# Basic Arithmetic Solved MCQs for FPSC and Other Competitive Exams 

1. In decreasing price of a motor bike by $\mathbf{1 0 \%}$ number of bikes sold is increased by $\mathbf{1 0 \%}$. What is the change in overall sales?
(a) Increases
(b) decreases
(c) remains same
(d) may increase or may decrease
(Answer) b
2. The radius of circle is increased by $\mathbf{2 0 \%}$ its area is increased by:
(a) $44 \%$
(b) $40 \%$
(c) $20 \%$
(d) no change
(Answer) a
3. A $\mathbf{3 0}$-ounce solution is $\mathbf{2 5 \%}$ alcohol. If $\mathbf{6 0}$-ounces of water are added to it what percent of the new solution is alcohol?
(a) $8 \%$
(b) $8.33 \%$
(c) $8.35 \%$
(d) $8.50 \%$
(Answer) b
4. $\mathbf{8 0 \%}$ of the workers working in a company wear jeans. Of these $\mathbf{2 0 \%}$ wear jeans that are black what percent of the workers wear jeans that are not black?
(a) $30 \%$
(b) $60.00 \%$
(c) $60.55 \%$
(d) $64 \%$
(Answer) d
5. Two trains travel in the same direction at 50 and $32 \mathrm{~km} / \mathrm{h}$. A man in slower train observes that the faster train passes him in 15 seconds. The length of faster train is:
(a) 75 m
(b) 100 m
(c) 150 m
(d) 341.66 m
(Answer) a
6. A train 110 meters long passes a telegraph pole in 3 seconds. How long will it take to cross
a platform 165 meters long?
(a) 4 seconds
(b) 4.5 seconds
(c) 7
(d) 10 seconds
(Answer) C
7. Two trains for Lahore leave Rawalpindi at 8:30 AM and 9:00 AM and travel at $60 \mathrm{~km} / \mathrm{h}$ and 70 km/h. How many kilometers from Rawalpindi will the two trains be together:
(a) 100
(b) 190
(c) 210
(d) 150
(Answer) c
8. A train traveling at 36 km/h took 10 seconds to pass a stationary man. What was the length of the train?
(a) 45 m
(b) 80 m
(c) 100 m
(d) 110 m
(Answer) c
9. A train 100 meters long traveling at $48 \mathrm{~km} / \mathrm{h}$ completely crosses a bridge in 30 seconds. How long is the bridge:
(a) 100 m
(b) 150 m
(c) 200 m
(d) 300 m
(Answer) d
10. If part of tank filled in one hour $=1 / 10$ then time required to fill the tank.
(a) 8
(b) 12
(c) 10
(d) 15
(Answer) c
11. An inlet pipe can fill a tank in 10 hrs and an outlet pipe empties the same full tank in 20 hrs. The time required to fill the tank when both pipes are opened.
(a) 10
(b) 20
(c) 30
(d) 25
(Answer) b
12. The price of a book increases by $10 \%$ in June but in July it decreases by $10 \%$. What is its price at the end of July if its original price was 200 ?
(a) 198
(b) 200
(c) 190
(d) 210
(Answer) a
13. The price of a cap is increases by $25 \%$. By how much percent should its price be decreased now to get the original price?
(a) $25 \%$
(b) $22 \%$
(c) $20 \%$
(d) $18 \%$
(Answer) c
14. Saima gets $\mathbf{5 0 \%}$ that of her brother. Her brother gets what percent of Saima?
(a) $100 \%$
(b) $150 \%$
(c) $50 \%$
(d) $200 \%$
(Answer) a
15. The population of a town increases at a rate of $15 \%$ per year. At present population is 4000. What will it be after 2 years?
(a) 5290
(b) 5200
(c) 5431
(d) 500
(Answer) a
16. A lady spends $10 \%$ of her budget on utility bills and $75 \%$ of remaining on food provisions. If she is left with 558 what is her total budger?
(a) 2480
(b) 1650
(c) 5500
(d) 1650
(Answer) a
17. The population of a state annually increases at the rate of $15 \%$. If its present population is 79350 what was its population two years ago?
(a) 50000
(b) 55000
(c) 58000
(d) 60000
(Answer) d
18. Imran got $20 \%$ increase in his salary at the end of 1 st year. At the end of 2 nd year he got an increase of $\mathbf{1 0 \%}$. If his present income is 19800 what was his income two years ago?
(a) 16000
(b) 17000
(c) 15000
(d) 18000
(Answer) c
19. A train 100 meters long completely crosses a bridge $\mathbf{3 0 0}$ meters long in $\mathbf{4 5}$ seconds. What is the speed of the train:
(a) $32 \mathrm{~km} / \mathrm{h}$
(b) $36 \mathrm{~km} / \mathrm{h}$
(c) $40 \mathrm{~km} / \mathrm{h}$
(d) $48 \mathrm{~km} / \mathrm{h}$
(Answer) a
20. A train 100 meters long completely passes a man walking in the same direction at $6 \mathbf{k m} / \mathrm{h}$ in $\mathbf{5}$ seconds and a car in the same direction in $\mathbf{6}$ seconds. The speed of car is:
(a) $18 \mathrm{~km} / \mathrm{h}$
(b) $20 \mathrm{~km} / \mathrm{h}$
(c) $24 \mathrm{~km} / \mathrm{h}$
(d) $1 / 9 \mathrm{~km} / \mathrm{h}$
(Answer) a
21. If As 1 days work $=1 / 20$ then time required to finish the job (in days)
(a) 20
(b) 10
(c) 25
(d) 30
(Answer) a
22. Alia can complete an assignment in 5 days and Babar can complete the same assignment is 20 days. The time taken by both Alia and Babar to complete the assignment working together is
(a) 3 days
(b) 5 days
(c) 4 days
(d) 2 days
(Answer) c
23. Asghar can do a job in 60 days. And both Asghar and Babar can do the same job in 20 days working together. Babar alone can do the same job in
(a) 30 days
(b) 60 days
(c) 28 days
(d) 45 days
(Answer) a
24. $X$ can do a job in 16 days $Y$ can do the same job in 20 days $X Y$ and $Z$ can do the job in 7.5 days. Alone Z can do the same job in
(a) 100 days
(b) 120 days
(c) 80 days
(d) 48 days
(Answer) d
25. Stations $P$ and $Q$ are situated 200 km apart. Two trains start from stations $P$ and $Q$ simultaneously. The train starting from station $P$ goes towards station $Q$ at $\mathbf{1 0 0} \mathbf{~ k m}$ per hour. The train starting from station $Q$ goes towards station $P$ at 150 km per hour. At what distance from station $P$ will the two trains cross each other?
(a) 20 km
(b) 40 km
(c) 30 km
(d) 80 km
(Answer) d
26. The sum of two numbers is 40 and their difference is 4 .The ratio of the numbers is
(a) $21: 19$
(b) $22: 9$
(c) $11: 9$
(d) 11:18
(Answer) c
27. A businessman allows a discount of $5 \%$ for cash payment. How much percent above the cost price should be marked to make a gain of $14 \%$ ?
(a) $20 \%$
(b) $15 \%$
(c) $18 \%$
(d) $25 \%$
(Answer) a
28. A sum of money at simple interest doubles in 10 years. In how many years will it amount to 4 times itself?
(a) 25 years
(b) 35 years
(c) 30 years
(d) 75 years
(Answer) c
29. A military camp has provision for 50 days. If after 10 days 500 more soldiers joined the camp and the provisions lasted for 35 days only. How many men were there in the camp?
(a) 1700
(b) 3600
(c) 4000
(d) 3500
(Answer) d
30. If 9 men or 15 women can do a piece of work in 25 days, then $\mathbf{3 9}$ men and $\mathbf{1 0}$ women will complete the same work in?
(a) 4 days
(b) 6 days
(c) 5 days
(d) 7 days
(Answer) c
31. A reduction of $20 \%$ in the price of rice enables a person to buy 3.5 kg more rice for Rs.385.The original price of rice per kg is?
(a) Rs. 25
(b) Rs. 22.5
(c) Rs. 27.5
(d) Rs. 20
(Answer) c
32. As 'Wheel' is related to 'Vehicle’ similarly ‘Clock' is related to what?
(a) Needle
(b) Nail
(c) Stick
(d) Pin
(Answer) a
33. As 'Plateau' is related a 'Mountain', similarly 'Bush' is related to what?
(a) Plants
(b) Field
(c) Forest
(d) Trees
(Answer) c
34. If the position of Shaher Yar Akbar is 15th from one end and 13th from the other end in his class, what is the total number of students in his class?
(a) 28
(b) 24
(c) 27
(d) 29
(Answer) c
35. Aslam Khan starting from a fixed point goes 15 km towards North and then after turning to his right he goes 15 km . Then he goes 10, 15 and 15 metres after turning to his left each time. How far is he from his starting point?
(a) 5 metres
(b) 10 metres
(c) 20 metres
(d) 15 metres
(Answer) b
36. Effat goes 12 km towards North from a fixed point and then she goes $\mathbf{8} \mathbf{~ k m}$ towards South from there. In the end she goes $\mathbf{3} \mathbf{~ k m}$ towards east. How far and in what direction is she from her starting point?
(a) 7 km East
(b) 5 km West
(c) 7 km West
(d) 5 km North-East
(Answer) d
37. A certain distance is covered at a certain speed. If half of this distance is covered in double the time, the ratio of the two speed is
(a) $4: 1$
(b) $1: 4$
(c) $2: 1$
(d) $1: 2$
(Answer) a
38. Sum of the ages of $A$ and $B$ at present is 7 times the difference in their age. After five years, the sum of their ages will be 9 times the difference in their ages. The present age of the elder of the two is therefore
(a) 10 years
(b) 20 years
(c) 35 years
(d) none of these
(Answer) b
39. At present, father's age is 4 times his son's age. If 5 years back, father's age was 35 years, what is son's present age, in years?
(a) 10
(b) 12
(c) 15
(d) 20
(Answer) a
40. Thirty men take 20 days to complete a job working 9 hours a day. How many hour a day should 40 men work to complete the job?
(a) 8 hrs
(b) $71 / 2 \mathrm{hrs}$
(c) 3.7 hrs
(d) 9 hrs
(Answer) b
41. A and B can do a piece of work in 45 days and 40 days respectively. They began to do the
work together but A leaves after some days and then B completed the remaining work $\mathbf{n} 23$ days. The number of days after which A left the work was
(a) 9
(b) 11
(c) 12
(d) 15
(Answer) a
42. On sports day, if $\mathbf{3 0}$ children were made to stand in a column, $\mathbf{1 6}$ columns could be formed. If $\mathbf{2 4}$ children were made to stand in a column, how many columns could be formed?
(a) 20
(b) 30
(c) 40
(d) 50
(Answer) a
43. The probability that a man will be alive for 25 years is $3 / 5$ and the probability that his wife will be alive for 25 years is $\mathbf{2 / 3}$. Find the probability that only the man will be alive for $\mathbf{2 5}$ years.
(a) $2 / 5$
(b) $1 / 5$
(c) $3 / 5$
(d) $4 / 5$
(Answer) b
44. Some green are blue. No blue are white.
(a) Some green are white
(b) No white are green
(c) No green are white
(d) None of the above
(Answer) a
45. Right to freedom from illegal detention is secured through
(a) Mandamus
(b) Prohibition
(c) Quo-Warranto
(d) Habeas Corpus
(Answer) d
46. Euthanasia means
(a) Surgery by consent
(b) Transfer by consent
(c) Divorce by consent
(d) Death by consent
(Answer) d
47. Average age of students of an adult school is 40 years. 120 new students whose average age is 32 years joined the school. As a result the average age is decreased by 4 years. Find the number of students of the school after joining of the new students:
(a) 1200
(b) 120
(c) 360
(d) 240
(Answer) d
48. The cost of 16 packets of salt, each weighing 900 grams is Rs.28.What will be the cost of 27 packets, if each packet weighs 1 Kg ?
(a) Rs. 52.50
(b) Rs. 56
(c) Rs. 58.50
(d) Rs. 64.75
(Answer) a
49. A piece of cloth cost Rs 35 . If the length of the piece would have been 4 m longer and each meter cost Rs. 1 less, the cost would have remained unchanged. How long is the piece?
(a) 10
(b) 11
(c) 12
(d) 13
(Answer) a
50. In a journey of 15 miles two third distance was travelled with 40 mph and remaining with 60 mph . How much time the journey takes
(a) 40 min
(b) 30 min
(c) 120 min
(d) 20 min
(Answer) d
51. Find the average of first 40 natural numbers.
(a) 40
(b) 35
(c) 30.6
(d) 20.5
(Answer) d
52. A person who suffers from Claustrophobia has fear of what?
(a) Confined places
(b) Lightning
(c) Heights
(d) None of these
(Answer) a
53. Two taps $A$ and $B$ can fill a tank in 12 minutes and 15 minutes respectively. If both the taps are opened simultaneously and the tap $A$ is closed after 3 minutes, then how much more time will it take to fill the tank by tap $B$ ?
(a) $7 \mathrm{~min} \& 15 \mathrm{sec}$
(b) $7 \mathrm{~min} \& 45 \mathrm{sec}$
(c) $8 \mathrm{~min} \& 5 \mathrm{sec}$
(d) $8 \mathrm{~min} \& 15 \mathrm{sec}$
(Answer) d
54. The milk and water in two vessels $A$ and $B$ are in the ratio $4: 3$ and $2: 3$ respectively. In what ratio, the liquids be mixed in both the vessels so that the new liquid contains half milk and half water?
(a) $7: 5$
(b) $1: 2$
(c) $2: 1$
(d) $6: 5$
(Answer) a
55. A car covers a distance of 715 km at a constant speed. If the speed of the car would have been $10 \mathrm{~km} / \mathrm{hr}$ more, then it would have taken 2 hours less to cover the same distance. What is the original speed of the car?
(a) $45 \mathrm{~km} / \mathrm{hr}$
(b) $50 \mathrm{~km} / \mathrm{hr}$
(c) $55 \mathrm{~km} / \mathrm{hr}$
(d) $65 \mathrm{~km} / \mathrm{hr}$
(Answer) c
56. A sum of Rs. 427 is to be divided among $A, B$ and $C$ in such a way that 3 times A's share, 4 times B's share and 7 times C's share are all equal. The share of $\mathbf{C}$ is
(a) Rs. 84
(b) Rs. 147
(c) Rs. 196
(d) Rs. 240
(Answer) a
57. A house wife saved Rs. 2.50 in buying an item on sale. If she spent Rs. 25 for the item, approximately how much percent she saved in the transaction?
(a) $8 \%$
(b) $9 \%$
(c) $10 \%$
(d) $11 \%$
(Answer) b
58. I have trouble $\qquad$ .
(a) to remember my password
(b) to remembering my password
(c) remember my password
(d) remembering my password
59. (Answer) d
60. A man can row upstream at 8 kmph and downstream at 13 kmph . The speed of the stream is?
(a) 2.5 kmph
(b) 4.2 kmph
(c) 5 kmph
(d) 10.5 kmph
(Answer) a
61. A papaya tree was planted 2 years ago. It increases at the rate of $\mathbf{2 0 \%}$ every year. If at present, the height of the tree is 540 cm , what was it when the tree was planted?
(a) 432 cm
(b) 324 cm
(c) 375 cm
(d) 400 cm
(Answer) c
62. A boy has Rs 2. He wins or loses Rs. 1 at a time If he wins he gets Rs. 1 and if he loses the
game he loses Rs. 1. He can loose only 5 times. He is out of the game if he earns Rs 5. Find the number of ways in which this is possible?
(a) 14
(b) 23
(c) 16
(d) 12
(Answer) c
63. Xenophobia is fear of which kind?
(a) Fear of confined spaces
(b) Things that glow in the dark
(c) Fear of heights
(d) Foreigners or strangers
(Answer) d
64. $A$ is twice as good a workman as $B$ and together they finish a piece of work in 18 days. In how many days will A alone finish the work?
(a) 27
(b) 26
(c) 25
(d) 24
(Answer) a
65. The speed of a car is $75 \mathrm{~m} / \mathrm{sec}$. What is the speed of car in $\mathrm{km} / \mathrm{hr}$ ?
(a) $135 \mathrm{~km} / \mathrm{hr}$
(b) $270 \mathrm{~km} / \mathrm{hr}$
(c) $200 \mathrm{~km} / \mathrm{hr}$
(d) $250 \mathrm{~km} / \mathrm{hr}$
(Answer) b
66. The least number exactly divisible by $\mathbf{1 2 , 1 5 , 2 0 , 5 4}$ is
(a) 532
(b) 220
(c) 540
(d) 500
(Answer) c
67. If the cost price of $\mathbf{1 0}$ chairs be equal to selling price of $\mathbf{1 6}$ chairs, then the loss percentage will be
(a) 9.6
(b) 17.5
(c) 20
(d) 37.5
(Answer) d
68. The diagonals of a rhombus are 15 cm and 20 cm . Find its area?
(a) 120 sqcm
(b) 300 sq cm
(c) 150 sqcm
(d) 480 sqcm
(Answer) c
69. $P$ and $Q$ started business with Rs. 15000 and Rs. 10000 respectively. Find the share of $P$ in an annual profit of Rs. 25000.
(a) Rs. 8000
(b) Rs. 6000
(c) Rs. 10000
(d) Rs. 15000
(Answer) d
70. An amount doubles itself in 5 years with simple interest. What is the rate of interest?
(a) 20
(b) 25
(c) 33
(d) 35
(Answer) a
71. In a cricket match five batsmen A, B, C, D and E scored an average of 36 runs. D scored 5 more than E; E scored 8 fewer than A; B scored as many as D and E combined; and B and C scored 107 between them. How many runs did $E$ score?
(a) 62
(b) 45
(c) 28
(d) 20
(Answer) d
72. If STRAY is coded as TUSBZ then how will MOURN be coded?
(a) LPVSO
(b) NPVSO
(c) NVPSO
(d) NPSVO
(Answer) b
73. A lady pointing to a man in a photograph says, "The sister of the son of this man is my mother-in-law." How is the husband of the lady related to the man in the photograph?
(a) Maternal grandson
(b) Nephew
(c) Son
(d) Maternal grandfather
(Answer) a
74. In a group of 15 people, 7 read French, 8 read English while 3 of them read none of these two. How many of them read French and English both?
(a) 0
(b) 3
(c) 4
(d) 5
(Answer) b
75. Arshad's monthly expenditures are 7500. How much he spends in 8 months?
(a) Rs. 60000
(b) Rs. 70000
(c) Rs. 80000
(d) Rs. 90000
(Answer) a
76. A car covers 20.525 km distance in one litre petrol. How much distance this car will cover in 15 litres petrol?
(a) 307.875
(b) 407.875
(c) 507.875
(d) 607.875
(Answer) a
77. A train covers $45 ½ \mathrm{~km}$ distance in one hour. How much distance train will cover in 25 hours?
(a) 1437.5 km
(b) 1537.5 km
(c) 1637.5 km
(d) 1137.5 km
(Answer) d
78. A seller loses $13 \%$ by selling a book at a certain price. Had he sold it for R.s 9.75 more, $\mathbf{H e}$ would have gained $26 \%$. C.P to him was:
(a) 25
(b) 30
(c) 39
(d) 42
(Answer) a
79. A shopkeeper bought bicycle for R.s $\mathbf{6 0 0}$ and sold it for R.s $\mathbf{7 2 0}$.find the gain percent.
(a) $15 \%$
(b) $18 \%$
(c) $20 \%$
(d) 25
(Answer) c
80. Akbar sold his old gun for Rs.900, which he bought for Rs.2500. His loss is?
(a) $64 \%$
(b) $82 \%$
(c) $94 \%$
(d) $15 \%$
(Answer) a
81. The written price of a coat is Rs. 275 If $15 \%$ rebate is given on the written price, what will a customer pay?
(a) Rs. 223.75
(b) Rs. 231.75
(c) Rs. 243.75
(d) Rs. 233.75
(Answer) d
82. Cost of 6 handkerchiefs is Rs.90. Find the cost of 2 dozen handkerchiefs.
(a) Rs. 360
(b) Rs. 330
(c) Rs. 340
(d) Rs. 350
(Answer) a
83. The sum of the two digits of a two digit number is 14 . The difference between the first
digit and the second digit of the two digit number is 2 . What is the product of the two digits of the two digit number?
(a) 56
(b) 48
(c) 45
(d) 65
(Answer) b
84. If the following words are arranged according to the dictionary order then which will be the second word in that order?
(a) Expound
(b) Exposure
(c) Expulsion
(d) Expose
(Answer) d
85. There are 16 teams in a soccer tournament. If everyone plays against everyone exactly once, how many games are there going to be?
(a) 119
(b) 120
(c) 1278
(d) 135
(Answer) a
86. Ayesha says, "Nasir's grandfather is the only son of my father." How is Ayesha related to Nasir?
(a) Daughter
(b) Sister
(c) Niece
(d) Grandmother
(Answer) d
87. A clock is so placed that at 12 noon, its minute hand points towards North-East. In which direction does its hour hand point at $1: 30 \mathrm{PM}$ ?
(a) North
(b) South
(c) East
(d) West
(Answer) c
88. Introducing a man, a woman says, "He is the only son of my mother's mother." How is the man related to the woman?
(a) Uncle
(b) Father
(c) Maternal uncle
(d) Uncle
(Answer) c
89. A train crosses a pole in 15 seconds, while it crosses 100 meter long platform in 25 seconds. The length of the train is -
(a) 125 m
(b) 135 m
(c) 159 m
(d) 175 m
(Answer) c
90. A house owner wants to get his house painted. He is told that this would require 25 kg of paint. Allowing for $15 \%$ wastage and assuming that the paint is available in 2 kg tins, the number of tins required for painting the house is -
(a) 15
(b) 12
(c) 10
(d) 20
(Answer) a
91. The difference in selling prices of a heater at gains of $5 \%$ and $7.5 \%$ is rupees 1.25 .then the cost prize of heater is:
(a) 45
(b) 50
(c) 52.50
(d) 53.75
(Answer) b
92. The town ' $C$ ' is there in between ' $A$ ' and ' $B$ '. If Nasir travels from $A$ to $C$ with a speed of 4 $\mathrm{km} / \mathrm{hr}$ and C to $\mathbf{B}$ with $6 \mathrm{~km} / \mathrm{hr}$, what is the average speed of Nasir from $\mathbf{A}$ to $\mathbf{B}$ ?
(a) 4.8 km
(b) 4.6 km
(c) 5 km
(d) 5.2 km
(Answer) a
93. A man starting at a point walks 1 km east, then 2 km north, then 1 km east, then 1 km north, then 1 km east and then 1 km north to arrive at his destination. What is the shortest distance between the starting point and his destination?
(a) 8 KM
(b) 7 KM
(c) 6 KM
(d) 5 KM
(Answer) d
94. What is the smallest number, which when divided by 3, 8 and 15 leaves the remainder 1, 6 and 13 respectively?
(a) 121
(b) 242
(c) 118
(d) 239
(Answer) c
95. A perfect number is defined as a number the sum of whose divisors (excluding the number itself, but including 1) is equal to the number itself. 6 is the lowest perfect number. Find the second lowest number.
(a) 12
(b) 14
(c) 28
(d) 496
(Answer) c
96. A shopkeeper sells 18 mangoes for the purchase price of 20 mangoes. The percent profit made by the shopkeeper is.
(a) $10 \%$
(b) $11.11 \%$
(c) $9.09 \%$
(d) $12 \%$
(Answer) b
97. A pineapple costs Rs. 7 each a watermelon costs Rs. 5 each $Z$ spends Rs. 38 on these fruits. The number of pineapples purchased is:
(a) 2
(b) 4
(c) 3
(d) 5
(Answer) b
98. In a certain series, each number except the first and second is obtained by adding the previous two numbers. If the first number is $\mathbf{2}$ and sixth 26, what is the second number?
(a) 4
(b) 3
(c) 8
(d) 6
(Answer) a
99. The average of 13 results is 68 . The average of first seven is 63 and that of the last seven is 70; the seventh result is:
(a) 73.5
(b) 94
(c) 47
(d) 69
(Answer) c
100. A ship sails out to a mark at the rate of 10 km per hour and sails back at the rate of 15 km per hour. The average rate of sailing is
(a) $12.5 \mathrm{~km} . \mathrm{hr}$
(b) $12 \mathrm{~km} / \mathrm{hr}$
(c) $7.5 \mathrm{~km} / \mathrm{hr}$
(d) $13 \mathrm{~km} / \mathrm{hr}$
(Answer) b
101. He was INFURIATED by the maddening behaviour of the clerk at the post office.
(a) Disgusted
(b) Enraged
(c) Pacified
(d) Depressed
(Answer) b
