

- 1) Find the volume of the parallelepiped determined by $a = 2i + 3k$, $b = 6j - 2k$ and $c = -3i + 3j$.
 A) 12
 B) 42
 C) 54
 D) 66 [Correct]
- 2) Which of the following is not a Geometric Progression?
 A) 8, 16, 24, 32 [Correct]
 B) 1.5, 3.0, 6.0, 12.0,
 C) 2, 4, 8, 16,
 D) 5, 25, 125, 625,
- 3) In how many ways can six people be seated around a circular table?
 A) 24 ways
 B) 52 ways
 C) 80 ways
 D) 120 ways [Correct]
- 4) A boy throws a ball straight up with a speed of 5 m/s. An observer in the bus is moving at 12 m/s. What is the velocity of the ball to an observer in the bus?
 A) 13 m/s [Correct]
 B) 14 m/s
 C) 17 m/s
 D) 21 m/s
- 5) The correct relationship between impulse and change in momentum is:
 A) $\vec{J} = \Delta\vec{P} \times t$
 B) $\vec{J} = \frac{1}{\Delta\vec{P}}$
 C) $\vec{J} = \Delta\vec{P}$ [Correct]
 D) $\vec{J} = \frac{\Delta\vec{P}}{\Delta t}$
- 6) The area under force-displacement curve is numerically equal to:
 A) Power
 B) Acceleration
 C) Displacement
 D) Work done [Correct]
- 7) Naturally occurring aluminum oxide mineral (Al_2O_3), that is the hardest known natural substance after diamond:
 A) Bauxite
 B) Kaolinite
 C) Corundum [Correct]
 D) Cryolite
- 8) When electron moves to 3rd energy level, i.e. $n_1=3$, from a higher energy level $n_2=4,5,6$ then which of the following series is displayed?
 A) Balmer
 B) Lyman
 C) Paschen [Correct]
 D) Pfund
- 9) In a given atom, no two electrons can have the same set of four quantum number. This is called _____.
 A) Aufbau principle
 B) Hund's rule
 C) Pauli's exclusion principle [Correct]
 D) Electronic configuration
- 10) Amina bought a doll for Rs.475 and sold it for Rs.450. Find her loss percentage.
 A) 8.5%
 B) 9.5%
 C) 5.26% [Correct]
 D) 12.5%
- 11) The solution set of the simultaneous equations $x + y = 12$ and $x - y = 2$ is:
 A) {5, 7}
 B) {7, 5} [Correct]
 C) {5, 3}
 D) {4, 8}
- Read the passage below and answer **12-13**
DIRECTION: Prejudice works like a slow poison after it has seeped into a human being. Like poison, it usually enters without the victim's knowledge. Poison and prejudice can enter the mind or spirit and spread to their dark work. The person who is affected by prejudice is, unlike the recipient of poison, rarely aware of the ailment and does nothing to counteract the bad agent. Just as poison cripples the body, prejudice distorts the victim's thoughts and actions. Unlike poison, prejudice does not kill its victim, but its effects last for a long time unless the victim becomes aware of its condition and seeks an antidote.
- 12) The paragraph follows _____ method of development.
 A) cause and effect
 B) process analysis
 C) classification
 D) comparison and contrast [Correct]
- 13) Which statement is true about "prejudice?"
 A) Prejudice enters a human's being with the victim's knowledge.
 B) It affects human's body.
 C) It is like a poison.
 D) Its effects are long-lasting. [Correct]
- 14) The president with his ministers _____ coming to attend the meeting.
 A) is [Correct]
 B) are
 C) were
 D) has

- 15) He is _____.
A) older than me. [Correct]
B) elder than me.
C) older than I is.
D) elder than I.
- 16) The word similar in meaning to "oblivion" is
A) remembrance
B) wisdom
C) unconsciousness [Correct]
D) None of the above
- 17) "The novice teacher was overexcited about his job."
[The word opposite in meaning to the underlined word is]
A) beginner
B) experienced [Correct]
C) knowledgeable
D) stern
- 18) DO: BE
[Find a similar relationship as the words in capitals]
A) he: nice
B) might: could [Correct]
C) will: future
D) should: advice
- 19) JOY: DELIGHT
[Find a similar relationship as the words in capitals]
A) melancholy: ecstasy
B) admit: allow [Correct]
C) forbid: allow
D) write: speak