

IBPS PO Mains Quantitative Aptitude 2020 Memory Based

Q1. Find the total time taken by train to cover distance from A to D on Tuesday?

(2 Marks)

Read the data given below carefully and answer the questions.

A train running between four stations i.e. A, B, C & D on Monday and Tuesday. The average speed of train on Monday during whole journey is 50 kmph and average speed of train on Tuesday during whole journey is 62.5 kmph. On Monday train takes one hour less to cover distance between A and B as compare to that of on Tuesday. Train takes equal time to cover distance between B to C on both the given days, while train takes three hours more to cover distance between C and D as compare to that of on Tuesday. The distance between A and B is 40% less than that of between C and D. The distance between B and C is 50% more than that of between A and B.

Note - There is not any halt or stoppage from the station A to D.

- (a) 6 hours
- (b) 8 hours
- (c) 10 hours
- (d) 4 hours
- (e) 12 hours

Q2. Find the difference between the distance from station A to B and from station C to D?

(2 Marks)

Read the data given below carefully and answer the questions.

A train running between four stations i.e. A, B, C & D on Monday and Tuesday. The average speed of train on Monday during whole journey is 50 kmph and average speed of train on Tuesday during whole journey is 62.5 kmph. On Monday train takes one hour less to cover distance between A and B as compare to that of on Tuesday. Train takes equal time to cover distance between B to C on both the given days, while train takes three hours more to cover distance between C and D as compare to that of on Tuesday. The distance between A and B is 40% less than that of between C and D. The distance between B and C is 50% more than that of between A and B.

Note - There is not any halt or stoppage from the station A to D.

- (a) 60 km
- (b) 20 km
- (c) 80 km
- (d) 40 km
- (e) Can't determined

Q3. On Monday speed of train between stations B to C is 50% more than speed of train between C to D and time taken to cover distance between B to C is 2 hours less than that of time taken between C and D. Find the speed of train between C to D on Monday? (2 Marks)

Read the data given below carefully and answer the questions.

A train running between four stations i.e. A, B, C & D on Monday and Tuesday. The average speed of train on Monday during whole journey is 50 kmph and average speed of train on Tuesday during whole journey is 62.5 kmph. On Monday train takes one hour less to cover distance between A and B as compare to that of on Tuesday. Train takes equal time to cover distance between B to C on both the given days, while train takes three hours more to cover distance between C and D as compare to that of on Tuesday. The distance between A and B is 40% less than that of between C and D. The distance between B and C is 50% more than that of between A and B.

Note - There is not any halt or stoppage from the station A to D.

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

- Q4. Scheme A offers R% p.a. rate of interest on compound annually. Find the value of R.**
Statement I – If interest received on Rs. $\frac{2}{5}$ P on simple interest for 11 years at the rate of $\frac{R}{4}\%$ p.a. is half of when Rs. P invested in scheme A for 2 years.
Statement II – Rs. X is invested in scheme A for two years and it amounted Rs. 3600. If Rs. $\frac{16}{25}$ X is invested at rate of (R – 10) % on CI annually for two years, then it amounted Rs. 1936.
Statement III- When Rs. Q invested in scheme A for two years and three years, then difference between interests is Rs. 1152. (2 Marks)
 (a) Statement (I) alone is sufficient answer the question
 (b) Statement (II) alone is sufficient to answer the question
 (c) All the three statements taken together are necessary to answer the question
 (d) Either statement (I) alone or statement (II) and (III) together sufficient to answer the question.
 (e) Either statement (I) alone or statement (II) alone is sufficient to answer the question.
- Q5. If in school A total number of boys and girls are 'X' and 'Y' respectively, then the difference between total boys in both schools and total girls in both schools will be represented as (Total boys in both schools together are more than that of total girls): (2 Marks)**
Read the data given below carefully and answer the questions.
There are two schools A & B in a town. Total number of girls in school B are 30 more than twice of total number of girls in school A. Total number of boys in school B are equal to total number of students (boys + girls) in school A.
 (a) $2X - 2Y - 30$
 (b) $3X - 2Y + 30$
 (c) $2X - Y - 30$
 (d) $3X - 3Y + 30$
 (e) None of these
- Q6. If total students in school B is 180 less than twice of total students in school A, then find the difference between total students in school A and total girls in school B? (2 Marks)**
Read the data given below carefully and answer the questions.
There are two schools A & B in a town. Total number of girls in school B are 30 more than twice of total number of girls in school A. Total number of boys in school B are equal to total number of students (boys + girls) in school A.
 (a) 240
 (b) 280
 (c) 420
 (d) 210
 (e) None of these
- Q7. If the number of girls in school B is 450, then find the number of boys in school B (total number of students in school B is 180 less than twice the number of students in school A) (2 Marks)**
Read the data given below carefully and answer the questions.
There are two schools A & B in a town. Total number of girls in school B are 30 more than twice of total number of girls in school A. Total number of boys in school B are equal to total number of students (boys + girls) in school A.
 (a) 630
 (b) 420
 (c) 570
 (d) 600
 (e) 480

Q8. 'X' is the n th term of the given series and 'Y' is the $(n + 1)$ th term of the given series. Choose the correct statement from the following statements (i), (ii) & (iii).

701, 349, 173, 85, 41, 19, 8, 2.5

(i) $X = 2Y + 3$

(ii) $Y = 3X + 2$

(iii) Difference between 1st and 2nd term is twice of the difference between 2nd and 3rd term and so on. (2 Marks)

(a) Only (i) and (iii)

(b) Only (i) and (ii)

(c) Only (ii) and (iii)

(d) Only (i)

(e) All (i), (ii) & (iii)

Q9. In the following questions, a series is given in which one term is wrong with which another series started. You have to find the wrong term in the given series then starting from that, find IVth term of new series so formed. (2 Marks)

1, 3, 6, 21, 88, 445, 2676

(a) 39

(b) 37

(c) 25

(d) 33

(e) 35

Q10. Wrong term of series I is the nearest square of which of the given term? (1 Marks)

Series I: 8, 9, 15, 25, 42, 68, 105

Series II: 60, 180, 450, 900, 1350, 1380, 675

(a) 5

(b) 4

(c) 8

(d) 7

(e) 3

Q11. If wrong term in series II is 'N', then which statement is true about $(\frac{N}{30} + 1)^2$ (2 Marks)

(i) It's a prime number.

(ii) Sum of the digits is less than 9.

(iii) It's a nearest multiple of 5 and its remainder is 4.

Series I: 8, 9, 15, 25, 42, 68, 105

Series II: 60, 180, 450, 900, 1350, 1380, 675

(a) Only (ii) and (iii) follow

(b) Only (i) and (ii) follow

(c) Only (i) follow

(d) Non follow

(e) All (i), (ii) and (iii) follow

Q12. Find total population of village E? (2 Marks)

Table given below shows percentage of total literate population of five (A, B, C, D & E) villages, literate male, illiterate male and total female (literate + illiterate). Read the data carefully and answer the questions.

| Villages | % of literate population | Male literate | Male illiterate (in %) out of total illiterate | Total female (Literate + Illiterate) |
|----------|--------------------------|---------------|--|--------------------------------------|
| A | 75 | 1050 | 40% | 750 |
| B | 72 | 75% | 75% | NA |
| C | 80 | 1280 | 60% | NA |
| D | 96 | 70% | 50% | NA |
| E | 85 | 1530 | 60% | 1746 |

Note:- 'NA' means some vales are missing which you have to calculate if required.

- (a) 4200
- (b) 3600
- (c) 4000
- (d) 3000
- (e) 4800

Q13. Find difference between total male and total female population of village A? (2 Marks)

Table given below shows percentage of total literate population of five (A, B, C, D & E) villages, literate male, illiterate male and total female (literate + illiterate). Read the data carefully and answer the questions.

| Villages | % of literate population | Male literate | Male illiterate (in %) out of total illiterate | Total female (Literate + Illiterate) |
|----------|--------------------------|---------------|--|--------------------------------------|
| A | 75 | 1050 | 40% | 750 |
| B | 72 | 75% | 75% | NA |
| C | 80 | 1280 | 60% | NA |
| D | 96 | 70% | 50% | NA |
| E | 85 | 1530 | 60% | 1746 |

Note:- 'NA' means some vales are missing which you have to calculate if required.

- (a) 600
- (b) 300
- (c) 500
- (d) 400
- (e) 200

Q14. Find the ratio between total male population to total female population in village B? (2 Marks)

Table given below shows percentage of total literate population of five (A, B, C, D & E) villages, literate male, illiterate male and total female (literate + illiterate). Read the data carefully and answer the questions.

| Villages | % of literate population | Male literate | Male illiterate (in %) out of total illiterate | Total female (Literate + Illiterate) |
|----------|--------------------------|---------------|--|--------------------------------------|
| A | 75 | 1050 | 40% | 750 |
| B | 72 | 75% | 75% | NA |
| C | 80 | 1280 | 60% | NA |
| D | 96 | 70% | 50% | NA |
| E | 85 | 1530 | 60% | 1746 |

Note:- 'NA' means some vales are missing which you have to calculate if required.

- (a) 3 : 2
- (b) 3 : 1
- (c) 2 : 1
- (d) 5 : 3
- (e) 4 : 1

Q15. If the number of female graduates in village C is equal to the number of illiterate males in village C and the difference between the number of graduate female and under graduate female in village C is 120, then find the total population of village C (Note - There is only graduate and under graduate population in village C)? (2 Marks)
Table given below shows percentage of total literate population of five (A, B, C, D & E) villages, literate male, illiterate male and total female (literate + illiterate). Read the data carefully and answer the questions.

| Villages | % of literate population | Male literate | Male illiterate (in %) out of total illiterate | Total female (Literate + Illiterate) |
|----------|--------------------------|---------------|--|--------------------------------------|
| A | 75 | 1050 | 40% | 750 |
| B | 72 | 75% | 75% | NA |
| C | 80 | 1280 | 60% | NA |
| D | 96 | 70% | 50% | NA |
| E | 85 | 1530 | 60% | 1746 |

Note:- 'NA' means some vales are missing which you have to calculate if required.

- (a) 4000
- (b) 2000
- (c) 1250
- (d) 3000
- (e) 2500

Q16. If difference between male and female population of village D is 1152, then find total number of illiterate females in village D? (2 Marks)

Table given below shows percentage of total literate population of five (A, B, C, D & E) villages, literate male, illiterate male and total female (literate + illiterate). Read the data carefully and answer the questions.

| Villages | % of literate population | Male literate | Male illiterate (in %) out of total illiterate | Total female (Literate + Illiterate) |
|----------|--------------------------|---------------|--|--------------------------------------|
| A | 75 | 1050 | 40% | 750 |
| B | 72 | 75% | 75% | NA |
| C | 80 | 1280 | 60% | NA |
| D | 96 | 70% | 50% | NA |
| E | 85 | 1530 | 60% | 1746 |

Note:- 'NA' means some vales are missing which you have to calculate if required.

- (a) 60
- (b) 40
- (c) 90
- (d) 120
- (e) 80

Q17. A bag kept some green balls, some blue balls and seven red balls. Probability of picking one green ball is $\frac{1}{7}$ more than that of picking one red ball from the bag and probability of picking one blue ball is $\frac{9}{35}$ more than that of picking one red ball from the bag. Find total number of blue balls in the bag? (1 Marks)

- (a) 12
- (b) 14
- (c) 18
- (d) 20
- (e) 16

Q18. Aman born three years after marriage of his parents and Aman's mother is three years younger than his father. At present Aman is 20 years younger than his mother and after three years ratio of the age of Aman's father to his mother's will be 11 : 10. Find how many years before his parents got married? (1 Marks)

- (a) 10 years
- (b) 7 years
- (c) 13 years
- (d) 8 years
- (e) 6 years

Q19. Shopkeeper marked up a pen at certain percentage above its cost price. If marked price of pen is Rs. Y, then find the value of Y?

Statement I – Y is marked up 80% above cost price.

Statement II – Cost price of the pen is Rs. X. If shopkeeper allows a discount of 4% on marked price, then he makes a profit of 8% on it. When shopkeeper sells the pen at marked price, then he makes a profit of Rs. 28.

Statement III – Cost price of the pen is Rs. P. If shopkeeper allows a discount of $22\frac{2}{9}\%$ on marked price, then he makes a profit of Rs. 70. (2 Marks)

- (a) Statement **(I)** alone is sufficient answer the question
- (b) Statement **(II)** alone is sufficient to answer the question
- (c) All the three statements taken together are necessary to answer the question
- (d) Either statement **(II)** alone or statement **(I)** and **(III)** together sufficient to answer the question.
- (e) Statement **(III)** alone is sufficient to answer the question

Q20. Find the ratio of the radius of cylindrical jar to the radius of conical vessel ? (1 Marks)

A man is going shop from his home with the speed of _____ kmph and time taken to reach the shop by him is _____ hours. After reaching there he purchases a cylindrical jar of certain height having capacity equal to 83259 cm^3 . The man also purchases a conical vessel whose capacity is $1/27^{\text{th}}$ of cylindrical jar and height of conical vessel is 14 cm.

Note: Height of conical vessel is four times of the height of cylindrical jar.

- (a) 3 : 1
- (b) 4 : 1
- (c) 5 : 1
- (d) 6 : 1
- (e) 5 : 2

Q21. The distance (in km) between the home and shop in numerical value is equal to seven more than $1/3$ rd of square root of $1/11$ th of the capacity of the cylindrical jar and the speed of the man is four times of the time taken by him to reach the shop.

Speed of man _____ kmph. (2 Marks)

A man is going shop from his home with the speed of _____ kmph and time taken to reach the shop by him is _____ hours. After reaching there he purchases a cylindrical jar of certain height having capacity equal to 83259 cm^3 . The man also purchases a conical vessel whose capacity is $1/27^{\text{th}}$ of cylindrical jar and height of conical vessel is 14 cm.

Note: Height of conical vessel is four times of the height of cylindrical jar.

- (a) 12
- (b) 15
- (c) 10
- (d) 8
- (e) 18

Q22. The distance (in km) between the home and shop in numerical value is equal to seven more than $1/3$ rd of square root of $1/11$ th of the capacity of the cylindrical jar and the speed of the man is four times of the time taken by him to reach the shop.

Time taken to reach the shop by man is _____ hours. (2 Marks)

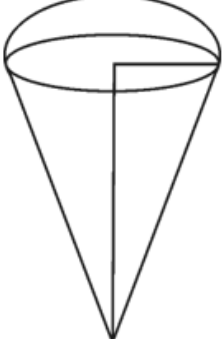

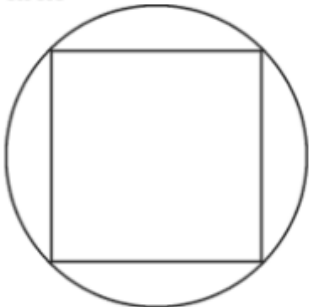
A man is going shop from his home with the speed of _____ kmph and time taken to reach the shop by him is _____ hours. After reaching there he purchases a cylindrical jar of certain height having capacity equal to 83259 cm^3 . The man also purchases a conical vessel whose capacity is $1/27^{\text{th}}$ of cylindrical jar and height of conical vessel is 14 cm.

Note: Height of conical vessel is four times of the height of cylindrical jar.

- (a) 3.5
- (b) 2
- (c) 3
- (d) 2.5
- (e) 4

Q23. If the difference of the height of Y and side of S is greater than 20 m. (2 Marks)

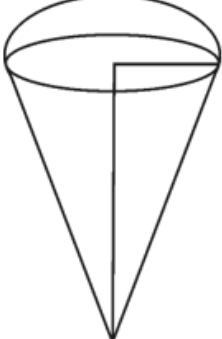

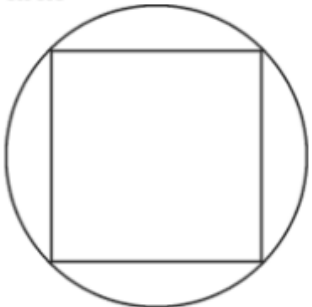
Match the column I and II based on the given questions.

| Column I | Column II |
|--|---|
| <p>(i) X = Cone Volume of cone = 1232 m^3</p>  | <p>(A) Radius = 14 m</p> |
| <p>(ii) Y = Cylinder Volume of cylinder = 1848 m^3</p>  | <p>(B) Radius = 7 m</p> |
| <p>(iii) S = Square, which inscribe in circle</p>  | <p>(C) Circumference of circle = 44 m</p> |

- (a) (i) Only A, either B or C
(ii) Only A
(iii) Only A
(b) (i) Only C
(ii) Only B
(iii) Only A
(c) (i) Only B
(ii) Only A
(iii) Only A
(d) (i) Only C
(ii) Only B
(iii) Only B
(e) None of these

Q24. If height of X is greater than height of Y. (2 Marks)

Match the column I and II based on the given questions.

| Column I | Column II |
|--|---|
| <p>(i) X = Cone Volume of cone = 1232 m^3</p>  | <p>(A) Radius = 14 m</p> |
| <p>(ii) Y = Cylinder Volume of cylinder = 1848 m^3</p>  | <p>(B) Radius = 7 m</p> |
| <p>(iii) S = Square, which inscribe in circle</p>  | <p>(C) Circumference of circle = 44 m</p> |

- (a) (i) Only A, either B or C
(ii) Only A
(iii) Only A
(b) (i) Either B or C
(ii) Only A
(iii) Only A, either B or C
(c) (i) Only B
(ii) Only A
(iii) Only A
(d) (i) Only C
(ii) Only B
(iii) Only B
(e) None of these

Q25. Out of total number of employee (Non managers + managers) in company B 40% are females. If out of Non managers employees in company B 40% are female employee, then find total number of Non managers employee in company B? (1 Marks)

Line graph given below shows percentage of managers out of total employees in six (A, B, C, D, E & F) different companies and table shows number of female managers out of total managers in these six companies. Read the data carefully and answer the questions.



| Companies | Total number of female managers |
|-----------|---------------------------------|
| A | 32 |
| B | 56 |
| C | 80 |
| D | 50 |
| E | 24 |
| F | 18 |

- (a) 480
- (b) 420
- (c) 400
- (d) 360
- (e) 240

Q26. If the total number of male managers in company C is 100 and the total female employee in C is 260, then find the total number of male employee (Non managers + managers) are what percent more than the total number of male managers in company C? (1 Marks)

Line graph given below shows percentage of managers out of total employees in six (A, B, C, D, E & F) different companies and table shows number of female managers out of total managers in these six companies. Read the data carefully and answer the questions.



| Companies | Total number of female managers |
|-----------|---------------------------------|
| A | 32 |
| B | 56 |
| C | 80 |
| D | 50 |
| E | 24 |
| F | 18 |

- (a) 160%
- (b) 280%
- (c) 140%
- (d) 340%
- (e) 240%

Q27. If the difference between total number of managers in company A and total number of employee (Non managers) in same company is 288, then find total number of male managers in company A? (1 Marks)

Line graph given below shows percentage of managers out of total employees in six (A, B, C, D, E & F) different companies and table shows number of female managers out of total managers in these six companies. Read the data carefully and answer the questions.

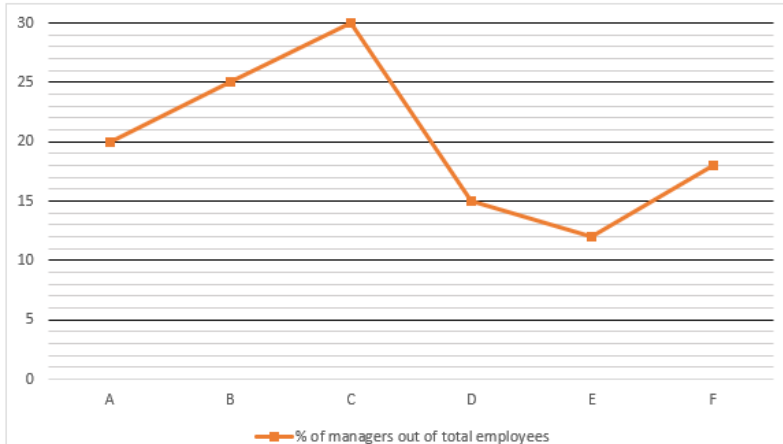


| Companies | Total number of female managers |
|-----------|---------------------------------|
| A | 32 |
| B | 56 |
| C | 80 |
| D | 50 |
| E | 24 |
| F | 18 |

- (a) 64
- (b) 32
- (c) 48
- (d) 72
- (e) 56

Q28. The ratio of total male managers in company F to total female managers in same company is 7 : 2. Find the number of total employee (Non managers) in company F? (1 Marks)

Line graph given below shows percentage of managers out of total employees in six (A, B, C, D, E & F) different companies and table shows number of female managers out of total managers in these six companies. Read the data carefully and answer the questions.



| Companies | Total number of female managers |
|-----------|---------------------------------|
| A | 32 |
| B | 56 |
| C | 80 |
| D | 50 |
| E | 24 |
| F | 18 |

- (a) 363
- (b) 349
- (c) 359
- (d) 369
- (e) 381

Q29. If total number of Non managers employees in company D is 612, then find total number of male managers in company D? (1 Marks)

Line graph given below shows percentage of managers out of total employees in six (A, B, C, D, E & F) different companies and table shows number of female managers out of total managers in these six companies. Read the data carefully and answer the questions.



| Companies | Total number of female managers |
|-----------|---------------------------------|
| A | 32 |
| B | 56 |
| C | 80 |
| D | 50 |
| E | 24 |
| F | 18 |

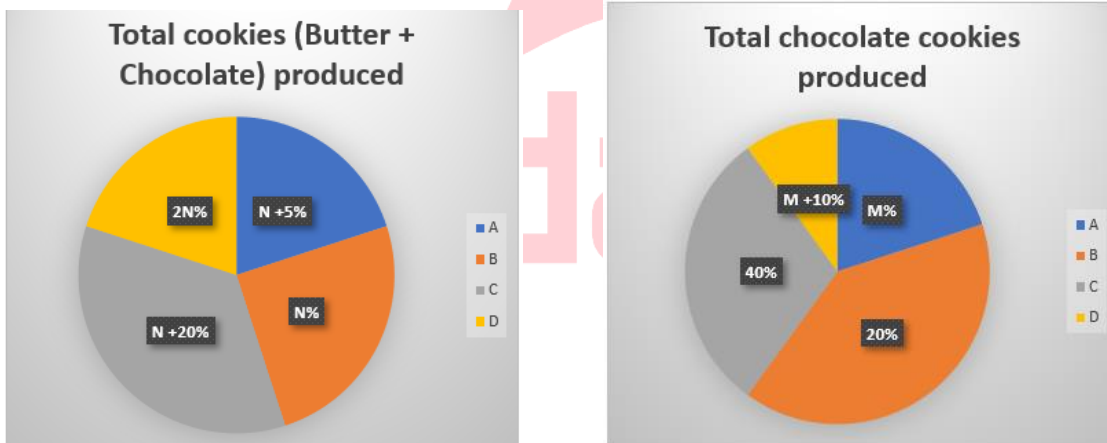
- (a) 78
(b) 88
(c) 68
(d) 48
(e) 58

Q30. The difference between total male managers in company E and the total female managers in company E is 50% of total female managers in that company, then find total number of employees in company E (male managers are more than female managers in company E) ? (1 Marks)

- (a) 400
(b) 300
(c) 500
(d) 600
(e) 800

Q31. Find total butter cookies produced by company C is how much less than the total butter cookies produced by company D? (2 Marks)

Pie chart (i) shows distribution of total cookies (butter + chocolate) produced by four different companies and pie chart (ii) shows distribution of total chocolate cookies produced by these four companies. Read the data carefully and answer the questions.

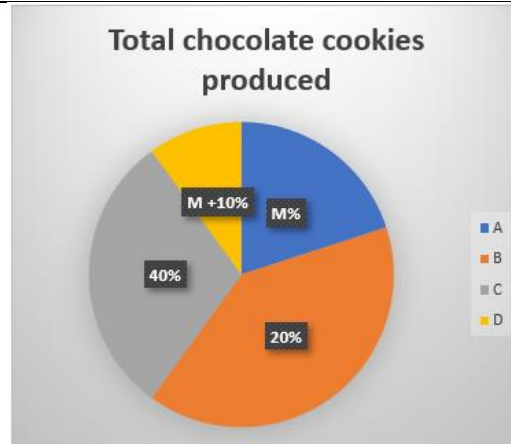
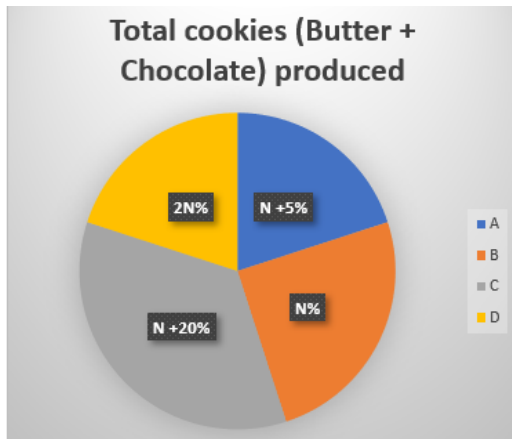


Note – Total number of butter cookies produced by A and B is 110 & 30 respectively.

- (a) 40
(b) 60
(c) 20
(d) 80
(e) 100

Q32. Find the ratio of total butter cookies produced by all four companies to total chocolate cookies produced by all four companies? (2 Marks)

Pie chart (i) shows distribution of total cookies (butter + chocolate) produced by four different companies and pie chart (ii) shows distribution of total chocolate cookies produced by these four companies. Read the data carefully and answer the questions.

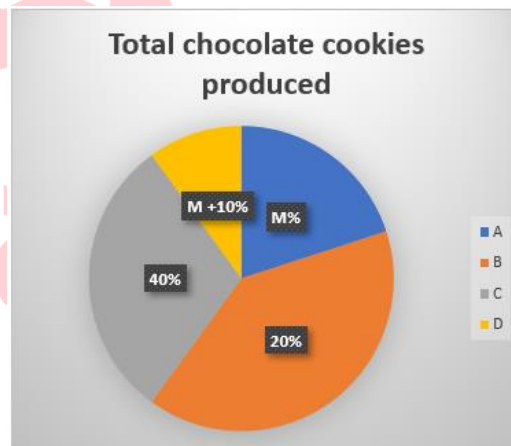
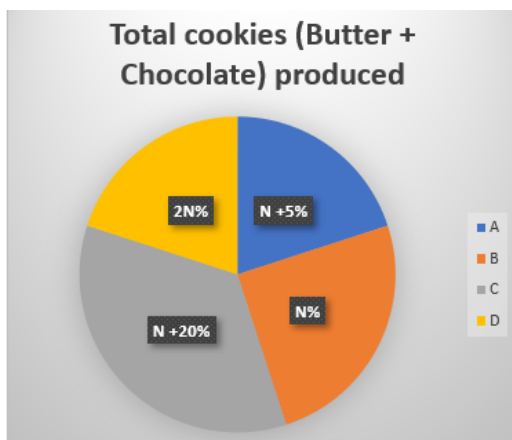


Note – Total number of butter cookies produced by A and B is 110 & 30 respectively.

- (a) 1 : 3
- (b) 2 : 3
- (c) 4 : 5
- (d) 2 : 5
- (e) 3 : 4

Q33. If a pie – chart of total butter cookies produced by all four companies made, then find the central angle for total butter cookies produced by company C? (2 Marks)

Pie chart (i) shows distribution of total cookies (butter + chocolate) produced by four different companies and pie chart (ii) shows distribution of total chocolate cookies produced by these four companies. Read the data carefully and answer the questions.

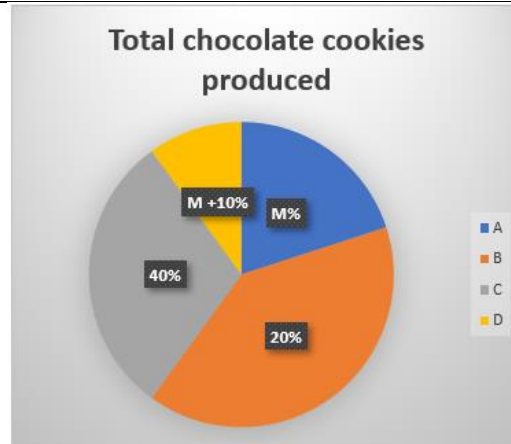
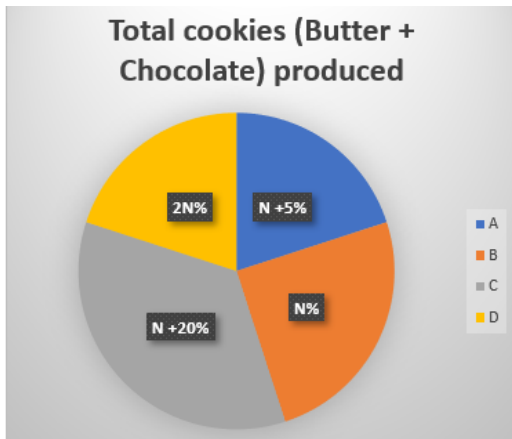


Note – Total number of butter cookies produced by A and B is 110 & 30 respectively.

- (a) 117°
- (b) 108°
- (c) 99°
- (d) 121°
- (e) 95.4°

Q34. Find the difference between total chocolate cookies produced by company B and total butter cookies produced by company D? (2 Marks)

Pie chart (i) shows distribution of total cookies (butter + chocolate) produced by four different companies and pie chart (ii) shows distribution of total chocolate cookies produced by these four companies. Read the data carefully and answer the questions.

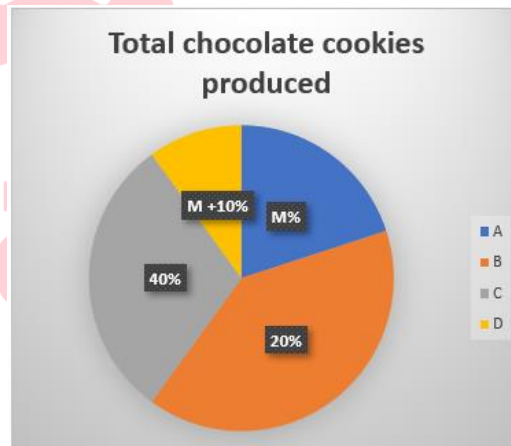
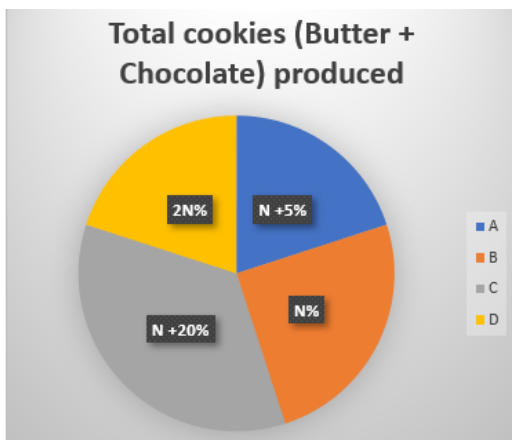


Note – Total number of butter cookies produced by A and B is 110 & 30 respectively.

- (a) 50
- (b) 40
- (c) 10
- (d) 30
- (e) 20

Q35. Company C & D sold 60% & 80% of total produced butter cookies respectively. If company C & D sold each butter cookies at Rs. 12 & Rs. 15 respectively, then find total revenue got by company C is what percent less than total revenue got by company D by selling these butter cookies? (2 Marks)

Pie chart (i) shows distribution of total cookies (butter + chocolate) produced by four different companies and pie chart (ii) shows distribution of total chocolate cookies produced by these four companies. Read the data carefully and answer the questions.



Note – Total number of butter cookies produced by A and B is 110 & 30 respectively.

- (a) 64%
- (b) 44%
- (c) 52%
- (d) 48%
- (e) 56%

Solutions

| | | | | |
|-------------|--------------|--------------|--------------|--------------|
| S1. Ans.(b) | S8. Ans.(a) | S15. Ans.(e) | S22. Ans.(c) | S29. Ans.(e) |
| S2. Ans.(c) | S9. Ans.(d) | S16. Ans.(a) | S23. Ans.(a) | S30. Ans.(c) |
| S3. Ans.(e) | S10. Ans.(e) | S17. Ans.(e) | S24. Ans.(b) | S31. Ans.(a) |
| S4. Ans.(e) | S11. Ans.(c) | S18. Ans.(a) | S25. Ans.(b) | S32. Ans.(b) |
| S5. Ans.(a) | S12. Ans.(b) | S19. Ans.(d) | S26. Ans.(e) | S33. Ans.(c) |
| S6. Ans.(e) | S13. Ans.(c) | S20. Ans.(d) | S27. Ans.(a) | S34. Ans.(d) |
| S7. Ans.(a) | S14. Ans.(b) | S21. Ans.(a) | S28. Ans.(d) | S35. Ans.(e) |

