

# APCOB Staff Assistant – Quantitative Aptitude

**Directions (36-40):** Table given below shows the number of male and female participated in an event from five different schools (A, B, C, D & E). Study the table carefully and answer the following questions.

Schools	Male	Female
A	650	450
B	540	420
C	720	500
D	560	450
E	680	320

**36.** Find average number of female participated from school - A, B & D.

- (a) 400                      (b) 380                      (c) 350  
(d) 440                      (e) 450

**37.** Total male participated from school - B & D together are how much more or less than total female participated from school - A & C together?

- (a) 150                      (b) 110                      (c) 170  
(d) 120                      (e) 240

**38.** Total male participated from school - B & C together are what percent more or less than total female participated from school - A & D together?

- (a) 20%                      (b) 60%                      (c) 50%  
(d) 40%                      (e) 30%

**39.** If total male participated from school - F are 40% more than that of from school - A and ratio of female participated from school - B to that of from school - F is 21:32, then find total students participated from school - F.

- (a) 1420                      (b) 1550                      (c) 1580  
(d) 1460                      (e) 1490

**40.** Find total number of male students participated from all the five schools together.

- (a) 2860                      (b) 3150                      (c) 2940  
(d) 3200                      (e) 3020

**Direction (41-45):** What will come in the place of question (?) mark in following number series:

**41.** ?, 100, 150, 375, 1312.5

- (a) 100                      (b) 200                      (c) 150  
(d) 400                      (e) 50

**42.** 104, ?, 96, 120, 88, 128

- (a) 112                      (b) 110                      (c) 114  
(d) 118                      (e) 108

**43.** 15, 8, 9, 15, 32, ?

- (a) 66                      (b) 99                      (c) 80  
(d) 82.5                      (e) 80.5

**44.** 6, 8, 14, 26, 46, ?

- (a) 72                      (b) 84                      (c) 96  
(d) 80                      (e) 76

**45.** 72000, 36000, 12000, 3000, 600, ?

- (a) 120                      (b) 200                      (c) 300  
(d) 150                      (e) 100

**46.** 12 men can do a work in 10 days while 10 women can do the same work in 18 days. In how many days 4 men & 6 women together can do the same work?

- (a)  $\frac{120}{7}$  days                      (b) 24 days                      (c)  $\frac{180}{13}$  days  
(d) 15 days                      (e) 18 days

**47.** A car can cover a distance in 4 hour at speed 60 kmph then by what percent should the speed of car be increased to cover the same distance in 2.5 hr?

- (a) 60%                      (b) 40%                      (c) 50%  
(d) 100%                      (e) 75%

**48.** The ratio of the ages of Ram and Rahim 10 years ago was 1 : 3. The ratio of their ages five years hence will be 2 : 3. Then, the ratio of their present ages is :

- (a) 1 : 2                      (b) 3 : 5                      (c) 3 : 4  
(d) 2 : 5                      (e) None of these

**49.** Two trains of length 140m & 120m are running in same direction on parallel tracks with speeds 132 kmph & 80 kmph respectively. How much time will they take to cross each other?

- (a) 7.09 sec                      (b) 18 sec                      (c) 11.7 sec  
(d) 4.42 sec                      (e) Cannot be determined

**50.** A person sold a book at 20% profit. If he had bought it at 10% less cost and sold for Rs 90 more then he would have gained 40% profit. Find cost price of book.

- (a) Rs 800                      (b) Rs 1600                      (c) Rs 1500  
(d) None of these                      (e) Rs 1200

**Direction (51-55):** In each question two equations numbered (I) and (II) are given. You have to solve both the equations and mark appropriate answer.

(a) If  $x = y$  or no relation can be established

(b) If  $x > y$

(c) If  $x < y$

(d) If  $x \geq y$

(e) If  $x \leq y$

**51. I.**  $x = \sqrt{25}$

**II.**  $y^3 = 125$

**52. I.**  $x^2 + 2x - 35 = 0$

**II.**  $y^2 + 15y + 56 = 0$

**53. I.**  $x^2 = 81$

**II.**  $y^2 = 64$

**54. I.**  $17x^2 - 14x - 83 = -80$

**II.**  $y^2 = 2y + 35$

**55. I.**  $x^2 + 4x - 45 = 0$

**II.**  $y^2 - 13y + 40 = 0$

56. A container contains mixture of milk & water in ratio 5 : 3 respectively. If 8 lit milk is added in it then ratio of milk to water becomes 11 : 5. Find difference between initial quantity of milk & that of water.

- (a) 5 lit (b) 38 lit (c) 18 lit  
(d) 30 lit (e) 10 lit

57. Rs 6000 when invested at a certain rate at SI for 2 years, it fetches Rs 1200. If same sum is invested at same rate for a year compounded half - yearly then find compound interest.

- (a) Rs 615 (b) Rs 600 (c) Rs 1200  
(d) Rs 585 (e) Rs 1260

58. A boat can cover 28 km downstream in 42 min. ratio of speed of boat in still water to speed of stream is 7 : 3. Find difference between time taken by boat to cover 60 km downstream & 40 km upstream.

- (a) 2.25 hr (b) 1 hr (c) 1.5 hr  
(d) 0.4 hr (e) 0.9 hr

59. A & B entered into a business by investing total capital of Rs 17000. B withdraws Rs 1500 after 6 months and gets Rs 8100 as profit out of total profit of Rs 19500 at the end of year. Find capital of B after 6 months from starting.

- (a) Rs 7000 (b) Rs 9500 (c) Rs 7500  
(d) Rs 6000 (e) Rs 6500

60. If length of a rectangle increases by 40% while keeping breadth constant then area of rectangle increased by 24 m<sup>2</sup> and perimeter of original rectangle is 32 m. find breadth of rectangle.

- (a) 8.4 m (b) 10 m (c) 6 m  
(d) 14 m (e) 8 m

**Direction (61–70):** What will come in the place of (?) mark in following question.

61.  $280 \div 4 \div 2 = 170 - ?$   
(a) 105 (b) 115 (c) 125  
(d) 135 (e) 145

62.  $\frac{(\sqrt{144} + \sqrt{169}) \times 3}{5} = ?$   
(a) 375 (b) 325 (c) 350  
(d) 275 (e) 475

63.  $(12 \times 5 \div 4) \times 8 = ?$   
(a) 100 (b) 140 (c) 120  
(d) 80 (e) 90

64.  $(120\% \text{ of } 750) \div ? = 25$   
(a) 30 (b) 36 (c) 24  
(d) 18 (e) 48

65.  $8\frac{1}{2} - 4\frac{5}{6} = ? - 3\frac{7}{12}$   
(a)  $3\frac{1}{4}$  (b)  $3\frac{5}{12}$  (c)  $2\frac{7}{12}$   
(d)  $7\frac{1}{4}$  (e)  $5\frac{2}{3}$

66.  $275 + 64\% \text{ of } 750 = 750 + ?$   
(a) 25 (b) 8 (c) 10  
(d) 15 (e) 5

67.  $\sqrt{225} + \sqrt{81} + 12^2 = ?$   
(a) 168 (b) 164 (c) 162  
(d) 172 (e) 182

68.  $\frac{510}{?} = \sqrt{324} + 3.25$   
(a) 12 (b) 48 (c) 24  
(d) 6 (e) 18

69.  $12.5\% \text{ of } (120 + ?) = 45$   
(a) 160 (b) 180 (c) 360  
(d) 240 (e) 120

70.  $572 \div 13 \times 12 - 16 = (8)^?$   
(a) 4 (b) 2 (c) 3  
(d) 5 (e) None of these