see below for questions

# TEST II
# QUANTITATIVE APTITUDE

**Directions** (Q. Nos. 76–80) *What will come in place of question mark (?) in the following questions?*

**76.** $\frac{1}{6}$ of (92)% of $1\frac{1}{23}$ of (650) = 85 + ?

(1) 18 (2) 21
(3) 19 (4) 28
(5) None of these

**77.** $92 \times 576 \div 2\sqrt{1296} = (?)^3 + \sqrt{49}$

(1) 3 (2) $(9)^2$
(3) 9 (4) 27
(5) None of these

**78.** $3\frac{1}{4} + 2\frac{1}{2} - 1\frac{5}{6} = \frac{(?)^2}{10} + 1\frac{5}{12}$

(1) 25 (2) $\sqrt{5}$
(3) 625 (4) 15
(5) 5

**79.** $(\sqrt{8} \times \sqrt{8})^{1/2} + (9)^{1/2} = (?)^3 + \sqrt{8} - 340$

(1) 7 (2) 19
(3) 18 (4) 9
(5) None of these

**80.** $(15 \times 0.40)^4 \div (1080 \div 30)^4 \times (27 \times 8)^4 = (3 \times 2)^{?+5}$

(1) 8 (2) 3
(3) 12 (4) 16
(5) None of these

**Directions** (Q. Nos. 81–85) *What **approximate** values should come in place of the question mark (?) in the following questions? (You are not expected to calculate the exact value.)*

**81.** $\left(\frac{24}{9}\right)^2 \times \frac{399}{39} \div \frac{41}{899} = ?$

(1) 1600 (2) 1650
(3) 1700 (4) 1550
(5) 1750

**82.** 67.99% of 1401 − 13.99% of 1299 = ?

(1) 700 (2) 720
(3) 770 (4) 800
(5) 740

**83.** 5466.97 − 3245.01 + 1122.99 = ? + 2309.99

(1) 1130 (2) 1000
(3) 1100 (4) 1030
(5) 1060

**84.** 5998 ÷ 9.98 + 670.99 − 139.99 = ?

(1) 1080 (2) 1280
(3) 1180 (4) 1130
(5) 1230

**85.** $-(4.99)^3 + (29.98)^2 - (3.01)^4 = ?$

(1) 550 (2) 590
(3) 620 (4) 650
(5) 690

**Directions** (Q. Nos. 86–90) *What will come in place of question mark (?) in the following number series?*

**86.** 1 7 49 343 (?)
(1) 16807 (2) 1227
(3) 2058 (4) 2401
(5) None of these

**87.** 13 20 39 78 145 (?)
(1) 234 (2) 244
(3) 236 (4) 248
(5) None of these

**88.** 12 35 81 173 357 (?)
(1) 725 (2) 715
(3) 726 (4) 736
(5) None of these

**89.** 3 100 297 594 991 (?)
(1) 1489 (2) 1479
(3) 1478 (4) 1498
(5) None of these

**90.** 112 119 140 175 224 (?)
(1) 277 (2) 276
(3) 287 (4) 266
(5) None of these

**Directions** (Q. Nos. 91–95) *In the following questions two equations numbered* I *and* II *are given. You have to solve both the equations and—*

Give answer
(1) if $x > y$
(2) if $x \geq y$
(3) if $x < y$
(4) if $x \leq y$
(5) if $x = y$ or the relationship cannot be established

**91.** I. $\sqrt{1225}x + \sqrt{4900} = 0$
II. $(81)^{1/4}y + (343)^{1/3} = 0$

**92.** I. $\frac{18}{x^2} + \frac{6}{x} - \frac{12}{x^2} = \frac{8}{x^2}$
II. $y^3 + 9.68 + 5.64 = 16.95$

**93.** I. $\frac{(2)^5 + (11)^3}{6} = x^3$
II. $4y^3 = -(589 \div 4) + 5y^3$

**94.** I. $12x^2 + 11x + 12 = 10x^2 + 22x$
II. $13y^2 - 18y + 3 = 9y^2 - 10y$

**95.** I. $(x^{7/5} \div 9) = 169 \div x^{3/5}$
II. $y^{1/4} \times y^{1/4} \times 7 = 273 \div y^{1/2}$

**96.** The cost of five chairs and three tables is ₹ 3110. Cost of one chair is ₹ 210 less than cost of one table. What is the cost of two tables and two chairs?
(1) ₹ 1660 (2) ₹ 1860
(3) ₹ 2600 (4) Cannot be determined
(5) None of these

**97.** The respective ratio between the present ages of Ram, Rohan and Raj is 3 : 4 : 5. if the average of their present ages is 28 yr then what would be the sum of the ages of Ram and Rohan together after 5 yr?
(1) 45 yr (2) 55 yr (3) 52 yr
(4) 59 yr (5) None of these

**98.** The total area of a circle and a rectangle is equal to 1166 sq cm. The diameter of the circle is 28 cm. What is the sum of the circumference of the circle and the perimeter of the rectangle if the length of the rectangle is 25 cm?
(1) 186 cm (2) 182 cm
(3) 184 cm (4) Cannot be determined
(5) None of these

**99.** Raman scored 456 marks in an exam and Seeta got 54 per cent marks in the same exam which is 24 marks less than Raman. If the minimum passing marks in the exam is 34 per cent, then how much more marks did Raman score than the minimum passing marks?
(1) 184 (2) 196
(3) 190 (4) 180
(5) None of these

**100.** Smallest angle of a triangle is equal to two-third the smallest angle of a quadrilateral. The ratio between the angles of the quadrilateral is 3 : 4 : 5 : 6. Largest angle of the triangle is twice its smallest angle. What is the sum of second largest angle of the triangle and largest angle of the quadrilateral?
(1) 160° (2) 180°
(3) 190° (4) 170°
(5) None of these

**101.** A 320 m long train moving with an average speed of 120 km/h crosses a platform in 24 s. A man crosses the same platform in 4 min. What is the speed of man in m/s?
(1) 2.4 (2) 1.5
(3) 1.6 (4) 2.0
(5) None of these



**102.** The simple interest accrued on a sum of certain principal is ₹ 7200 in six years at the rate of 12 p.c.p.a. What would be the compound interest accrued on that principal at the rate of 5 p.c.p.a. in 2 yr?
(1) ₹ 1020 (2) ₹ 1055
(3) ₹ 1050 (4) ₹ 1025
(5) None of these

**103.** Sum of square of first number and cube of second number is 568 together. Also square of the second number is 15 less than square of 8. What is the value of three-fifth of the first number? (assuming both the numbers are positive)
(1) 18 (2) 8
(3) 9 (4) 16
(5) None of these

**104.** The sum of 8 consecutive odd numbers is 656. Also average of four consecutive even number is 87. What is the sum of the smallest odd number and second largest even number?
(1) 165 (2) 175
(3) 163 (4) Cannot be determined
(5) None of these

**105.** Seema purchased an item for ₹ 9600 and sold it for loss of 5 per cent. From that money she purchased another item and sold it for gain of 5 per cent. What is her overall gain/loss?
(1) Loss of ₹ 36 (2) Profit of ₹ 24
(3) Loss of ₹ 54 (4) Profit of ₹ 36
(5) None of these

**Directions** (Q. Nos. 106–110) *Study the table carefully to answer the questions that follow :*

**Candidates who appeared and passed in the test from four schools in six different years**

| Year | School | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | A | | B | | C | | D | |
| | Appeared | Passed | Appeared | Passed | Appeared | Passed | Appeared | Passed |
| 2004 | 124 | 78 | 445 | 354 | 454 | 343 | 546 | 345 |
| 2005 | 234 | 124 | 545 | 435 | 732 | 567 | 565 | 456 |
| 2006 | 456 | 235 | 664 | 454 | 693 | 456 | 235 | 112 |
| 2007 | 398 | 156 | 345 | 144 | 645 | 545 | 546 | 234 |
| 2008 | 546 | 346 | 584 | 354 | 354 | 258 | 656 | 564 |
| 2009 | 547 | 435 | 704 | 347 | 578 | 313 | 456 | 252 |

**106.** What was the total number of failed candidates from school-C in the year 2008 and the number of candidates who appeared in the exam from school-D in the year 2006?
(1) 335 (2) 325 (3) 322
(4) 332 (5) None of these

**107.** In which year was the difference between the number of candidates who appeared and passed in the exam from school-B second lowest?
(1) 2004 (2) 2005 (3) 2006
(4) 2007 (5) 2008

**108.** What was the respective ratio between the number of candidates who appeared from school-C in the year 2006 and the number of candidates who passed in the exam from school-D in the year 2009?
(1) 11 : 4 (2) 11 : 5 (3) 5 : 11
(4) 9 : 11 (5) None of these

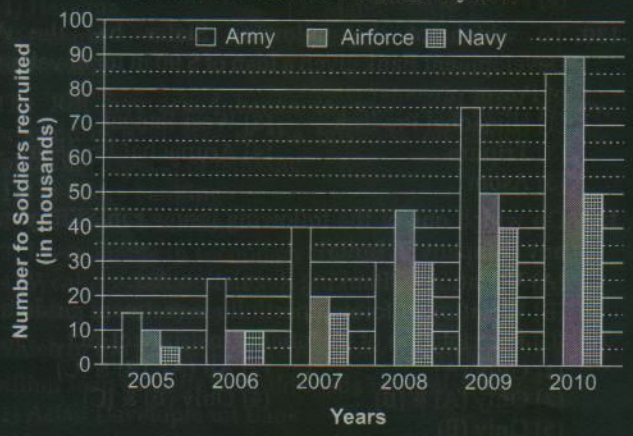


**109.** Number of candidates who passed in the exam from school B in the year 2005 was approximately what per cent of number of candidates who appeared from school-A in the year 2008?
(1) 76 (2) 87 (3) 90
(4) 84 (5) 80

**110.** What was the **approximate** percent increase in the number of candidates who passed in the exam from school-A in the year 2009 as compared to the previous year?
(1) 22 (2) 39 (3) 26
4) 30 (5) 34

**Directions** (Q. Nos. 111–115) *Study the following graph carefully to answer the questions that follow :*

**Number of Soldiers recruited (in thousands) in three different forces in six different years**




**111.** What was the average number of soldiers recruited in the Navy overall the years together?
(1) 25000 (2) 24000
(3) 2400 (4) 28000
(5) None of these

**112.** Number of soldiers recruited in Navy in the year 2009 was what percentage of soldiers recruited in Army in the year 2006?
(1) 140 (2) 150 (3) 160
(4) 180 (5) None of these

**113.** If 30 per cent of soldiers recruited in Airforce in the year 2010 was female then what is the number of males recruited in Air force in that year?
(1) 63000 (2) 6300 (3) 61000
(4) 6100 (5) None of these

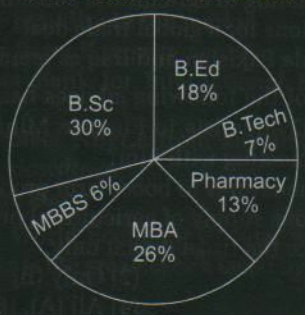
**114.** What was the respective ratio between the number of soldiers recruited for Airforce in the year 2005 and the number soldiers recruited in Army in the year 2009?
(1) 2 : 15 (2) 5 : 13 (3) 2 : 17
(4) 15 : 4 (5) None of these

**115.** What was **approximate** percentage decrease in number of soldiers recruited in Army in the year 2008 as compared to the previous year?
(1) 20 (2) 23 (3) 38
(4) 30 (5) 33

**Directions** (Q. Nos. 116–120) *Study the following Pie-chart carefully to answer these questions.*

**Total Students = 6500**

**Percentage distribution of Students in different courses**




**116.** What is the value of **half** of the difference between the number of students in MBA and MBBS?
(1) 800 (2) 1600 (3) 1300
(4) 650 (5) None of these

**117.** How much more percentage **(approximately)** of students are in MBA as compared to students in B.Ed.?
(1) 49 (2) 53 (3) 59
(4) 41 (5) 44

**118.** What is the total number of students in B.Ed., Pharmacy and MBBS together?
(1) 2465 (2) 2565 (3) 2405
(4) 2504 (5) None of these

**119.** What is the respective ratio between the number of students in Pharmacy and the number of students in B.Tech?
(1) 11 : 13 (2) 13 : 6 (3) 13 : 7
(4) 6 : 13 (5) None of these

**120.** Number of students in B.Sc. is **approximately** what percentage of the number of students in B.Ed.?
(1) 167 (2) 162 (3) 157
(4) 153 (5) 150

**Directions** (Q. Nos. 121–125) *Study the following table carefully to answer the questions that follow.*

**Amount earned (in lacs) by five persons in six different years**

| Year | Person | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| 2005 | 2.24 | 4.33 | 5.64 | 3.73 | 1.69 |
| 2006 | 1.44 | 3.34 | 6.93 | 5.52 | 5.52 |
| 2007 | 4.63 | 2.79 | 7.52 | 5.68 | 4.28 |
| 2008 | 6.65 | 6.63 | 5.83 | 6.74 | 6.83 |
| 2009 | 5.34 | 4.50 | 5.94 | 8.48 | 7.52 |
| 2010 | 7.38 | 5.36 | 7.84 | 9.45 | 9.94 |

**121.** What was the average of the earning of Person-B in the year 2006, C in the year 2008 and E in the year 2005 together?
(1) ₹ 3.62 lac (2) ₹ 2.64 lac
(3) ₹ 3.64 lac (4) ₹ 10.86 lac
(5) None of these

**122.** What was the respective ratio between the amount earned by Person-B in the year 2007 and Person-D in the year 2010?
(1) 32 : 107 (2) 31 : 105
(3) 29 : 107 (4) 32 : 105
(5) None of these

**123.** What is the **approximate** per cent increase in the amount earned by Person-D in the year 2010 as compared to the previous year?
(1) 7 (2) 21
(3) 18 (4) 15
(5) 12

**124.** Whose earning increased consistently from the year 2005 to the year 2010?
(1) A (2) B
(3) C (4) D
(5) E

**125.** Total amount earned by Person-A in the year 2006 and Person-C in the year 2010 together was **approximately** what per cent of the amount earned by Person-E in the year 2009?
(1) 151 (2) 155
(3) 168 (4) 174
(5) 162