Answer key

1. If three cards are drawn one by one randomly from a pack of 52 cards, then what is the probability that three of them are jack?

    A) 3/5525   B) 1/5525   C) 4/555   D) 3/552

    Ans: B) 1/5525

2. Statements: All parks are grounds.   Some grounds are museums. No museum is a theatre.
    Conclusions: I. All museums are parks.   II. No ground is a theatre.

    A) Only I follow   B) Neither I nor II follows   C) Only II follows   D) Both I and II follow

    Ans: B) Neither I nor II follows

3. If January 1, 2007, was Monday, then the day of the week lies on January 1, 2008?

    A) Monday   B) Tuesday   C) Wednesday   D) Sunday

    Ans: B) Tuesday

4. The calendar for the year 1864 is similar for which year?

    A) 1893   B) 1800   C) 1892   D) 1995

    Ans: C) 1892

5. M, S, A, F, J, H, and D are seven family members living in the same apartment. M is S's husband.
    H is J's wife. S is the mother of J and the daughter of A. D is the brother of H. F is the wife of A.
    How is D related to J?   A) Wife's brother   B) Father   C) Husband   D) Brother

    Ans: a) Wife's brother

6. The distance of the point P(2, 3) from the x-axis is   A) 1   B) 3   C) 5   D) 2

    Ans: B) 3

7. If the 23rd and 24th terms of an A.P. are 42 and 312, respectively, then its 37th term is:

    A) 3821   B) 3820   C) 3823   D) 3822

    Ans: D) 3822

8. If 1st January of 2020 is Thursday then what day of the week lies on 1st January 2021?

    A) Monday   B) Wednesday   C) Friday   D) Saturday

    Ans: D) Saturday

9. The area of a quadrilateral whose vertices are (3, 0), (4, 5), (-1, 4), and (-2,-1) taken in order, is:

    A) 48 sq. units   B) 30 sq. units   C) 24 sq. units   D) 12 sq. units

    Ans: C) 24 sq. units

10. In a survey of 260 students in a school, 100 were listed as taking apple juice, 150 as taking orange juice, and 75 were listed as taking both apple as well as orange juice. Find how many students were taking neither apple juice nor orange juice.
      A) 75   B) 85   C) 65   D) 95
   Ans: B) 85

11. In a class of 37 students, 25 like to play cricket, and 16 like to play football. Also, each student likes to play at least one of the two games. How many students like to play both cricket and football?
      A) 5   B) 6   C) 3   D) 4
   Ans: D) 4

12. When multiplying 3.24 by 0.006, how many significant figures should the result have?
      A) 2   B) 3   C) 1   D) 4
   Ans: C) 1

13. A coin is thrown eight times. The probability of getting exactly five tails is:
      A) 0.22   B) 0.11   C) 0.78   D) 0.28
   Ans: A) 0.22

14. The mode and median of the data are 19.5 and 85, respectively. What is the mean of the data? (Use an empirical formula.)
      A) 119.1   B) 118   C) 117.8   D) 118.6
   Ans: C) 117.8

15. At what angle, the hands of a clock are inclined at 30 minutes past 3?
      A) 90°   B) 80°   C) 60°   D) 75°
   Ans: D) 75°

16. The value of the discriminant of the quadratic equation $7x^2-18x-11=0$ is:
      A) 619   B) 638   C) 632   D)616
   Ans: C) 632

17. If the 8th and 12th terms of an A.P. are 82 and 478, respectively, then its 50th term is:
      A) 4241   B) 4242   C) 4238   D) 4240
   Ans: D) 4240

18. An accurate clock shows 8 o'clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 2 o'clock in the afternoon?
      A) 144°   B) 150°   C) 168°   D) 180°
   Ans: D) 180°

19. The area of the triangle ABC with the vertices A (-5, 7), B (-4, -5), and C (4, 5) is
      A) 53 sq. units   B) 63 sq. units   C) 36 sq. units   D) 35 sq. units
   Ans: A) 53 sq. units

20. (Left) + 2 $ Q = Y L A S S X L / % 9 T \ = X H 6 ? (Right) How many such numbers are there that are immediately preceded by a symbol and immediately followed by a letter?
      A) Three   B) One   C) Two   D) Four
   Ans: B) One