                                                                             |  |  |
|                   |      |                                                                             |  |  |