# Quaid-i-Azam University <br> Department of Computer Science 

## Aptitude Test

## Instructions

- Write your name and registration number allocated to you by the university while submitting the application form and other information on the answer sheet and also on the question paper instructions' page.
- Number of sections, number of questions in each section and number of possible answers for each question can vary.
- Each correct answer will carry 2 marks and $1 / 2$ mark will be deducted for each incorrect answer.
- Only use blue or black ink.
- You are not allowed to use Calculators or lead pencils.


## Sample Paper

## Part 1 : Logic

Questions 1-3: Series
Each series below follows a rule. Find the next term in each series.

| Q.1. | 7 | 9 | 5 | 11 |
| :--- | :--- | :--- | :--- | :--- |
|  | 4 | 15 | 12 | 7 |
|  | 13 | 8 | 11 | $?$ |

A) 6
B) 8
C) 10
D) 12
E) None
Q.2. 1

3
A) 21
B) 24
C) 27
D) 32
E) None
Q.3. 58

35
?
11
63
A) 28
B) 24
C) 20
D) 18
E) None

## Questions 4-6: Algorithmic Logic

Q.4.

| Box no. | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Contents | 0 | -1 | 2 | -4 | 5 | -6 |

1. Cube the contents of box no. 2
2. Add the result of step 1 to contents of box no. 4 and store the result in box no. 2
3. Subtract the contents of box no. 3 from contents of box no. 2 and store the result in box no. 4
4. The result in box no. 4 is:
A) -5
B) 5
C) -7
D) 7
E) None
Q.5.

| Box no. | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Contents | 1 | -1 | 8 | -8 | 27 | -27 |

1. Take the cube root of contents of box no. 4 and add it to contents of box no. 2
2. Subtract 2 from contents of box no. 2 and place result in box no. 4
3. Add square of contents of box no. 4 to contents of box no. 6
4. The result of step 3 is:
A) 2
B) 4
C) -26
D) 25
E) None

| Box no. | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Contents | 5 | 10 | 15 | 20 | 25 | 30 |

1. Subtract contents of box no. 3 from contents of box no. 2 and add result to contents of box no. 1
2. Subtract contents of box no. 5 from contents of box no. 1 and place result in box no. 2
3. If contents of box no. 1 are greater than contents of box no. 2 , subtract contents of box no. 2 from contents of box no. 1
4. Add the result of step 3 to contents of box no. 5
5. Contents of box no. 5 are:
A) 50
B) 25
C) -25
D) 0
E) None

## Questions 7-8: Pattern Matching

Q.7.

?

Q.8.


## Part 2 : Quantitative

Questions 9-12 : Arithmetic
Q.9. A car dealer gives a customer a 20 percent discount on the list price of a car, and still gets a profit of 25 percent on his cost. If the dealer's cost is Rs. 4800/-, what is the list price of the car?
A) 6000
B) 7200
C) 7500
D) 8000
E) None
Q.10. If a student must have a mark of $80 \%$ to pass a test of 75 items, the number of items he may miss and still pass the test is
A) 30
B) 12
C) 15
D) 20
E) None
Q.11. The regular price of a TV that sold for Rs. 27500/- at a $20 \%$ reduction sale is
A) 47500
B) 32000
C) 48750
D) 55750
E) None
Q.12. In a school where 30 percent of the students are boys, 80 percent of the boys are present on a certain day. If 960 boys are present, the total number of students is
A) 4000
B) 2800
C) 4500
D) 3000
E) None

## Questions 13-16: Geometry

Q.13. Which of the following expresses the area of the shaded region in the figure?
A) $\frac{x^{2}-y^{2}}{2}$
B) $\frac{x^{2}+y^{2}}{2}$
C) $x^{2}-y^{2}$
D) $\frac{x^{2}+x y}{4}$
E) None

Q.14. The figure is formed by two overlapping squares, each having sides of 6 centimeters in length. If P and Q are the midpoints of the intersecting sides, what is the area, in square centimeter, of the shaded region?
A) 72
B) 63
C) 60
D) 54
E) None
Q.15. For the figure, which of the following option is true
A) $\mathrm{n}^{2}>\mathrm{p}^{2}+\mathrm{m}^{2}$ B) $\mathrm{n}^{2}<\mathrm{p}^{2}+\mathrm{m}^{2}$
C) $n^{2}=p^{2}+m^{2}$ D) $n^{2}=2 p^{2}+m^{2}$
E) None

Q.16. The figure is a rectangular solid with $\mathrm{AB}=10, \mathrm{BC}=10$ and $\mathrm{CD}=3$. What is the total surface area of the figure?
A) 320
B) 300
C) 220
D) 160
E) None


## Part 3 : Comprehension \& Analytical Reasoning

17. America's first globe maker was James Wilson, who $\qquad$ and blacksmith in his earlier life.
A) a farmer had been
B) had been a farmer
C) farming
D) being a farmer
E) None

For Question 18, choose the one word or phrase that must be changed in order for the sentence to be correct
18. Asprin is recommend to many people for its ability to thin the blood
$\begin{array}{llll}\mathrm{A} & \mathrm{B} & \mathrm{C} & \mathrm{D}\end{array}$
A) A
B) B
C) C
D) D
E) None

Questions 19-20 are based on the following passage
(1) Carbohydrates, which are sugars, are an essential part of a healthy diet. They provide the main source of energy for the body, and they also function to flavor and sweeten foods. Carbohydrates range from simple sugars like glucose to complex sugars such as amylose and amylopectin. Nutritionists estimate that carbohydrates should make up about one-forth to one-fifth of a person's diet. This translates to about 75-100 grams of carbohydrates per day.
(5) A diet that is deficient in carbohydrates can have an adverse effect on a person's health. When the body lacks a sufficient amount of carbohydrates it must then use its protein supplies for energy, a process called gluconeogenesis. This, however, results in a lack of necessary proteins, and further health difficulties may occur. A lack of carbohydrates can also lead to ketosis, a build-up of ketones in the body that causes fatigue, lethargy, and bad breath.
19. What is the main idea of the passage?
A) Carbohydrates are needed for good health
B) Carbohydrates prevent a build up of proteins
C) Carbohydrates can lead to ketosis
D) Carbohydrates are an expandable part of a good diet
E) None
20. The word "function" as used in line 2 refers to which of the following?
A) neglect
B) serve
C) dissolve
D) profess
E) None

## ANSWER SHEET

NAME \& SIGNATURE N.I.C. NO.

FATHER'S NAME

REGN. NO. $\qquad$
DOMICILE $\qquad$
DATE
Please Encircle Below the Appropriate Answers

| $\mathbf{1}$ | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2}$ | A | B | C | D | E |
| $\mathbf{3}$ | A | B | C | D | E |
| $\mathbf{4}$ | A | B | C | D | E |
| $\mathbf{5}$ | A | B | C | D | E |
| $\mathbf{6}$ | A | B | C | D | E |
| $\mathbf{7}$ | A | B | C | D | E |
| $\mathbf{8}$ | A | B | C | D | E |
| 9 | A | B | C | D | E |
| $\mathbf{1 0}$ | A | B | C | D | E |
| $\mathbf{1 1}$ | A | B | C | D | E |
| $\mathbf{1 2}$ | A | B | C | D | E |
| $\mathbf{1 3}$ | A | B | C | D | E |
| $\mathbf{1 4}$ | A | B | C | D | E |
| $\mathbf{1 5}$ | A | B | C | D | E |
| $\mathbf{1 6}$ | A | B | C | D | E |
| $\mathbf{1 7}$ | A | B | C | D | E |
| $\mathbf{1 8}$ | A | B | C | D | E |
| $\mathbf{1 9}$ | A | B | C | D | E |
| $\mathbf{2 0}$ | A | B | C | D | E |

In the given example each question has five choices ( $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$, and E ). Encircle the choice, which in your opinion is the best answer. Please don't overwrite. If you want to change your answer, you may do so after crossing out the previous answer.

For Example

| 1 | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | A | $\boldsymbol{X}$ | C | D | E |

