

Date of Examination



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GENERAL SIR JOHN KOTELAWALA DEFENCE UNIVERSITY
SELECTION TEST FOR THE ENROLLMENT OF DAY SCHOLARS –INTAKE 39
BSC. IN DATA SCIENCE AND BUSINESS ANALYTICS DEGREE PROGRAMME
SUBJECT KNOWLEDGE

Call up No./Reference No.:

NIC No:

Instructions:

Duration: 30 minutes

Answer **all questions.**

- 1) In which of the following form, data is stored in computer?
 - a) Decimal
 - b) Binary
 - c) Hexa Decimal
 - d) Octal

- 2) Which one of the following is not an input device?
 - a) Keyboard
 - b) Joystick
 - c) Printer
 - d) Optical Character Reader

- 3) When an input electrical signal A=10110 is applied to a NOT gate, its output signal is
 - a) 01001
 - b) 10001
 - c) 10101
 - d) 00101

- 4) Once you load the suitable program and provide required data, computer does not need human intervention. This feature is known as,
 - a) Accuracy
 - b) Reliability
 - c) Versatility
 - d) Automatic

- 5) A collection of related instructions organized for a common purpose is referred to as
 - a) File
 - b) Database
 - c) Program
 - d) None of above

6) What are the next quantities in each sequence?

25, 24, 22, 19, 15, ...

2, 5, 10, 17, 26, ...

- a) 12 and 32
- b) 10 and 37
- c) 10 and 32
- d) 12 and 37

7) 10 is 5% of a , and 5 is 15% of b . Given that c equals $\frac{b}{a}$. What is the value of c ?

- a) 1
- b) $\frac{1}{6}$
- c) 2
- d) $\frac{1}{2}$

8) $\frac{216 \times 3}{12} = \sqrt{36} \times ?$

Complete the equation by correctly identifying the missing part of the calculation from the list of options below.

- a) 4.5×4
- b) $\sqrt{16}$
- c) $\frac{276}{92}$
- d) $\frac{42-15}{3}$

9) If x, y and z are three consecutive positive integers such that $x < y < z$ and $x + y + z = 27$ then what is the value of z ?

- a) 10
- b) 9
- c) 8
- d) 7

10) If $4 < x < 5$ and $1 < y < 5$, which of the following best describes $x - y$?

- a) $1 < x - y < 3$
- b) $-1 < x - y < 4$
- c) $4 < x - y < 5$
- d) $3 < x - y < 5$

- 11) The slope of the line $2x + y = 5$ is NOT the same as the slope of which one of the following lines?
- a) $x = -\frac{y}{2}$
 - b) $y = -2x + 8$
 - c) $6y = 15 - 3x$
 - d) $4y + 8x = 1$
- 12) If $15x + 16 = 0$, then $15|x|$ equals which one of the following?
- a) -16
 - b) $-16x$
 - c) 16
 - d) $16x$
- 13) If n is a positive integer, which one of the following numbers must have a remainder of 3 when divided by any of the numbers 4, 5, and 6?
- a) $12n + 3$
 - b) $24n + 3$
 - c) $90n + 3$
 - d) $120n + 3$
- 14) Which one of the following numbers can be removed from the set $S = \{0, 2, 4, 6, 8\}$ without changing the average of set S ?
- a) 0
 - b) 4
 - c) 2
 - d) 5
- 15) A boy is 12 years old and his sister is 8 years old. How old was the boy when he was twice as old as his sister?
- a) 5 years
 - b) 6 years
 - c) 8 years
 - d) 10 years
- 16) If $p + q = 12$ and $pq = 36$, then $\frac{1}{p} + \frac{1}{q}$
- a) $\frac{1}{2}$
 - b) $\frac{1}{3}$
 - c) 3
 - d) 4

- 17) The remainder is 75 when a number is divided by 10,000. What is the remainder when the same number is divided by 1,000?
- a) 5
 - b) 7
 - c) 75
 - d) 750
- 18) A bag contains 2 red, 3 green and 2 blue balls. Two balls are drawn at random. What is the probability that none of the balls drawn is blue?
- a) $10/21$
 - b) $11/21$
 - c) $2/7$
 - d) $5/7$
- 19) The difference between two angles of a triangle is 16° . The average of the same two angles is 52° . Which one of the following is the value of the greatest angle of the triangle?
- a) 60°
 - b) 68°
 - c) 76°
 - d) 78°
- 20) The remainder when the positive integer m is divided by n is r . What is the remainder when $3m$ is divided by $3n$?
- a) $3n$
 - b) $3r$
 - c) $m - nr$
 - d) $3(m - nr)$
- 21) A man is required to take a tablet once every 6 hours, a capsule once every 8 hours and a syrup once every 12 hours. If he takes all three together at 6.00 p.m. on a Tuesday evening, when will he take all three together again?
- a) Wednesday 6.00 a.m.
 - b) Thursday 6.00 a.m.
 - c) Wednesday 6.00 p.m.
 - d) Thursday 6.00 p.m.

