Admission Test Pattern
(Grad Programs of Management Sciences Department)

Sir Syed CASE Institute of Technology

FALL 2022

Name: __________________________________________

Applicant ID: ________________________________________

Instructions:

1. Total time allowed to complete the test is 90 minutes.

2. The paper comprises three sections with a total of 100 questions.

3. Please pay attention to the instructor when instructions are being given.

4. Talking, whispering and glancing either ways is strictly prohibited.

5. You will be provided a rough work sheet which may be detached from the question paper for convenience but must be handed back to the supervisory staff on exam closure.

6. The instructor will tell you when to start and finish. Please listen carefully

7. ANSWER SHEET IS ATTACHED BY THE END OF QUESTION PAPER. DO NOT USE QUESTION PAPER FOR THIS PURPOSE, YOU WOULD NOT BE GRADED.

8. Any violation or ignorance of the instructions will disqualify you from the admission.

“Good Luck”
Section 1                     Marks 40

General Math

(Questions 1-40)

Question No. 1

Of the following, which is greater than \( \frac{1}{2} \)?

A. \( \frac{2}{5} \)
B. \( \frac{4}{7} \)
C. \( \frac{4}{9} \)
D. \( \frac{5}{11} \)

Question No. 2

If an object travels at five feet per second, how many feet does it travel in one hour?

A. 300
B. 3000
C. 72000
D. 18000

Question No. 3

What is the average (arithmetic mean) of all the multiples of ten from 10 to 190 inclusive?

A. 90
B. 95
C. 100
D. 105

Question No. 4

If \( f(x) = |x^2 - 50| \), what is the value of \( f(-5) \) ?

A. 75
B. 25
C. 0
D. -25
Section 2          Marks 20
Logic and IQ

(Questions 41-60)

Instruction (Q41-Q42): Each of following questions contains six statements followed by four sets of combinations of three. Choose the set in which the statements are most logically related.

Question No. 1

(a) No fishes breathe through lungs.
(b) All fishes have scales.
(c) Some fishes breed upstream.
(d) All whales breathe through lungs.
(e) No whales are fishes.
(f) All whales are mammals.

A.  abc
B.  bcd
C.  ade
D.  def

Question No. 42

(a) All men are men of scientific ability.
(b) Some women are women of scientific ability.
(c) All men are men of artistic genius.
(d) Some men and women are of scientific ability.
(e) Some men of artistic genius are men of scientific ability.
(f) Some women of artistic genius are women of scientific ability.

A.  acd
B.  ace
C.  def
D.  abc

Question No. 43

Two ducks and two dogs have a total of:

(a) 4 legs
(b) 6 legs
(c) 23 legs
(d) 12 legs

Question No. 44

Two numbers of the series 1, 6, 3, 5, 11 add up to:

(a) 4
(b) 5
(c) 1
(d) 18
The chief claim for the use of science in education is that it teaches a child something about the actual universe in which he is living, in making him acquainted with the results of scientific discovery, and at the same time teaches him how to think logically and inductively by studying scientific method. A certain limited success has been reached in the first of these aims, but practically none at all in the second. Those privileged members of the community who have been through a secondary or public school education may be expected to know something about the elementary physics and chemistry of a hundred years ago, but they probably know hardly more than any bright boy can pick up from an interest in wireless or scientific hobbies out of school hours.

As to the learning of scientific method, the whole thing is palpably a farce. Actually, for the convenience of teachers and the requirements of the examination system, it is necessary that the pupils not only do not learn scientific method but learn precisely the reverse, that is, to believe exactly what they are told and to reproduce it when asked, whether it seems nonsense to them or not. The way in which educated people respond to such quackeries as spiritualism or astrology, not to say more dangerous ones such as racial theories or currency myths, shows that fifty years of education in the method of science in Britain or Germany has produced no visible effect whatever. The only way of learning the method of science is the long and bitter way of personal experience, and, until the educational or social systems are altered to make this possible, the best we can expect is the production of a minority of people who are able to acquire some of the techniques of science and a still smaller minority who are able to use and develop them.

Questions 61-67 pertain to the Comprehension Passage

Question No. 61
Please suggest a suitable Title for the passage.

_____________________________________

Question No. 62
The author’s attitude to secondary and public school education in the sciences is

A. ambivalent
B. neutral
C. supportive
D. satirical
E. contemptuous
Comprehension Passage 2

Difficulty in communicating with others is a common problem associated with Alzheimer's disease. It is usually one of the symptoms displayed during the early stages of the illness. The affected person may not be able to make himself or herself understood or be able to understand what others are trying to say. If the Alzheimer patient has been covering up problems with communication, he may become angry or defensive when he cannot find the words to respond to questions or comments. Or he may appear uncooperative, when in fact he simply cannot understand what someone is trying to say. If you are having problems communicating with an Alzheimer patient, make sure that he is not suffering from a hearing impairment and keep the following in mind; the Alzheimer patient may forget within seconds even the information he understood; he may still be able to read but may be lost over the phone. Communication may be helped by combined use of signs, labels or written messages and oral instructions. It is wise to be aware that the person may understand more than he is able to express. Never talk about the patient as if he were not there. Always treat the Alzheimer patient with dignity and respect. Remember that he is an adult. Avoid talking down. Your sensitivity will be greatly appreciated.

Questions 68-72 pertain to the Comprehension Passage 2

Question No. 68

How does an Alzheimer patient probably feel when he cannot respond to questions?

(a) Frustrated
(b) Regretful
(c) Defeated
(d) Revengeful

Question No. 69

Which in the opinion of the author is the best way to communicate with an Alzheimer patient?

(a) Talking on the phone
(b) Talking face to face
(c) Talking and gesturing
(d) Talking clearly and loudly

Question No. 70

What does the author suggest you do if you have to communicate with an Alzheimer patient?

(a) Be caring and understanding
(b) Be helpful and protective
(c) Be polite and speak softly
(d) Be cautious about what you say
Part B  
Marks 10  
Similar Words  

Instructions: Please pick the option that best describes the given word: 

**Question No. 73**  
STABLE  
(a) Uniform  
(b) Fluctuating  
(c) Permanent  
(d) Unwavering  

**Question No. 74**  
EXPLICIT  
(a) Clean  
(b) Implied  
(c) Obvious  
(d) Specifically  

**Question No. 75**  
ADVOCATES  
(a) Lawyers  
(b) Experts  
(c) Recommends  
(d) Loyalists.  

**Question No. 76**  
MANAGED  
(a) Performed  
(b) Maneuvered  
(c) Trained  
(d) Organized  

**Question No. 77**  
PROFICIENT  
(a) Efficient  
(b) Expert  
(c) Qualified  
(d) Clumsy
Part C                        Marks 10

Sentence Completion

Instructions: Pick out the most appropriate word from the given list to fill in the blanks.

Question No. 83

Indications are that the Government is ………………………to the prospect of granting bonus to the striking employees.

(a) Aligned  
(b) Obliged  
(c) Reconciled  
(d) Relieved

Question No. 84

He is much too ……. in his writings: he writes a page when a sentence should suffice

(a) devious  
(b) lucid  
(c) verbose  
(d) pleasant

Question No. 85

Amin ……………. classical music. He always prefers NusratFatehAli to Junoon

(a) Adores  
(b) Apprehends  
(c) Encompasses  
(d) Cultivates

Question No. 86

As a general rule, politicians do not …………….centre stage.

(a) Forward  
(b) Forbid  
(c) Forgive  
(d) Forsake
PART D        Marks 08

Antonyms

Instructions: In the following questions choose the word which is OPPOSITE in meaning of the word given in capitals

Question No. 93

CAPTIVATE

(a) Repel
(b) Seize
(c) Free
(d) Enchanted

Question No. 94

OVERT

(a) Unambiguous
(b) Concealed
(c) Manifest
(d) Inexplicable

Question No. 95

SUBSTANTIAL

(a) Extensive
(b) Independent
(c) Manifest
(d) Minimal