# JAGRAN

# Josh
## your guide to success

PUNJAB NATIONAL BANK SPECIALIST
OFFICERS EXAM 2011- QUANTITATIVE
APTITUDE QUESTION PAPER

**Directions**—(Q. 1–4) What will come in place of the question-mark (?) in the following equation ?

1. $\frac{3}{5}$ of $\frac{5}{7}$ of 357 = ?
   - (A) 51
   - (B) 153
   - (C) 255
   - (D) 159
   - (E) None of these

2. $4320 + 16 \div 9 = ?$
   - (A) 45
   - (B) 36
   - (C) 27
   - (D) 33
   - (E) None of these

3. 125% of 860 + 75% of 480 = ?
   - (A) 1415
   - (B) 1385
   - (C) 1435
   - (D) 1365
   - (E) None of these

4. $1121 \cdot 21 + 121 \cdot 021 + 21 \cdot 0021 = ?$
   - (A) 1263·2331
   - (B) 1263·2121
   - (C) 1163·2121
   - (D) 1163·2331
   - (E) None of these

**Directions**—(Q. 5–8) What **approximate** value will come in place of the question-mark (?) in following equation ?

· (You are not expected to calculate the exact value.)

5. $\frac{2}{7}$ of $\frac{14}{19}$ of 305 = ?
   - (A) 75
   - (B) 64
   - (C) 56
   - (D) 78
   - (E) 69

6. $384 \cdot 996 \times 15 \cdot 001 + 44 \cdot 99 = ?$
   - (A) 5280
   - (B) 5420
   - (C) 5820
   - (D) 5480
   - (E) 5240

7. $(10 \cdot 998)^2 \times (4 \cdot 001)^3 = ?$
   - (A) 7700
   - (B) 7640
   - (C) 7600
   - (D) 7560
   - (E) 7740

8. $(12 \cdot 001)^2 \times \sqrt{725} = ?$
   - (A) 3560
   - (B) 4120
   - (C) 3720
   - (D) 3880
   - (E) 3640

**Directions**—(Q. 9–12) What will come in place of the question-mark (?) in each of the following number series ?

9. 4, 5, 13, 40, 104, ?
   - (A) 229
   - (B) 308
   - (C) 315
   - (D) 241
   - (E) None of these

10. 8, 9, 13, 22, ?, 63
    - (A) 31
    - (B) 41
    - (C) 36
    - (D) 38
    - (E) None of these

11. 7, 6, 10, 27, 104, ?
    - (A) 520
    - (B) 420
    - (C) 515
    - (D) 525
    - (E) None of these

12. 3, 7, 15, ?, 63, 127
    - (A) 35
    - (B) 37
    - (C) 33
    - (D) 29
    - (E) None of these

13. Mr. Baljit purchased 100 pieces of an article @ ₹ 480 per piece. He then listed the price so as to gain a profit of 25%. While selling the articles he offered a discount of 5%. What is the percentage of profit earned in the deal ?
    - (A) 20·00
    - (B) 15·00
    - (C) 15·79
    - (D) 18·75
    - (E) None of these

14. The number formed by inter-changing the positions of digits of a two digit number is less than the original number by 72. What is the original two digit number ?
    - (A) 80
    - (B) 91
    - (C) 81
    - (D) 19
    - (E) None of these

15. Present ages of Leela and Shivani are in the ratio of 4 : 5 respectively. Three years hence this ratio becomes 5 : 6. What is the difference between their present ages ?
    - (A) 5 years
    - (B) 6 years
    - (C) 4 years
    - (D) 3 years
    - (E) None of these

16. Perimeter of a circle is equal to the perimeter of a square whose area is 484 cm². What is the radius of the circle ?
    - (A) 22 cm
    - (B) 14 cm
    - (C) 7 cm
    - (D) Cannot be determined
    - (E) None of these

17. Mr. Rajesh spent 20% of his monthly income on grocery and household expenses. Out of the remaining he spent 25% on children's education, 20% on transport and 15% on entertain-ment. He is left with an amount of ₹ 14,400 after incurring above expenses. What was his monthly income ?
    - (A) ₹ 45,000
    - (B) ₹ 24,000
    - (C) ₹ 35,000
    - (D) ₹ 32,000
    - (E) None of these

18. A and B together can complete a piece of work in 4 days. If A alone can complete the same piece of work in 5 days, in how many days will B alone complete it ?
    - (A) 15 days
    - (B) 12 days
    - (C) 9 days
    - (D) 20 days
    - (E) None of these

19. Three-fifth of a number is equal to 70% of another number. What is the ratio between the first number and the second number respectively ?
    - (A) 7 : 6
    - (B) 7 : 8
    - (C) 3 : 4
    - (D) 4 : 7
    - (E) None of these

20. Number of students in a school in June every year increases by 10% from the previous year. If the school had 2,400 students in June 2009, how many students did it have in June 2011 ?

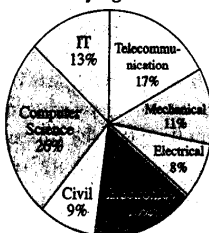(A) 2,840    (B) 2,880

(C) 2,904    (D) 2,920

(E) None of these

**Directions—(Q. 21–25)** In each of these question, two equations I and II are given with variables $x$ and $y$. You have to solve both the equations and give answers :

(A) If   $x < y$

(B) If   $x \le y$

(C) If   $x > y$

(D) If   $x = y$

(E) If   $x \ge y$

21. I.   $4x^2 - 16x + 15 = 0$

    II.   $2y^2 - 5y + 3 = 0$

22. I.   $x^2 + 3x + 2 = 0$

    II.   $y^2 - 3y + 2 = 0$

23. I.   $x^2 - 3x + 2 = 0$

    II.   $y^2 - 5y + 6 = 0$

24. I.   $6x^2 - 5x + 1 = 0$

    II.   $6y^2 + 5y + 1 = 0$

25. I.   $x^2 = 9$

    II.   $y^2 - 9y + 20 = 0$

**Directions—(Q. 26–30)** Study the following pie charts carefully to answer these questions.
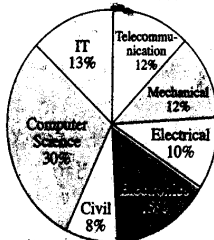
**Details of Number of Students Studying in Different Engineering Branches**

Total No. of Students Studying = 2500



**Details of Number of Students who got Campus Placement**

Total No. of Students who got Placement = 1600



26. Number of students who got placement from Mechanical is what per cent of the total number of students studying Engineering ?

(A) 8·22      (B) 6·78

(C) 7·68      (D) 6·4

(E) None of these

27. If 40% of the students studying Civil are girls how many girls are studying Civil ?

(A) 90        (B) 160

(C) 120      (D) 115

(E) None of these

28. Total number of studens who got placement from IT and Computer Science together is **approximately** what per cent of the total number of students studying these two disciplines together ?

(A) 43        (B) 75

(C) 60        (D) 65

(E) 70

29. What is the respective ratio between number of students who got placement from IT and the number of students studying Computer Science ?
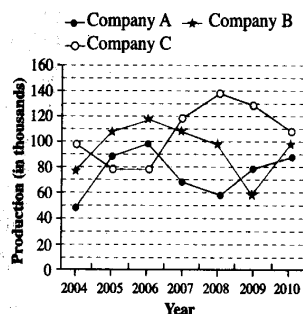
(A) 108 : 325    (B) 52 : 325

(C) 208 : 325    (D) 104 : 325

(E) None of these

30. What per cent of students studying Electronics got the placement ?

(A) 40        (B) 60

(C) 48        (D) 66

(E) None of these

**Directions—(Q. 31–35)** Study the following graph carefully to answer these questions.

**Annual Production of Cars by Company A, Company B and Company C in Thousands**



31. **Approximately**, what is the ratio between the average production of cars in Company A in 2007 and 2008 together and average production of cars in Company C for all the years taken together ?

(A) 13 : 22

(B) 15 : 27

(C) 65 : 91

(D) 63 : 46

(E) None of these

32. The total production of cars by all three companies in 2006 is by what per cent ( percentage rounded off to two digits after decimal) more / less than production of cars in all the three companies in 2004 ?

(A)· More by 30·43%

(B) Less by 15·65%

(C) Less by 33·45%

(D) More by 25·48%

(E) None of these

33. For Company C had the total production for all the years been less by 25%, what would have been the total production for all the years ?

(A) 3,34,700 units

(B) 2,75,000 units

(C) 5,70,000 units

(D) 4,50,633 units

(E) 4,72,500 units

34. Total production of cars of Companies B and C together in 2010 is **approximately** what per cent of the total production of these two companies together for all the years together ?

(A) 10%      (B) 12%

(C) 5%       (D) 15%

(E) 7%

35. The average production of cars in Company B is **approximately** what percentage of average production of cars in Company C for all the years taken together ?

(A) 62%

(B) 74%

(C) 85%

(D) 82%

(E) 90%