

Ultimate Bundle PDF Course 2022



- 01 **Topic wise - 14,000+ Qns**
- 02 **Sectional wise - 9,500+ Qns**
- 03 **Exam wise - 40,000+ Qns**
(Get 50 days Daily Targets)
- 04 **Special Mains Booster Bundle PDF Course - 7,500+ Qns**
- 05 **General Awareness Bundle PDF Course - 12,000+ Qns**

Exactly Based On Real Exam Pattern & Level (Pre & Mains Exams)
Total 80,000 + Qns

Language : English

Also Available in Quiz Format

 **Crack with Jack**

All in One Package of CWJ

Video Course | Mock Test | Ebooks | Bundle PDF | PDF Course

Validity : 24 Months

SUBSCRIBE NOW



Best of Bundle PDF Course Quantitative Aptitude Prelims table of contents

S.no	Topics	Page number
1	Caselet	2
2	Table DI	3
3	Bar Graph	4
4	Caselet (Venn diagram)	6
5	Table Chart (Based on statements)	7
6	Missing Table DI	8
7	Application sums	9

Caselet

Directions (1-5): Read the following information carefully and answer the questions given below.

Three departments namely HR, Marketing and Finance are in three different companies namely A, B and C.

Company A: 30% of the employees are in the marketing department and the number of employees in the HR department is 80% more than the number of employees in the finance department. The average number of employees in the marketing and finance department is 110.

Company B: The number of employees in the marketing department in A is 20% less than the number of employees in the marketing department in B. Number of employees in the finance department is $\frac{2}{3}$ rd of the number of employees in the marketing department. The

number of employees in the HR department is 10 more than the number of employees in the finance department.

Company C: Total number of employees in C is 25% more than the total number of employees in A. Number of employees in the HR department in C is 33.33% more than the number of employees in the marketing department in B and the number of employees in the marketing department in C is 175.

1) In Company B, 40% of the employees in the HR department are males, 48% of the employees in the marketing department are males and 52% of the employees in the finance department are males. Find the total number of female employees in Company B.

- a) 160
- b) 225

- c) 192
- d) 250
- e) None of these

2) Find the ratio of the number of employees in the marketing department in C to the number of employees in the finance department in A.

- a) 4:5
- b) 3:2
- c) 9:11
- d) 7:4
- e) None of these

3) The number of employees in the HR department in A is what percentage more/less than the number of employees in the finance department in C?

- a) 44% more
- b) 48% less
- c) 35% more
- d) 40% less
- e) None of these

4) In company D, the number of employees in the HR department is 30% less than that of A and the number of employees in the marketing department is 20% more than that of C and the number of employees in the finance department is 20% more than that of B. Find the total number of employees in D.

- a) 526
- b) 416
- c) 456

- d) 486
- e) None of these

5) Find the difference between the number of employees in the Finance department in B and the number of employees in the marketing department in A.

- a) 45
- b) 20
- c) 10
- d) 50
- e) None of these

Table DI

Directions (06-10): Study the following information carefully and answer the questions.

The given table chart shows the percentage of the marks obtained by four different students i.e. A, B, C and D in Science, English, Maths, GK.

Name	Science (in %)	English (in %)	Maths (in %)	GK (in %)
A	80	70	64	75
B	60	65	90	80
C	96	82	50	72
D	72	60	84	95

Note: The maximum marks for Science and Maths is 150 and the maximum marks for English and GK is 200.

6) The total marks obtained by B in English is what percentage of the total marks obtained by A, B and D together in GK?

- a) 19%
- b) 34%

- c) 15%
- d) 26%
- e) None of these

7) The total marks obtained by C in Science and GK together is how much more than the total marks obtained by A and D together in English?

- a) 28
- b) 71
- c) 45
- d) 39
- e) None of these

8) If the sum of the total marks obtained by A in Maths and Hindi together is equal to the total marks obtained by D in GK and then find the average of the total marks obtained A in Science, English, Maths, GK and Hindi together?

- a) 170
- b) 120
- c) 150
- d) 110
- e) None of these

9) If the total marks obtained by E in Science and Maths is 32 and 74 more than that of D and the total marks obtained by E in English is 20% more than that of D and the total marks obtained by E in GK is 20% less than that of D, then find the total marks obtained by E in Science, English, Maths and GK together?

- a) 445

- b) 528
- c) 636
- d) 372
- e) None of these

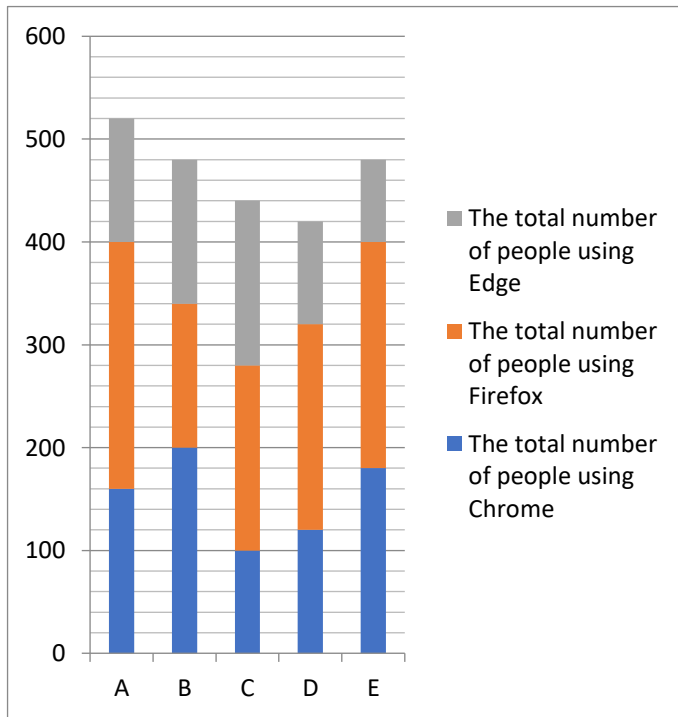
10) The total marks obtained by B in Science and Maths together is what percentage more than the total marks obtained by A in GK?

- a) 20%
- b) 50%
- c) 70%
- d) 30%
- e) None of these

Bar Graph

Directions (11-15): Study the following information carefully and answer the questions.

The given bar graph shows the total number of people using Chrome in five different cities i.e. A, B, C, D and E and also given the total number of people using Firefox in five different cities and the total number of people using Edge in five different cities.



11) Find the ratio of the total number of people using Firefox in cities D and E together to the total number of people using Edge in city A?

- a) 7:2
- b) 5:1
- c) 9:4
- d) 8:3
- e) None of these

12) The total number of people using Chrome and Edge together in city B is what percentage of the total number of people using Chrome and Firefox together in city E?

- a) 70%
- b) 55%
- c) 30%
- d) 85%
- e) None of these

13) If the total number of people using Opera and Chrome in city C is 50% more than the total number of people using Chrome in the same city and then find the average number of people using Firefox, Edge and Opera in city C?

- a) 110
- b) 130
- c) 150
- d) 170
- e) None of these

14) In city B, the average number of males using Chrome, Firefox and Edge is 90 and the ratio of the number of females using Chrome, Firefox and Edge is 9:5:7 respectively, then find the number of males using Chrome?

- a) 70
- b) 90
- c) 110
- d) 150
- e) None of these

15) The total number of people using Chrome, Firefox and Edge together in city E is how much more than the total number of people using Firefox in city A?

- a) 360
- b) 240
- c) 400
- d) 320
- e) None of these

Caselet (Venn diagram)

Directions (16-20): Read the following information carefully and answer the questions given below.

A certain number of students are there in a school who likes atleast anyone of the three different varieties of vegetables namely carrot, potato and beetroot. 25 students like all three vegetables and 15 (7/5)% of the students like only carrots and the ratio of the number of students who like only carrots to the number of students who like only potato is 2:3. The number of students who like only beetroot is 16 more than the number of students who like only carrots. The number of students who like both carrot and beetroot but not potato is 5 times the number of students who like all three vegetables. The number of students who like only beetroot is 50% more than the number of students who like carrot and potato but not beetroot. 2.5% of the total number of students who like all three vegetables.

16) If the total number of students who like only one vegetable is 45 more than the number of girls in the school, then find the number of boys in the school.

- a) 410
- b) 455
- c) 545
- d) 590
- e) None of these

17) Find the number of students who like exactly two vegetables.

- a) 385
- b) 340
- c) 370
- d) 335
- e) None of these

18) Find the number of students who like at most one vegetable.

- a) 640
- b) 512
- c) 590
- d) 345
- e) None of these

19) Find the difference between the number of students who like only carrot and the number of students who like both potato and beetroot but not carrot.

- a) 18
- b) 9
- c) 15
- d) 24
- e) None of these

20) Find the ratio of the number of students who like only potato to the number of students who like only beetroot and the number of people who like carrot and potato but not beetroot.

- a) 41:50
- b) 29:27
- c) 23:25

- d) 45:41
e) None of these

Table Chart (Based on statements)

Directions (21-25): Study the following information carefully and answer the questions.

The given table chart shows the percentage distribution of the total number of permanent employees in five different companies i.e. A, B, C, D and E and also given the number of temporary employees in five different companies.

The total number of permanent employees = 3000

Company	% distribution of the total number of permanent employees	The number of temporary employees
A	25%	40% of the number of permanent employees in A
B	15%	1/3 rd of the number of permanent employees in B
C	16%	Half of the number of permanent employees in C
D	30%	60% less than the number of permanent employees in D
E	14%	50% of the number of permanent employees in E

21) Find the difference between the number of permanent employees in company D and the number of temporary employees in company A?

- a) 600
b) 500
c) 700
d) 900
e) None of these

22) If the number of permanent employees in company F is 280 more than that of company E and the ratio of the total number of employees in company E to F is 3:4, then find the number of temporary employees in company F?

- a) 220
b) 300
c) 410
d) 140
e) None of these

23) If the ratio of the number of permanent male to female employees in company A is 3:2 and the average number of permanent and temporary male employees in company A is 310, then find the number of temporary female employees in company A?

- a) 170
b) 150
c) 130
d) 110
e) None of these

24) Find the ratio of the number of permanent employees in company E to the number of temporary employees in company C?

- a) 7:4
b) 9:5
c) 8:3
d) 10:7
e) None of these

25) The number of permanent employees in company A is what percentage more than the total number of employees in company B?

- a) 10%
- b) 25%
- c) 40%
- d) 15%
- e) None of these

Missing Table DI

Directions (26-30): Study the following information carefully and answer the questions.

The given missing table chart shows the sum of the number of blue and orange gems sold in five different months i.e. March, April, May, June, July and also given the percentage of the number of blue gems sold in five different months and the percentage of the number of green gems sold in five different months.

Total number of gems sold = Number of blue gems sold + Number of orange gems sold + Number of green gems sold

Month	The number of blue and orange gems sold	% of the number of blue gems sold	% of the number of green gems sold
March	315	-	30%
April	-	25%	40%
May	150	36%	-
June	210	20%	30%
July	-	-	50%

Note: The total number of gems sold in April and July is 300 and 140 more than the total number of gems sold in June.

26) If the total number of gems sold in May is 30 more than the number of blue and orange gems sold in July and the ratio of the number of blue, orange and green gems sold in May is 9:10:6 respectively, then find the number of orange gems sold in May?

- a) 170
- b) 110
- c) 100
- d) 150
- e) None of these

27) Find the ratio of the number of green gems sold in April to the number of blue and orange gems sold in March?

- a) 16:21
- b) 10:9
- c) 5:2
- d) 12:7
- e) None of these

28) Find the difference between the number of green gems sold in March and July together and the total number of gems sold in July?

- a) 75
- b) 50
- c) 105
- d) 85
- e) None of these

29) The total number of gems sold in March is what percentage more than the total number of gems sold in June?

- a) 30%
- b) 50%
- c) 70%
- d) 40%
- e) None of these

30) In July, the number of blue gems sold is equal to the number of orange gems sold. If the sum of the number of orange gems sold in March and July together is 245, then find the number of blue gems sold in March?

- a) 120
- b) 140
- c) 180
- d) 160
- e) None of these

Application sums

31) A invested Rs.2000 in SI for $5n$ years at 15% per annum and B invested Rs.3000 in CI for n years at 20% per annum and the interest obtained by B is Rs.1320. Find the interest obtained by A.

- a) Rs.3500
- b) Rs.2500
- c) Rs.4500
- d) Rs.3000
- e) None of these

32) Car A starts from Chennai at 5.30 am and travels towards Madurai at the speed of 80 km/hr and car B starts from Madurai at 7.00 am and travels towards Chennai at the speed of 75

km/hr. If the total distance between Chennai to Madurai is 585 km, then what time does car A and B meet each other?

- a) 8.30 am
- b) 10.00 am
- c) 12.30 am
- d) 9.00 am
- e) None of these

33) Total surface area of the cuboid is 432 m^2 and the ratio of the length to breadth to height of the cuboid is 4:6:3 and length of the rectangle is equal to the sum of the length and breadth of the cuboid and breadth of the rectangle is 18 m. Find the perimeter of the rectangle.

- a) 64 m
- b) 58 m
- c) 98 m
- d) 76 m
- e) None of these

34) Average of n consecutive even numbers is $(n + 7)$ and the average of 6 consecutive odd numbers is $(3n + 1)$ and the sum of n consecutive even numbers and 6 consecutive odd numbers is 156. Find the smallest even number in the series.

- a) 10
- b) 8
- c) 12
- d) 16
- e) None of these

35) A vessel contains 80 liters of pure milk. 30% of the pure milk is removed from the vessel and filled with a certain quantity of water, then the ratio of milk to water becomes 7:4. If again x liters of milk and $(x + 42)$ liters of water is added, then the ratio becomes 9:11. Find the value of x .

- a) 30
- b) 12
- c) 18
- d) 25
- e) None of these

36) In how many ways the word 'GRAMMAR' can be arranged, so that vowels never come together?

- a) 1120
- b) 740
- c) 1080
- d) 450
- e) None of these

37) Train A crosses a pole in t seconds and a tunnel in $(t+2.5)$ seconds. The speed of train A and B is 32 m/sec and 64 m/sec respectively. If train A crosses train B running in the opposite direction in 5 seconds and the length of train B is 320 m, then find the length of the tunnel?

- a) 120 m
- b) 160 m
- c) 80 m
- d) 100 m
- e) None of these

38) A bag contains a certain number of pine apples, guava and jack fruits and the number of pine apples is twice the number of guava and the number of jack fruits is 6 and the probability of selecting 1 pine apple is $\frac{4}{9}$. Find the probability of selecting 2 guavas.

- a) $\frac{4}{11}$
- b) $\frac{7}{23}$
- c) $\frac{4}{29}$
- d) $\frac{2}{51}$
- e) None of these

39) A boat covers 200 km downstream and 120 km upstream in 11 hours. If the downstream speed of the boat is double the upstream speed of the boat, then find the time taken by the boat to cover 90 km in still water?

- a) 5 hours
- b) 3 hours
- c) 6 hours
- d) 9 hours
- e) None of these

40) A car travelled a total distance of 480 km in 10 hours. If one-third of the distance is covered at the rate of 32 km/hr and $\frac{5}{12}$ th of the distance is covered at the rate of 40 km/hr and the remaining distance is covered at the rate of y km/hr, then it takes 2 hours more the original time taken. Find the value of y ?

- a) 72
- b) 48
- c) 60

- d) 40
- e) None of these

41) P and Q together can complete a work x days and R alone can complete the same work in $3x/2$ days and P, Q and R together can finish the work in 8 days and the ratio of the efficiency of P to Q is 4:5. Find the time taken by P alone to complete the work.

- a) 28 days
- b) 30 days
- c) 24 days
- d) 20 days
- e) None of these

42) Average present age of A, B and C is x years and the present age of A is 1 year more than the average present age of A, B and C and the age of C after 8 years is the same as the present age of A. Find the difference of the present age of A and C, if the present age of B is 33 years.

- a) 8 years
- b) 5 years
- c) 12 years
- d) 7 years
- e) None of these

43) A and B entered into a partnership with an investment of Rs.4000 and Rs.5000 and B invested 6 months more than that of A and the total profit obtained by A and B is 6900 and the

profit of A is Rs.2400. Find the ratio of the investment period of A to B.

- a) 3:5
- b) 5:6
- c) 2:3
- d) 4:5
- e) None of these

44) A and B contested in an election. A got $x\%$ of votes and failed in the election by 900 votes and B got $(x + 20)\%$ of votes and won the election. Find the total number of voters in the election, if the number of votes gained by A and B is 80% of the total number of voters and the remaining voters did not cast their votes.

- a) 6000
- b) 5625
- c) 5125
- d) 5825
- e) None of these

45) Sunita invested a certain amount in simple interest at $R\%$ per annum for 4 years. She also invested the same amount in compound interest at 20% per annum for 2 years. If the simple interest received is two times the compound interest received, then find the value of R ?

- a) 22
- b) 15
- c) 30
- d) 27
- e) None of these

46) Pipe P can fill the tank in 1 hour 12 minutes and pipe Q can fill the tank in 48 minutes. Ratio of the efficiency of pipes Q to R is 1:2. If pipes P, Q and R together opened and then after how much time pipes Q and R closed, so that the whole tank is filled in 18 minutes?

- a) 10 minutes
- b) 15 minutes
- c) 12 minutes
- d) 9 minutes
- e) None of these

47) A alone can complete 40% of the work in 8 days and with help of B, the whole work can complete in 12 days. If A, B and C together complete the work in 10 days and they get the total wages of Rs.1260, then find the difference between the wages of A and B?

- a) Rs.120
- b) Rs.360
- c) Rs.210
- d) Rs.420
- e) None of these

48) The present age of Rohan is $\frac{4}{5}$ th of the present age of Mohan and the ratio of the present age of Rohan to Sohan is 4:3. 5 years ago, the sum of the age of Rohan, Mohan and Sohan together is 93 years and then find the present age of Sohan?

- a) 27 years
- b) 50 years
- c) 45 years
- d) 36 years
- e) None of these

49) The side of the cube is double the radius of the sphere. If the total surface area of the cube is 560 cm^2 more than the total surface area of the sphere, then find the lateral surface area of the cube?

- a) 784 cm^2
- b) 1764 cm^2
- c) 196 cm^2
- d) 484 cm^2
- e) None of these

50) A and B entered into a partnership with an investment of Rs.3500 and Rs. x respectively and after 3 months, A withdraws 14.28% of the investment and B added Rs.500. At the end of one year, the profit ratio of A to B is 25:23. Find the initial investment of B.

- a) Rs.2500
- b) Rs.4500
- c) Rs.3000
- d) Rs.3500
- e) None of these

Answer With Explanation

Directions (1-5):

Company A:

Total number of employees = $100x$

Number of employees in marketing department = $30x$

Number of employees in HR and finance department = $100x - 30x = 70x$

Number of employees in HR department = $180/100 * \text{Number of employees in finance department}$

Number of employees in HR department = $70x * /14 = 45x$

Number of employees in finance department = $70x - 45x = 25x$

$30x + 25x = 110 * 2$

$x = 4$

Number of employees in marketing department = $30 * 4 = 120$

Number of employees in HR department = $45 * 4 = 180$

Number of employees in finance department = $25 * 4 = 100$

Total number of employees = 400

Company B:

Number of employees in marketing department = $120 * 100/80 = 150$

Number of employees in finance department = $150 * 2/3 = 100$

Number of employees in HR department = $100 + 10 = 110$

Total number of employees = $150 + 110 + 100 = 360$

Company C:

Total number of employees = $400 * 125/100 = 500$

Number of employees in HR department = $150 + 150 * 33.33/100 = 200$

Number of employees in marketing department = 175

Number of employees in finance department = $500 - 200 - 175 = 125$

Company	Total number of employees	Number of employees in HR department	Number of employees in marketing department	Number of employees in finance department
A	400	180	120	100
B	360	110	150	100
C	500	200	175	125

1) Answer: C

Number of male employees in HR department in B = $110 * 40/100 = 44$

Number of male employees in marketing department in B = $150 * 48/100 = 72$

Number of male employees in finance department in B = $100 * 52/100 = 52$

Total number of female employees in Company B = $360 - (44 + 72 + 52) = 192$

2) Answer: D

Required ratio = $175:100 = 7:4$

3) Answer: A

Required percentage = $(180 - 125)/125 * 100 = 55/125 * 100 = 44\%$ more

4) Answer: C

Number of employees in HR department in D = $180 * 70/100 = 126$

Number of employees in marketing department in D = $175 * 120/100 = 210$

Number of employees in finance department in D = $100 * 120/100 = 120$

Total number of employees in D = $126 + 210 + 120 = 456$

5) Answer: B

Required difference = $120 - 100 = 20$

Directions (06-10):

Science:

The total marks obtained by A = $150 * 80/100 = 120$

The total marks obtained by B = $150 * 60/100 = 90$

The total marks obtained by C = $150 * 96/100 = 144$

The total marks obtained by D = $150 * 72/100 = 108$

English:

The total marks obtained by A = $200 * 70/100 = 140$

The total marks obtained by B = $200 * 65/100 = 130$

The total marks obtained by C = $200 * 82/100 = 164$

The total marks obtained by D = $200 * 60/100 = 120$

Maths:

The total marks obtained by A = $150 * 64/100 = 96$

The total marks obtained by B = $150 * 90/100 = 135$

The total marks obtained by C = $150 * 50/100 = 75$

The total marks obtained by D = $150 * 84/100 = 126$

GK:

The total marks obtained by A = $200 * 75/100 = 150$

The total marks obtained by B = $200 * 80/100 = 160$

The total marks obtained by C = $200 * 72/100 = 144$

The total marks obtained by D = $200 * 95/100 = 190$

Name	Science	English	Maths	GK
A	120	140	96	150
B	90	130	135	160
C	144	164	75	144
D	108	120	126	190

6) Answer: D

The total marks obtained by A, B and D together in GK = $150 + 160 + 190 = 500$

Required percentage = $130/500 * 100 = 26\%$

7) Answer: A

The total marks obtained by C in Science and GK = $144 + 144 = 288$

The total marks obtained by A and D together in English = $140 + 120 = 260$

Required difference = $288 - 260 = 28$

8) Answer: B

The total marks obtained by A in Maths and Hindi together = 190

The total marks obtained by A in Hindi = $190 - 96 = 94$

The average marks obtained by A in Science, English, Maths, Gk and Hindi together = $(120 + 140 + 96 + 150 + 94)/5 = 600/5 = 120$

9) Answer: C

The total marks obtained by E in Science = $108 + 32 = 140$

The total marks obtained by E in Maths = $126 + 74 = 200$

The total marks obtained by E in English = $120 * 120/100 = 144$

The total marks obtained by E in GK = $190 * 80/100 = 152$

Required total = $140 + 200 + 144 + 152 = 636$

10) Answer: B

The total marks obtained by B in Science and Maths together = $90 + 135 = 225$

Required percentage = $(225 - 150)/150 * 100 = 75/150 * 100 = 50\%$

11) Answer: A

The total number of people using Firefox in cities D and E = $200 + 220 = 420$

Required ratio = $420:120 = 7:2$

12) Answer: D

The total number of people using Chrome and Firefox in city E = $180 + 220 = 400$

The total number of people using Chrome and Edge in city B = $200 + 140 = 340$

Required percentage = $340/400 * 100 = 85\%$

13) Answer: B

The total number of people using Opera and Chrome in city C = $100 * 150/100 = 150$

The total number of people using Opera in city C = $150 - 100 = 50$

Required average = $(50 + 180 + 160)/3 = 390/3 = 130$

14) Answer: C

The total number of males using Chrome, Firefox and Edge in city B = $90 * 3 = 270$

The total number of females using Chrome, Firefox and Edge in city B = $480 - 270 = 210$

The number of females using Chrome in city B = $210 * 9/(9 + 5 + 7) = 210 * 9/21 = 90$

The number of males using Chrome in city B = $200 - 90 = 110$

15) Answer: B

Best of Bundle PDF Course 2022 – Quantitative Aptitude Questions for Prelims Exams

The total number of people using Chrome, Firefox and Edge together in city E = $180 + 220 + 80 = 480$

Required difference = $480 - 240 = 240$

Directions (16-20):

Number of students who like all three vegetables = 25

Total number of students in the school = $25 * 100 / 2.5 = 1000$

Number of students who like only carrot = $1000 * 82 / 5 * 1 / 100 = 164$

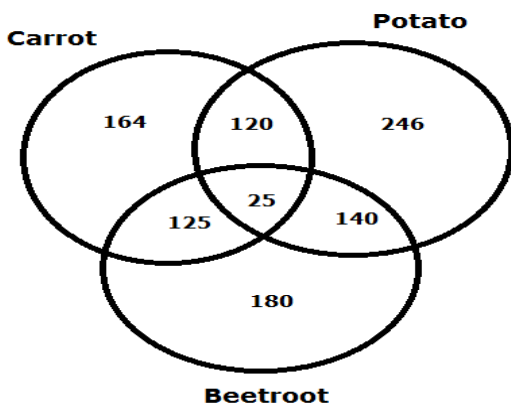
Number of students who like only potato = $164 * 3 / 2 = 246$

Number of students who like only beetroot = $164 + 16 = 180$

Number of students who like both carrot and beetroot but not potato = $5 * 25 = 125$

Number of students who like carrot and potato but not beetroot = $180 * 100 / 150 = 120$

Number of students who like potato and beetroot but not carrot = $1000 - 164 - 246 - 180 - 125 - 120 - 25 = 140$



16) Answer: B

Total number of girls in the school = $(164 + 246 + 180) - 45 = 590 - 45 = 545$

Number of boys in the school = $1000 - 545 = 455$

17) Answer: A

Number of students who like exactly two vegetables = $120 + 125 + 140 = 385$

18) Answer: C

Number of students who like at most one vegetable = $164 + 246 + 180 = 590$

19) Answer: D

Required difference = $164 - 140 = 24$

20) Answer: A

Required ratio = $246 : (120 + 180) = 246 : 300 = 41 : 50$

Directions (21-25):

Company A:

The number of permanent employees = $3000 * 25 / 100 = 750$

The number of temporary employees = $750 * 40 / 100 = 300$

Company B:

The number of permanent employees = $3000 * 15 / 100 = 450$

The number of temporary employees = $450 * 1 / 3 = 150$

Company C:

The number of permanent employees = $3000 * 16 / 100 = 480$

The number of temporary employees = $480 / 2 = 240$

Company D:

The number of permanent employees = $3000 * \frac{30}{100} = 900$

The number of temporary employees = $900 * \frac{(100-60)}{100} = 900 * \frac{40}{100} = 360$

Company E:

The number of permanent employees = $3000 * \frac{14}{100} = 420$

The number of temporary employees = $420 * \frac{50}{100} = 210$

Company	The number of permanent employees	The number of temporary employees
A	750	300
B	450	150
C	480	240
D	900	360
E	420	210

21) Answer: A

Required difference = $900 - 300 = 600$

22) Answer: D

The total number of employees in company E = $420 + 210 = 630$

The total number of employees in company F = $630 * \frac{4}{3} = 840$

The number of permanent employees in company F = $420 + 280 = 700$

The number of temporary employees in company F = $840 - 700 = 140$

23) Answer: C

The total number of employees in company A = $750 + 300 = 1050$

The total number of female employees in company A = $1050 - 310 * 2 = 1050 - 620 = 430$

The number of permanent female employees in company A = $750 * \frac{2}{(3+2)} = 750 * \frac{2}{5} = 300$

The number of temporary female employees in company A = $430 - 300 = 130$

24) Answer: A

Required ratio = $420:240 = 7:4$

25) Answer: B

The total number of employees in company B = $450 + 150 = 600$

Required percentage = $\frac{(750 - 600)}{600} * 100 = \frac{150}{600} * 100 = 25\%$

Directions (26-30):

March:

The number of blue and orange gems sold = 315

The number of green gems sold = $315 * \frac{30}{(100-30)} = 315 * \frac{30}{70} = 135$

The total number of gems sold = $315 * \frac{100}{(100-30)} = 450$

June:

The number of blue and orange gems sold = 210

The total number of gems sold = $210 * \frac{100}{(100-30)} = 300$

The number of green gems sold = $210 * \frac{30}{(100-30)} = 90$

The number of blue gems sold = $210 * \frac{20}{(100-30)} = 60$

Best of Bundle PDF Course 2022 – Quantitative Aptitude Questions for Prelims Exams

The number of orange gems sold = $300 - 60 - 90 = 150$

April:

The total number of gems sold = $300 + 300 = 600$

The number of blue gems sold = $600 * 25/100 = 150$

The number of green gems sold = $600 * 40/100 = 240$

The number of orange gems sold = $600 - 150 - 240 = 210$

July:

The total number of gems sold = $300 + 140 = 440$

The number of green gems sold = $440 * 50/100 = 220$

The number of blue and orange gems sold = $440 - 220 = 220$

Month	The total number of gems sold	The number of blue gems sold	The number of green gems sold	The number of orange gems sold
March	450	-	135	-
April	600	150	240	210
May	-	-	-	-
June	300	60	90	150
July	440	-	220	-

26) Answer: C

The total number of gems sold in May = $220 + 30 = 250$

The number of orange gems sold in May = $250 * 10/(9+10+6) = 100$

27) Answer: A

Required ratio = $240:315 = 16:21$

28) Answer: D

The number of green gems sold in March and July = $135 + 220 = 355$

Required difference = $440 - 355 = 85$

29) Answer: B

Required percentage = $(450-300)/300 * 100 = 150/3 = 50\%$

30) Answer: C

The number of orange gems sold in July = $220/2 = 110$

The number of orange gems sold in March = $245 - 110 = 135$

The number of blue gems sold in March = $450 - 135 - 135 = 180$

31) Answer: D

$3000 * (1 + 20/100)^n - 3000 = 1320$

$3000 * (120/100)^n = 4320$

$(6/5)^n = 4320/3000$

$(6/5)^n = 144/100$

$(6/5)^n = (12/10)^2$

$n = 2$

Interest obtained by A = $2000 * 5 * 2 * 15/100 = \text{Rs.}3000$

32) Answer: B

The distance covered by car A = $80 * (7.00 - 5.30) = 80 * 1.5 = 120 \text{ km}$

The cars A and B meet each other = $(585 - 120)/(80 + 75)$

$$= 465/155$$

= 3 hours

The cars A and B meet each other = $7.00 + 3.00$

= 10.00 am

33) Answer: D

Length of the cuboid = $4x$

Breadth of the cuboid = $6x$

Height of the cuboid = $3x$

Lateral surface area of the cuboid = 432 m^2

$$2 * (4x * 6x + 6x * 3x + 3x * 4x) = 432$$

$$24x^2 + 18x^2 + 12x^2 = 216$$

$$54x^2 = 216$$

$$x^2 = 4$$

$$x = 2$$

Length of the cuboid = $4 * 2 = 8 \text{ m}$

Breadth of the cuboid = $6 * 2 = 12 \text{ m}$

Length of the rectangle = $8 + 12 = 20 \text{ m}$

Perimeter of the rectangle = $2 * (20 + 18) = 2 * 38 = 76 \text{ m}$

34) Answer: B

Sum of the n consecutive even numbers = $n * (n + 7) = n^2 + 7n$

Sum of 6 consecutive odd numbers = $6 * (3n + 1) = 18n + 6$

$$n^2 + 7n + 18n + 6 = 156$$

$$n^2 + 25n - 150 = 0$$

$$n^2 + 30n - 5n - 150 = 0$$

$$n(n + 30) - 5(n + 30) = 0$$

$$n = 5, -30$$

Average of 5 consecutive even numbers = $5 + 7 = 12$

3rd number in the even number series is 12

1st number in the even number series = $12 - 2 - 2 = 8$

35) Answer: D

The Initial quantity of milk = 80 liters

Quantity of milk after 30% of the milk is removed = $80 * 70/100 = 56$ liters

Quantity of water added = $56 * 4/7 = 32$ liters

$$(56 + x)/(32 + x + 42) = 9/11$$

$$(56 + x)/(74 + x) = 9/11$$

$$616 + 11x = 666 + 9x$$

$$2x = 50$$

$$x = 25 \text{ liters}$$

36) Answer: D

The number of vowels = A, A = 2

The number of consonants = G, R, M, M, R = 5

The number of ways the letters can be arranged = $7!/(2!2!2!) = 630$

The number of ways the vowels can come together = $6!/(2!2!2!) = 180$

The number of ways the vowels never come together = $630 - 180 = 450$

37) Answer: C

Let the length of train A = x

And the length of the tunnel = y

$$x + 320 = (32 + 64) * 5$$

$$x + 320 = 480$$

$$x = 160$$

$$160 = 32 * t$$

$$t = 5$$

$$160+y = 32*(5+2.5)$$

$$160+y = 240$$

$$y = 80 \text{ m}$$

38) Answer: D

Number of guava = x

Number of pine apples = 2x

$$\text{Total} = x + 2x + 6 = 3x + 6$$

$$2x/(3x + 6) = 4/9$$

$$18x = 12x + 24$$

$$6x = 24$$

$$x = 4$$

Number of guava = 4

Number of pine apples = 2 * 4 = 8

$$\text{Total} = 3 * 4 + 6 = 18$$

$$\text{Required probability} = 4C_2/18C_2 = 2/51$$

39) Answer: B

Let the upstream speed of the boat = x km/hr

And the downstream speed of the boat = 2x km/hr

$$200/2x + 120/x = 11$$

$$100 + 120 = 11x$$

$$x = 220/11$$

$$x = 20 \text{ km/hr}$$

The upstream speed of the boat = 20 km/hr

The downstream speed of the boat = 20 * 2 = 40 km/hr

The speed of the boat in still water = (40 + 20)/2 = 30 km/hr

Required time = 90/30 = 3 hours'

40) Answer: C

1/3rd of the total distance 480 km = 480 * 1/3 = 160 km

5/12th of the total distance 480 km = 480 * 5/12 = 200 km

The remaining distance of 480 km = 480 – 160 – 200 = 120 km

$$160/32 + 200/40 + 120/y = 10 + 2$$

$$5 + 5 + 120/y = 12$$

$$120/y = 2$$

$$y = 60 \text{ km/hr}$$

41) Answer: B

$$1/P + 1/Q + 1/R = 1/8$$

$$1/x + 2/3x = 1/8$$

$$(3 + 2)/3x = 1/8$$

$$x = 40/3 \text{ days}$$

Ratio of the time taken by P to Q = 5:4

$$1/P + 1/Q = 3/40$$

$$1/5a + 1/4a = 3/40$$

$$(4 + 5)/20a = 3/40$$

$$a = 6$$

Time taken by P alone to complete the work = 6 * 5 = 30 days

42) Answer: A

Sum of the present ages of A, B and C = 3x

Present age of A = x + 1

Present age of B = 33 years

Present age of C + 8 = (x + 1)

Present age of C = x – 7

$$x + 1 + 33 + x – 7 = 3x$$

$$3x - 2x = 27$$

$$x = 27$$

Required difference = $(27 + 1) - (27 - 7) = 8$
years

43) Answer: C

Time investment of A = x months

Time investment of B = (x + 6) months

$$(4000 * x)/(5000 * (x + 6)) = 2400/(6900 - 2400)$$

$$4x/(5x + 30) = 2400/4500$$

$$4x/(5x + 30) = 8/15$$

$$60x = 40x + 240$$

$$20x = 240$$

$$x = 12 \text{ months}$$

Time investment of A = 12 months

Time investment of B = 12 + 6 = 18 months

Required ratio = 12:18 = 2:3

44) Answer: B

Number of votes got by both candidates = 100%

$$x\% + x\% + 20\% = 100\%$$

$$2x\% = 80\%$$

$$x = 40\%$$

Number of votes gained by both candidates =

$$900 * 100/(60 - 40) = 4500$$

$$\text{Total number of voters} = 4500 * 100/80 = 5625$$

45) Answer: A

Let the amount invested in simple interest = x

$$x * R * 4/100 = 2 * [x * (1 + 20/100)^2 - x]$$

$$R * 4/100 * 25 = 2 * (36 - 25)$$

$$R = 11 * 2$$

$$R = 22$$

46) Answer: C

The pipe P can fill tank = 72 minutes

The pipe R can fill tank = $48 * 1/2 = 24$ minutes

$$(1/72 + 1/48 + 1/24) * s + 1/72 * (18-s) = 1$$

$$(2+3+6)/144 * s + (36-2s)/144 = 1$$

$$11s + 36 - 2s = 144$$

$$9s = 108$$

$$s = 12 \text{ minutes}$$

47) Answer: C

A alone complete the work = $8 * 100/40 = 20$
days

B alone complete the work = $1/12 - 1/20 = (5-3)/60 = 1/30 = 30$ days

C alone complete the work = $1/10 - 1/12 = (6-5)/60 = 1/60 = 60$ days

Ratio of the efficiency of A, B and C =
 $1/20:1/30:1/60 = 3:2:1$

The difference between the wages of A and B =
 $1260 * (3-2)/(3+2+1) = 1260 * 1/6 = \text{Rs.}210$

48) Answer: A

Let the present age of Rohan = 4x

And the present age of Mohan = 5x

And the present age of Sohan = $4x * 3/4 = 3x$

The sum of the present age of Rohan, Mohan
and Sohan = $93 + 5 * 3 = 108$

$$4x + 5x + 3x = 108$$

$$x = 108/12$$

$$x = 9$$

The present age of Sohan = $3 * 9 = 27$ years

49) Answer: A

Let the radius of the sphere = x

And the side of the cube = 2x

$$6 * (2x)^2 - 4 * 22/7 * (x)^2 = 560$$

$$x^2 * (168 - 88) = 560 * 7$$

$$x^2 = 49$$

$$x = 7$$

The side of the cube = 2 * 7 = 14 cm

The lateral surface area of the cube = 4 * 14 * 14
= 784 cm²

50) Answer: A

$$[(3500 * 3) + (3500 - 3500 * 14.28/100) * 9] / [(x * 3) + (x + 500) * 9] = 25/23$$

$$(10500 + 27000) / (3x + 9x + 4500) = 25/23$$

$$37500 / (12x + 4500) = 25/23$$

$$34500 = 12x + 4500$$

$$12x = 30000$$

$$x = \text{Rs.}2500$$