

## Quantitative Test for HEC HAT 1 Engineering & IT

| Sr | Questions                                                                                                                                                                                      | Answers Choice                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| 1  | A and B can do a job in 6 day. If A do the job alone he takes 10 days. What will be the time required by B to complete the job alone ?                                                         | A. 8<br>B. 6<br>C. 15<br>D. 3                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2  | Mr. Kashif got an average of 50 in 6 tests. What should he get in the next test to attain the average of 60 ?                                                                                  | A. 120<br>B. 60<br>C. 100<br>D. 70                                                                                                                                                                                                                                                                                                                                                                                                   |
| 3  | A word processing operator typed 44 words per minute. After practice, the operator's speed increased to 55 words per minutes. By what percent did the operator's speed increase?               | A. 25%<br>B. 50%<br>C. 15%<br>D. 20%                                                                                                                                                                                                                                                                                                                                                                                                 |
| 4  | A man bought 27 packets of Chilli Milli at \$280 each, 9 packets of Chilli Milli at \$320 each and 6 packets of Chilli Milli at \$360 each. Find the average price per packet of Chilli Milli. | A. <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">\$250</span><br>B. <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">\$300</span><br>C. <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">\$400</span><br>D. <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">\$380</span> |
| 5  | t is an integer greater than 5. The expression that must represent an odd integer is                                                                                                           | A. $t(t+1)$<br>B. $3t-1$<br>C. $t^{2+2}$<br>D. $2t-3$                                                                                                                                                                                                                                                                                                                                                                                |
| 6  | Question Image                                                                                                                                                                                 | A. 40<br>B. 50<br>C. 90<br>D. 130                                                                                                                                                                                                                                                                                                                                                                                                    |
| 7  | If the sum of the interior angles of a regular polygon measures up to 1440 degrees, how many sides does the polygon have ?                                                                     | A. 10 sides<br>B. 8 sides<br>C. 12 sides<br>D. 9 sides                                                                                                                                                                                                                                                                                                                                                                               |
| 8  | A rectangle is 16 cm long and 10 cm wide. If the length is reduced by k cm and its width is increased also by k cm so as to make it a square then its area changes by                          | A. 169<br>B. 256<br>C. 100<br>D. 9<br>E. None of the above                                                                                                                                                                                                                                                                                                                                                                           |
| 9  | If it takes 10 minutes to walk $\frac{3}{4}$ mile, how many minutes will it take to walk the rest of the mile?                                                                                 | A. $2\frac{1}{3}$<br>B. $13\frac{1}{3}$<br>C. $4\frac{2}{7}$<br>D. 30                                                                                                                                                                                                                                                                                                                                                                |
| 10 | How many integers from 28 to 98, both exclusive are exactly divisible by 7?                                                                                                                    | A. 9<br>B. 11<br>C. 12<br>D. 8                                                                                                                                                                                                                                                                                                                                                                                                       |
| 11 | A man spent 10% of his money. After spending 60% of the remainder he has Rs. 72 left. How much had he in the start ?                                                                           | A. 10<br>B. 100<br>C. 200<br>D. 400                                                                                                                                                                                                                                                                                                                                                                                                  |
| 12 | A man bought 27 packets of Chilli Milli at \$280 each, 9 packets of Chilli Milli at \$320 each and 6 packets of Chilli Milli at \$360 each. Find the average price per packet of Chilli Milli. | A. \$250<br>B. \$300<br>C. \$400<br>D. \$380                                                                                                                                                                                                                                                                                                                                                                                         |
| 13 | The population of a city increased in two years from 25,000 to 30,000: find the increase percent during the time.                                                                              | A. 10%<br>B. 20%<br>C. 40%<br>D. 5%                                                                                                                                                                                                                                                                                                                                                                                                  |
|    |                                                                                                                                                                                                | A. 8000<br>B. 8000                                                                                                                                                                                                                                                                                                                                                                                                                   |

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| 14 | If a machine can place a cap on a bottle of soda every 0.8 seconds, how many bottles can be capped in 2 hours ?                                                                                         | B. 9000<br>C. 300<br>D. 900                                                  |
| 15 | If a train travels $\frac{5}{6}$ miles in $1\frac{1}{4}$ minutes, how many miles will it travel in 1 hour?                                                                                              | A. 20 miles<br>B. 50 miles<br>C. 40 miles<br>D. 30 miles                     |
| 16 | If 10 tractors are needed to plow a field in 4 hours, how many tractors are needed to plow the field in 5 hours ?                                                                                       | A. 32<br>B. 4<br>C. 16<br>D. 8                                               |
| 17 | If $(x+1/x)^2=96$ what is the value of $x^2 + 1/x^2$ ?                                                                                                                                                  | A. 94<br>B. 98<br>C. 100<br>D. 90                                            |
| 18 | A and B can do a jobs in 6 days. If A does the job alone he takes 10 days.What will be time required by B to complete the job alone?                                                                    | A. 8<br>B. 6<br>C. 15<br>D. 3                                                |
| 19 | $(580 \times 12) - (645 \times 5) / 50 \times 10 = ?$                                                                                                                                                   | A. 7.47<br>B. 3725<br>C. 74.7<br>D. 4450                                     |
| 20 | Question Image                                                                                                                                                                                          | A. 40<br>B. 50<br>C. 120<br>D. 130                                           |
| 21 | Find the value of x if $3 : b = x : c$ .                                                                                                                                                                |                                                                              |
| 22 | A clock gain 8 minutes every x hours. How many hours will the clock gain in 3 days?                                                                                                                     | A. $576/x$<br>B. $48/5x$<br>C. $24/x$<br>D. $576/5x$                         |
| 23 | In solving an arithmetic example, Donna, by mistake multiplied by 6 instead of dividing by 6. If her answer was $13\frac{1}{5}$ , what should be the correct answer to the example?                     | A. $2\frac{8}{11}$<br>B. $5/66$<br>C. $2\frac{1}{5}$<br>D. $11/30$           |
| 24 | If apples cost 3 for 37 cents, find the cost of $1\frac{3}{4}$ dozen apples.                                                                                                                            | A. 111 cents<br>B. 159 cents<br>C. 259 cents<br>D. 211 cents                 |
| 25 | A word processing operator typed 44 words per minute. After practice, the operator's speed increased to 55 words per minutes. By what percent did the operator's speed increase ? (25%)                 | A. 25%<br>B. 50%<br>C. 15%<br>D. 20%                                         |
| 26 | Question Image                                                                                                                                                                                          | A. $4\pi$<br>B. $18\pi$<br>C. $28\pi$<br>D. $32\pi$                          |
| 27 | In solving an arithmetic example, Donna, by mistake multiplied by 6 instead of dividing by 6. If her anser was $13\frac{1}{5}$ , what should be the correct answer to the example ?                     | A. $2\frac{8}{11}$<br>B. $5/66$<br>C. $2\frac{1}{5}$<br>D. $11/30$           |
| 28 | David receives his allowance on Sunday. He spends $\frac{1}{4}$ of his allowance on Monday and $\frac{2}{3}$ of the remainder on Tuesday. What part of his allowance is left for the rest of the week ? | A. $\frac{2}{3}$<br>B. $\frac{4}{5}$<br>C. $\frac{6}{7}$<br>D. $\frac{1}{4}$ |
| 29 | $\sqrt{256} \div \sqrt{64} = ?$                                                                                                                                                                         | A. $\frac{1}{4}$<br>B. $\frac{26}{8}$<br>C. 16<br>D. 4                       |
| 30 | How many cents will r books cost if t books cost m dollars?                                                                                                                                             | A. $100mr / t$<br>B. $mr / 100$<br>C. $100t / mr$<br>D. $m / 100t$           |
| 31 | $2.08 - (0.5)^2 = ?$                                                                                                                                                                                    | A. -1.20<br>B. 1.88<br>C. 1.83<br>D. 2.16                                    |
| 32 | 12 is $\frac{3}{4}$ of what number ?                                                                                                                                                                    | A. 20<br>B. 24<br>C. 16                                                      |

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|    |                                                                                                                                                                                                               | <p>C. 10</p> <p>D. 8</p>                                                                                                                                                                    |
| 33 | If the area of two circles are in the ratio 169 : 196 then ratio of their radii is                                                                                                                            | <p>A. 13 : 11</p> <p>B. 10 : 13</p> <p>C. 14 : 13</p> <p>D. 13 : 14</p>                                                                                                                     |
| 34 | The average height of a class of 14 days is 5.3 feet. After new boy is admitted to the class ,the new average height now becomes 5.25. What is the height of the new boy?                                     | <p>A. 4.55</p> <p>B. 5.0</p> <p>C. 6.0</p> <p>D. 3.5</p>                                                                                                                                    |
| 35 | Out of the 44 boys in a class 9 are of the age of 10, 15 at the age of 9, and the rest are at the age of 8. Find their average age.                                                                           | <p>A. 7.85</p> <p>B. 8.75</p> <p>C. 12.2</p> <p>D. 14.35</p>                                                                                                                                |
| 36 | If $abc = 2$ and $a = c$ then $b =$                                                                                                                                                                           | <p>A. <math>a^{&lt;sup&gt;2&lt;/sup&gt;}</math></p> <p>B. <math>1/2a</math></p> <p>C. <math>2/a^{&lt;sup&gt;2&lt;/sup&gt;}</math></p> <p>D. <math>2-a^{&lt;sup&gt;2&lt;/sup&gt;}</math></p> |
| 37 | A clock gain 8 minutes every x hours. How many hours will the clock gain in 3 days ?                                                                                                                          | <p>A. <math>576/x</math></p> <p>B. <math>48/5x</math></p> <p>C. <math>24/x</math></p> <p>D. <math>576/5x</math></p>                                                                         |
| 38 | If $4x - y = 13$ and $3x - 2y = 7$ then what is the average of 'x' and 'y'?                                                                                                                                   | <p>A. 4</p> <p>B. 3</p> <p>C. 2</p> <p>D. 6</p>                                                                                                                                             |
| 39 | If you have 50 green , 50 orange, and 50 yellow jelly beans, how many bags can you fill for Halloween each containing 2 green, 3 orange, and 4 yellow jelly beans?                                            | <p>A. 12</p> <p>B. 13</p> <p>C. 16</p> <p>D. 17</p>                                                                                                                                         |
| 40 | $19 \times 11 + 18 \times 6 / 24 \times 3 - 62$                                                                                                                                                               | <p>A. 20.7</p> <p>B. <math>21 \frac{7}{8}</math></p> <p>C. 1.47</p> <p>D. 31.7</p>                                                                                                          |
| 41 | $(x+y)^2 = 25$ and $x^2 + y^2 = 13$ then $xy$ is equal to?                                                                                                                                                    | <p>A. 16</p> <p>B. 20</p> <p>C. 18</p> <p>D. 6</p>                                                                                                                                          |
| 42 | $Ay - b = c$ , dy what is 'y' in terms of 'a', 'b' and 'c'?                                                                                                                                                   | <p>A. <math>(c+b) / (a+d)</math></p> <p>B. <math>(c-b) / (a+d)</math></p> <p>C. <math>(c-b) / (a+d)</math></p> <p>D. <math>(c+b) / (a-d)</math></p>                                         |
| 43 | How many miles are there between two cities if the distance is represented by a 2.4 inch line on a map having a scale of 1 inch to 8 miles?                                                                   | <p>A. 19.0</p> <p>B. 12.8</p> <p>C. 8.5</p> <p>D. 38</p>                                                                                                                                    |
| 44 | $Ay - b = c$ -dy what is 'y' in terms of 'a', 'b' and 'c'?                                                                                                                                                    | <p>A. 30</p> <p>B. <math>38/2</math></p> <p>C. <math>38/3</math></p> <p>D. <math>38/5</math></p>                                                                                            |
| 45 | $\sqrt{169/196} \times 14 / \sqrt{1521} = ?$                                                                                                                                                                  | <p>A. <math>13/42</math></p> <p>B. <math>1/13</math></p> <p>C. <math>42/5</math></p> <p>D. <math>1/42</math></p>                                                                            |
| 46 | Find the sum of money, 11% of which is Rs.1650.                                                                                                                                                               | <p>A. 150</p> <p>B. 3300</p> <p>C. 25000</p> <p>D. 15000</p>                                                                                                                                |
| 47 | If the radius of a circle is increased by 20% then the area is increased by                                                                                                                                   | <p>A. 44%</p> <p>B. 120%</p> <p>C. 144%</p> <p>D. 40%</p>                                                                                                                                   |
| 48 | A man has Rs. 2000, and spends 18% of it. What money has he left now ?                                                                                                                                        | <p>A. 3600</p> <p>B. 820</p> <p>C. 1640</p> <p>D. 4000</p>                                                                                                                                  |
| 49 | One half of the employees of Al Karim Co. earn salaries above Rs. 18,000 monthly. One third of the remainder earn salaries between Rs. 15,000 and Rs. 18,000. What part of the staff earns below Rs. 15,000 ? | <p>A. <math>2/3</math></p> <p>B. <math>1/3</math></p> <p>C. <math>2/5</math></p> <p>D. <math>3/5</math></p>                                                                                 |
|    |                                                                                                                                                                                                               | <p>A. <math>3b/c</math></p>                                                                                                                                                                 |

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| 50 | Find the value of x if $3:b=x:c$ .                                                                                                                          | B. $\frac{c}{3b}$<br>C. $\frac{2c}{3b}$<br>D. $\frac{3c}{b}$                         |
| 51 | $1764 \div 17.64 / 0.5$                                                                                                                                     | A. 100<br>B. 20<br>C. 0.2<br>D. 200                                                  |
| 52 | $\frac{1}{2}$ of $44 \div 2.2 = ?$                                                                                                                          | A. 20<br>B. 22<br>C. 44<br>D. 100                                                    |
| 53 | If a man's weekly salary is \$X and he saves \$Y, what part of his weekly salary does he spend?                                                             |                                                                                      |
| 54 | A factory employs M men and W women. What part of its employees are women ?                                                                                 | A. $\frac{W}{(W+M)}$<br>B. $\frac{W}{M}$<br>C. $\frac{(W+M)}{M}$<br>D. $\frac{M}{W}$ |
| 55 | Question Image                                                                                                                                              | A. a<br>B. $90-a$<br>C. $180-\frac{a}{2}$<br>D. $180-a$                              |
| 56 | If p is a negative integer and $P^2 + 11p = t$ , a value of t could be                                                                                      | A. 12<br>B. 18<br>C. -18<br>D. 11                                                    |
| 57 | Question Image                                                                                                                                              | A. b<br>B. $b-180$<br>C. $90-b$<br>D. $180-b$                                        |
| 58 | A motion was passed by a vote of 5 : 3. what part of the votes cast was is favor of the motion?                                                             | A. $\frac{3}{5}$<br>B. $\frac{5}{8}$<br>C. $\frac{3}{8}$<br>D. $\frac{5}{3}$         |
| 59 | If 10 tractors are needed to plow a field in 4 hours, how many tractors are needed to plow the field in 5 hours?                                            | A. 32<br>B. 4<br>C. 16<br>D. 8                                                       |
| 60 | Question Image                                                                                                                                              | A. 30<br>B. 39<br>C. 80<br>D. 78                                                     |
| 61 | A rectangular lot 50 feet by 100 feet is surrounded on all sides by a concrete walk 5 feet wide. Find the number of square feet in the surface of the walk. | A. 1600<br>B. 5250<br>C. 5500<br>D. 6100                                             |
| 62 | If $3x+5y=10$ and $3y+5x=30$ then average if 'x' and 'y' is?                                                                                                | A. $\frac{3}{2}$<br>B. 4<br>C. $\frac{5}{2}$<br>D. $\frac{7}{2}$                     |
| 63 | If $2x + y + b = 11$ and $3x + 2y = 17$ then y is?                                                                                                          | A. 1<br>B. 5<br>C. 6<br>D. 4                                                         |
| 64 | Out of the 44 boys in a class 9 are of the age of 10, 15 at the age of 9, and the rest are at the of 8. Find their average age.                             | A. 7.85<br>B. 8.75<br>C. 12.2<br>D. 14.35                                            |
| 65 | $72/3 \div 18/6 = ?$                                                                                                                                        | A. 72<br>B. 8<br>C. 18<br>D. 48                                                      |
| 66 | If $x + 2y = 11$ and $x + y = 10$ the value of y is:                                                                                                        | A. 1<br>B. 2<br>C. 3<br>D. 4                                                         |
| 67 | A man spent 10% of his money .After spending 60% of the reminder he has Rs.72 left. How much had he in the start?                                           | A. 10<br>B. 100<br>C. 200<br>D. 400                                                  |
| 68 | A 4 cm cube is cut into 1 cm cubes. What is the percentage increase in the surface area                                                                     | A. 4%<br>B. 300%                                                                     |

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|    | after such cutting ?                                                                                                                                                | C. 75%<br>D. 400%                                                                                             |
| 69 | If $3\frac{1}{5}c = 2\frac{1}{2}b$ and $c \neq 0$ , then $b/c = ?$                                                                                                  | A. 25/32<br>B. 7/8<br>C. 32/25<br>D. 11/10                                                                    |
| 70 | $11/3 + 8/3 + 17/3$                                                                                                                                                 | A. 14<br>B. 12<br>C. 11<br>D. 15                                                                              |
| 71 | If $a^2 - b^2 = 36$ and $a - b = 12$ then average of 'a' and 'b' is?                                                                                                | A. 3<br>B. 12<br>C. 6<br>D. 3/2                                                                               |
| 72 | In a school there are 400 students, of whom 70% are boys: what is the number of girls ?                                                                             | A. 120<br>B. 200<br>C. 280<br>D. 2800                                                                         |
| 73 | $x + y = 17$ and $x = 2$ , then value of y?                                                                                                                         | A. 13<br>B. 15<br>C. 19<br>D. 10                                                                              |
| 74 | If $(p-3)(p+5) > (p-3)(p+8)$ , what is the best description of p ?                                                                                                  | A. $p = 3$<br>B. $-8 < p < -5$<br>C. $p = \{ \text{ \&nbsp; \&nbsp; \&nbsp; \&nbsp; \&nbsp; \}$<br>D. $p < 3$ |
| 75 | If the ratio of x : y is 9 : 7, then x+y is                                                                                                                         | A. 16<br>B. 2<br>C. 1<br>D. None                                                                              |
| 76 | The average of x, y, z and 40 is 10. What is the average of x, y, and Z.                                                                                            | A. 10<br>B. 0<br>C. 2<br>D. 15                                                                                |
| 77 | 12% of x = 360                                                                                                                                                      | A. 250<br>B. 100<br>C. 400<br>D. 3000                                                                         |
| 78 | The average height of five men is 68 inches. If one man is 70 inches tall and three other have an average of 67 inches, the height of the fifth man, in inches, is: | A. 68<br>B. 69<br>C. 70<br>D. 71                                                                              |
| 79 | What part of an hour elapses between 10:45 a.m. and 11:09 a.m. ?                                                                                                    | A. 2/5<br>B. 3/5<br>C. 11/12<br>D. 2                                                                          |
| 80 | If apples cost 3 for 37 cents, find the cost of $1\frac{3}{4}$ dozen apples.                                                                                        | A. 111 cents<br>B. 159 cents<br>C. 259 cents<br>D. 211 cents                                                  |
| 81 | $1/x = 1/y + 1/z$ then 'x' in terms of 'y' and 'z' is given by?                                                                                                     | A. $(y+z) / (y-z)$<br>B. $yz / (y+z)$<br>C. $(y+z) / yz$<br>D. $1/z - 1/y$                                    |
| 82 | Find the arithmetic mean of 25.2, 13.5, 18.5 and 34.8                                                                                                               | A. 13<br>B. 23<br>C. 27<br>D. 5                                                                               |
| 83 | Change $4\frac{4}{2}$ to an improper fraction:                                                                                                                      | A. 14/3<br>B. 11/3<br>C. 24/3<br>D. 10/3                                                                      |
| 84 | $(242 - 17)^2 - (7-5)^2 = ?$                                                                                                                                        | A. 49000<br>B. 49200<br>C. 94200<br>D. 49400                                                                  |
| 85 | $(44 \times 3) + 128 + 120 / 9.5 - 94.7$                                                                                                                            | A. 380<br>B. 10<br>C. 76.12<br>D. 100                                                                         |

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| 86  | The annual decrease in the population of a city was 10% and the present number of inhabitants is 1620. What was the population 2 years hence?                                       | A. 20<br>B. 400<br>C. 2000<br>D. 1000                                      |
| 87  | If a train travels $\frac{5}{6}$ mile in $1\frac{1}{4}$ minutes, how many miles will it travel in 1 hour ?                                                                          | A. 20 miles<br>B. 50 miles<br>C. 40 miles<br>D. 30 miles                   |
| 88  | If 'x' and 'y' are positive and $\frac{1}{x} = 3 + \frac{1}{y}$ is 'x' greater than 'y'?                                                                                            | A. Yes<br>B. No<br>C. It cannot be determined<br>D. They are equal         |
| 89  | A candy recipe calls for 5 parts milk, 4 parts cocoa, 4 parts syrup, 2 parts sugar, and 1 part butter. If you use 8 ounces of milk, how many ounces of candy mixture can you make ? | A. $25\frac{3}{5}$<br>B. $5\frac{3}{5}$<br>C. 20<br>D. 128                 |
| 90  | $2244 - 0.88 = ? \times 1122$                                                                                                                                                       | A. 20.02<br>B. 20.2<br>C. 19.3<br>D. 2.27                                  |
| 91  | Dave is twice as old as Bob, who is 3 years older than Steve. If Steve is $4a$ years old, Dave's age is                                                                             | A. $8a$<br>B. $22a$<br>C. $14a$<br>D. $8a + 6$                             |
| 92  | Question Image                                                                                                                                                                      | A. 24<br>B. $12\sqrt{2}$<br>C. $16\sqrt{2}$<br>D. 48                       |
| 93  | If $p$ is a negative integer and $p^2 + 11p = t$ , a value of $t$ could be:                                                                                                         | A. 12<br>B. 18<br>C. -18<br>D. 11                                          |
| 94  | $72 + 679 + 1439 + 537 + ? = 4036$                                                                                                                                                  | A. 1309<br>B. 1208<br>C. 2308<br>D. 2423                                   |
| 95  | What is the number , 5% of which is 10?                                                                                                                                             | A. 200<br>B. 100<br>C. 50<br>D. 10                                         |
| 96  | $7 \times 21 \div 3 + 3 \div 8 \div 4 \times 2$                                                                                                                                     | A. 13<br>B. 17<br>C. 31<br>D. 1                                            |
| 97  | A clerk filled 73 forms on Monday, 85 forms on Tuesday, 54 on Wednesday, 92 on Thursday and 66 on Friday. What was the average number of forms filled per day?                      | A. 50<br>B. 95<br>C. 84<br>D. 74                                           |
| 98  | The average height of five men is 68 inches. If one man is 70 inches tall and three others have an average of 67 inches, the height of the fifth man, in inches, is                 | A. 68<br>B. 69<br>C. 70<br>D. 71                                           |
| 99  | $t$ is an integer than 5. The expression that must represent an odd integer is:                                                                                                     | A. $1(t+1)$<br>B. $9t-1$<br>C. $t^2$<br>D. $2t-3$                          |
| 100 | Question Image                                                                                                                                                                      | A. $41\sqrt{O}$<br>B. $65\sqrt{O}$<br>C. $115\sqrt{O}$<br>D. $106\sqrt{O}$ |
| 101 | $816 - 288 \div 24 = ?$                                                                                                                                                             | A. 22<br>B. 828<br>C. 528<br>D. 804                                        |
| 102 | What is the sum of money, 6% of which is 18 dollars?                                                                                                                                | A. 600<br>B. 200<br>C. 300<br>D. 20                                        |
| 103 | A car that gets 15 miles per gallon of gasoline can travel 250 miles on a full tank. If the same car got 20 miles per gallon, how many miles could it travel on a full tank ?       | A. 300<br>B. 750<br>C. $250\frac{3}{4}$<br>D. $333\frac{1}{3}$             |

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| 104 | One-sixth of a day is what part of the time between 3 p.m. Monday and 3 p.m. Thursday of the same week ?                                                                                       | A. 1/10<br>B. 1/18<br>C. 1/15<br>D. 1/12                               |
| 105 | If a pipe can fill a tank in 2 hours and another pipe can fill the same tank in 40 minutes. how much time in minutes is needed to fill the tank if both the pipes are working together?        | A. 90<br>B. 50<br>C. 60<br>D. 30                                       |
| 106 | A car that gets 15 miles per gallon of gasoline can travel 250 miles on a full tank. If the same car got 20 miles per gallon, how many miles could it travel on a full tank?                   | A. 300<br>B. 750<br>C. 250 3/5<br>D. 333 1/3                           |
| 107 | When $3x^2+5x+7$ is subtracted from $x^2+8x+3$ the result is?                                                                                                                                  | A. $5x^2-3x+4$<br>B. $3x-2x^2-4$<br>C. $x^2+8x+10$<br>D. $11x^2+3x+10$ |
| 108 | Mr.Kashif got an average of 50 in 6 tests. What should he get in the next test to attain the average of 60?                                                                                    | A. 120<br>B. 60<br>C. 100<br>D. 70                                     |
| 109 | If $abc= 2$ and $a = c$ then $b =$                                                                                                                                                             | A. $a^2$<br>B. $1/2a$<br>C. $2/a^2$<br>D. $2-a^2$                      |
| 110 | $x\sqrt{0.09} = 3$ : $x = ?$                                                                                                                                                                   | A. 10<br>B. 1/3<br>C. 1/10<br>D. 1                                     |
| 111 | The value of $(x+y)^2 - (x-y)^2$ is?                                                                                                                                                           | A. 4<br>B. $x^2+y^2$<br>C. $4xy$<br>D. $-4xy$                          |
| 112 | $5/3 + 7/6 + 9/3 + 7/2 = ?$                                                                                                                                                                    | A. 28/3<br>B. 112/3<br>C. 28/12<br>D. 14/7                             |
| 113 | The average height of a class of 14 boys is 5.3 feet. A new boy admitted to the class, the new average of height now becomes 5.25. What is the height of the new boy ?                         | A. 4.55<br>B. 5.0<br>C. 6.0<br>D. 3.5                                  |
| 114 | How many tens are equal to the number whose hundreds, tens, and units digits are a, b, and c, respectively ?                                                                                   | A. b<br>C. $10a+b+c$                                                   |
| 115 | The value of $(x+y)^2 + (x-y)^2$ is?                                                                                                                                                           | A. 4<br>B. $2(x^2+y^2)$<br>C. $4xy$<br>D. $-4xy$                       |
| 116 | How many cents will r books cost if t books cost m dollars ?                                                                                                                                   |                                                                        |
| 117 | $224\sqrt{0.88} = ? \times 1122$                                                                                                                                                               | A. 20.02<br>B. 20.2<br>C. 19.3<br>D. 2.27                              |
| 118 | Find the ratio of 18 inches to 2 yards.                                                                                                                                                        | A. 3/4<br>B. 1/4<br>C. 1/5<br>D. 2/5                                   |
| 119 | The annual decrease in the population of a city was 10% and the present number of inhabitants is 1620. What was the population 2 years hence ?                                                 | A. 20<br>B. 400<br>C. 2000<br>D. 1000                                  |
| 120 | If Myra had bowling scores of b + 6, b - 2, b + 4, and b - 5, what must she score in the next game to get an overall average of b + 2 ?                                                        | A. b + 7<br>B. b - 3<br>C. b + 3<br>D. b - 7                           |
| 121 | Find the arithmetic mean of 25.2, 13.5, 18.5, and 34.8                                                                                                                                         | A. 13<br>B. 23<br>C. 27<br>D. 5                                        |
| 122 | A candy recipe calls for 5 parts milk, 4 parts cocoa, 4 parts syrup, 2 parts sugar, and 1 part butter. If you have 8 cups of milk, how many cups of each of the other ingredients do you need? | A. 25 3/5<br>B. 5 3/5<br>C. 20                                         |

|     |                                                                                                                                                                                                                |                                              |
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|     | butter. If you use 8 ounces of milk, how many ounces of candy mixture can you make?                                                                                                                            | C. 20<br>D. 128                              |
| 123 | A piece of fabric is cut into three sections so that the first is three times as long as the second and the second is three times as long as the third. What part of the entire piece is the smallest section? | A. 2/5<br>B. 3/7<br>C. 2/3<br>D. 1/13        |
| 124 | Four people are asked to stand in a straight line. In how many different orders can they line up?                                                                                                              | A. 12<br>B. 16<br>C. 24<br>D. 6              |
| 125 | 25% of 4 ÷ 4% of 25 =?                                                                                                                                                                                         | A. 1<br>B. 3<br>C. 0<br>D. 6                 |
| 126 | $(160 - 130)(270 - 240) / 2250 \div 50 = ?$                                                                                                                                                                    | A. 4/3<br>B. 2/3<br>C. 45<br>D. 20           |
| 127 | The population of a city increased in two years from 25,000 to 30,000; find the percent increase during the time.                                                                                              | A. 10%<br>B. 20%<br>C. 40%<br>D. 5%          |
| 128 | Question Image                                                                                                                                                                                                 | A. 25/32<br>B. 7/8<br>C. 32/25<br>D. 11/10   |
| 129 | In Myra had bowling scores of $b+6$ , $b-2$ , $b+4$ , and $b-5$ . what must she score in the next game to get overall average of $b+2$ ?                                                                       | A. $b+7$<br>B. $b-3$<br>C. $b+3$<br>D. $b-7$ |
| 130 | If $(36)(?)(7)=21$ , then ? equals                                                                                                                                                                             | A. 21/43<br>B. 1/42<br>C. 1/12<br>D. 1/11    |
| 131 | $3/4$ of 432 = ?                                                                                                                                                                                               | A. 340<br>B. 232<br>C. 324<br>D. 316         |
| 132 | A clerk filed 73 forms on Monday, 85 forms on Tuesday, 54 on Wednesday, 92 on Thursday and 66 on Friday. What was the average number of forms filed per day?                                                   | A. 50<br>B. 95<br>C. 84<br>D. 74             |
| 133 | If $(36)(?)(7)=21$ , then ? equals                                                                                                                                                                             | A. 21/43<br>B. 1/42<br>C. 1/12<br>D. 1/11    |
| 134 | One-sixth of a day is what part of the time between 3 p.m. Monday and 3 a.m. Thursday of the same week?                                                                                                        | A. 1/10<br>B. 1/18<br>C. 1/15<br>D. 1/12     |
| 135 | $\sqrt{?}/16 = 0.5$                                                                                                                                                                                            | A. 8<br>B. 12<br>C. 32<br>D. 64              |
| 136 | Find the ratio of 18 inches to 2 yards.                                                                                                                                                                        |                                              |
| 137 | If a pipe can fill a tank in 2 hours and another pipe can fill the same tank in 40 minutes. How much time in minutes is needed to fill the tank if both the pipes are working together?                        | A. 90<br>B. 90<br>C. 60<br>D. 30             |
| 138 | $(190)^2 - (150)^2 = ?$                                                                                                                                                                                        | A. 58600<br>B. 13600<br>C. 1360<br>D. 1600   |
| 139 | If you have 50 green, 50 orange, and 50 yellow jelly beans, how many bags can you fill for Halloween each containing 2 green, 3 orange, and 4 yellow jelly beans?                                              | A. 12<br>B. 13<br>C. 16<br>D. 17             |
| 140 | Four people are asked to stand in a straight line. In how many different orders can they line up?                                                                                                              | A. 12<br>B. 16<br>C. 24<br>D. 6              |



|     |                                                                                                                                              |                                                                                          |
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|     |                                                                                                                                              | D. 6                                                                                     |
| 141 | ? x 12 = 75% of 336                                                                                                                          | A. 48<br>B. 252<br>C. 28<br>D. 21                                                        |
| 142 | How many miles are there between two cities if the distance is represented by a 2.4-inch line on a map having a scale of 1 inch to 8 miles ? | A. 19.2<br>B. 12.8<br>C. 8.5<br>D. 38                                                    |
| 143 | Question Image                                                                                                                               | A. 15<br>B. 30<br>C. 45<br>D. 72                                                         |
| 144 | In a school there are 400 students , of whom 70% are boys. What is the number of girls?                                                      | A. 130<br>B. 200<br>C. 280<br>D. 2800                                                    |
| 145 | If $x + 3y = 7$ and $2x + y = 5$ then value $x/y$ is?                                                                                        | A. $1/2$<br>B. $1/3$<br>C. $2/5$<br>D. $8/9$                                             |
| 146 | $(60)^2 = ? \times 72$                                                                                                                       | A. 3600<br>B. 3528<br>C. 0.02<br>D. 50                                                   |
| 147 | $7/3 \div 35/18 \div 54/20 = ?$                                                                                                              | A. $49/4$<br>B. $4/9$<br>C. $4/63$<br>D. $81/35$                                         |
| 148 | Change $27/7$ to a mixed number.                                                                                                             | A. $6 \frac{1}{3}$<br>B. $7 \frac{1}{2}$<br>C. $3 \frac{6}{7}$<br>D. $2 \frac{1}{7}$     |
| 149 | The value of $\{0.5^4 - 0.4^4\} / \{0.5^2 + 0.4^2\}$ is?                                                                                     | A. 0.9<br>B. 0.09<br>C. 0.19<br>D. 0.31                                                  |
| 150 | Question Image                                                                                                                               | A. 55<br>B. 70<br>C. 110<br>D. 125                                                       |
| 151 | If $x\%$ of 60 = 48, then $x = ?$                                                                                                            | A. 80<br>B. 60<br>C. 90<br>D. 40                                                         |
| 152 | $2x^2y$ when multiplied with $x^2 + y^2$ gives ?                                                                                             | A. $2x^2y^2 + 2xy^3$<br>B. $2x^4y + 2x^2y^3$<br>C. $2xy^2 + 2x^2y$<br>D. $2xy^3 + 2x^3y$ |
| 153 | The average of $x, y, z$ and 40 is 10. What is the average of $x, y$ , and $z$ .                                                             | A. 10<br>B. 0<br>C. 2<br>D. 15                                                           |
| 154 | Question Image                                                                                                                               | A. 20<br>B. 25<br>C. 40<br>D. 50                                                         |
| 155 | $(60)^2 = ? \times 72$                                                                                                                       | A. 36<br>B. 3600<br>C. 40<br>D. 50                                                       |
| 156 | If $(p-3)(p+4) > (p-3)(p+8)$ , what is the best description of $p$ ?                                                                         | A. $p=3$<br>B. $-8 < p < -5$<br>C. $p \in \{ \}$<br>D. $p \geq 3$                        |
| 157 | Find the sum of money, 11% of which is Rs. 1650.                                                                                             | A. 150<br>B. 3300<br>C. 25000                                                            |

|     |                                                                                                                                                                        |                                                                       |
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|     |                                                                                                                                                                        | D. 15000                                                              |
| 158 | How many integers between 28 and 98 are exactly divisible by 7 ?                                                                                                       | A. 9<br>B. 11<br>C. 12<br>D. 8                                        |
| 159 | A man opens a bookstall with a capital of Rs.25000. In three months his capital amounts to rupees 27500. What is the increase percent?                                 | A. 1%<br>B. 10%<br>C. 20%<br>D. 7%                                    |
| 160 | $1.02 - 0.02 + ? = 1.842$                                                                                                                                              | A. 0.222<br>B. 0.842<br>C. 2<br>D. None                               |
| 161 | A team played 30 games of which it won 24. What part of the games played did it close ?                                                                                | A. $\frac{1}{5}$<br>B. $\frac{5}{6}$<br>C. $\frac{6}{5}$<br>D. 5      |
| 162 | The population of 8 villages is 900, 750, 1100, 1050, 835, 1250, 555, and 630. Find the population of Ninth village if the average population of Nine villages is 900. | A. 1200<br>B. 1050<br>C. 1030<br>D. 7070                              |
| 163 | $0.027\sqrt{90} = ?$                                                                                                                                                   | A. 0.0003<br>B. 0.03<br>C. 3<br>D. 0.00003                            |
| 164 | Dave is twice as old as Bob, who is 3 years older than Steve. If Steve is $4a$ years old, Dave's age is:                                                               | A. $8a$<br>B. $22a$<br>C. $14a$<br>D. $8a+6$                          |
| 165 | A man has Rs.2000 and spends 18% of it. What money has he left now?                                                                                                    | A. 3600<br>B. 820<br>C. 1640<br>D. 4000                               |
| 166 | If it takes 10 minutes to walk $\frac{3}{7}$ mile, how many minutes will it take to walk the rest of the mile ?                                                        | A. $2\frac{1}{3}$<br>B. $13\frac{1}{3}$<br>C. $4\frac{2}{7}$<br>D. 30 |
| 167 | $350 - -96 \div 18 = ?$                                                                                                                                                | A. 318<br>B. -132<br>C. 328<br>D. 232                                 |
| 168 | $x^2 = 1681$ , $x = ?$                                                                                                                                                 | A. 31<br>B. 41<br>C. 51<br>D. 61                                      |
| 169 | $0.007 \div \sqrt{0.000049}$                                                                                                                                           | A. 1<br>B. 0.0049<br>C. 2<br>D. 7                                     |
| 170 | Question Image                                                                                                                                                         | A. 50 m<br>B. 64 m<br>C. 72 m<br>D. 84 m                              |
| 171 | Question Image                                                                                                                                                         | A. 780<br>B. 585<br>C. 1170<br>D. 540                                 |
| 172 | The value of $x^2 + 5x + 6$ at $x=2$ is:                                                                                                                               | A. 10<br>B. 14<br>C. 18<br>D. 20                                      |
| 173 | What is the number of 5% of which is 10 ?                                                                                                                              | A. 200<br>B. 100<br>C. 50<br>D. 10                                    |
| 174 | An angle is $30^\circ$ more than one-half its complement. Find the angle.                                                                                              | A. $20^\circ$<br>B. $30^\circ$<br>C. $50^\circ$<br>D. $60^\circ$      |
|     |                                                                                                                                                                        | A. $\frac{x}{7y}$<br>B. $\frac{7x}{y}$                                |

|     |                                                                                                                                                                                                                                                          |                                                                                                               |
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| 175 | If 7 apples cost y cents, how many apples will x dollars buy ?                                                                                                                                                                                           | B. $7x/y$<br>C. $7x/100y$<br>D. $700x/y$                                                                      |
| 176 | $1\frac{3}{4} - 1\frac{3}{5} = ?$                                                                                                                                                                                                                        | A. 0.16<br>B. 0.2<br>C. 0.15<br>D. $13/20$                                                                    |
| 177 | Which of the following is the sum of two consecutive prime numbers ?                                                                                                                                                                                     | A. 66<br>B. 52<br>C. 41<br>D. 29                                                                              |
| 178 | Question Image                                                                                                                                                                                                                                           | A. a-180<br>B. 2a-180<br>C. $180-2a$<br>D. 180-b                                                              |
| 179 | The death rates for three diseases are :<br>Disease R 2 People out of 10,000<br>Disease S 13 People out of 1,000,000<br>Disease T 9 People out of 100,000<br>Disease R 2 People out of 10,000<br>What is the combined death rate for the three diseases? | A. 123 out of 1,000,000<br>B. 42 out of 10,000<br>C. 42 out of 1000,000<br>D. $303 \text{ out of } 1,000,000$ |
| 180 | The population of 8 villages is 900, 750, 1100, 1050, 835, 1250, 555, and 630. Find the population of Ninth village if the average population of Nine villages is 900.                                                                                   | A. 1200<br>B. 1050<br>C. $1030$<br>D. 7070                                                                    |
| 181 | Which of the following is the sum of two consecutive prime numbers?                                                                                                                                                                                      | A. 66<br>B. 52<br>C. 41<br>D. 29                                                                              |
| 182 | How many tens are equal to the number whose hundreds, tens, and units digits are a,b,c, respectively?                                                                                                                                                    | A. b<br>B. $a+1/10b+1/100c$<br>C. $10a+b+c$<br>D. $10a+b+c/10$                                                |
| 183 | $1250 \div 25 \times 0.5 = ?$                                                                                                                                                                                                                            | A. 25<br>B. 50<br>C. 2.5<br>D. 100                                                                            |
| 184 | Question Image                                                                                                                                                                                                                                           | A. 5<br>B. 10<br>C. 110<br>D. 125                                                                             |
| 185 | $Z + 1/Z = 2$ ; $Z = ?$                                                                                                                                                                                                                                  | A. 2<br>B. 1<br>C. $1/2$<br>D. $1\frac{1}{2}$                                                                 |
| 186 | $(60)^2 = ? \times 7$                                                                                                                                                                                                                                    | A. 3600<br>B. 3528<br>C. 0.02<br>D. 50                                                                        |
| 187 | Question Image                                                                                                                                                                                                                                           | A. b-180<br>B. b-90<br>C. $180-a/2$<br>D. 180-a                                                               |
| 188 | If a machine can place a cap on a bottle of soda every 0.8 seconds, how many bottles can be capped in 2 hours?                                                                                                                                           | A. 8000<br>B. $9000$<br>C. 300<br>D. 900                                                                      |
| 189 | A man opens a bookstall with a capital of Rs. 25000. In three month his capital amounts to rupees 27500. What is the increase percent ?                                                                                                                  | A. 1%<br>B. 10%<br>C. 20%<br>D. 7%                                                                            |
| 190 | If $x=7y+3$ and $z=49y^2$ then what is 'z' in terms of x?                                                                                                                                                                                                | A. $x^2$<br>B. $x^{\sup>2\sup>-3}$<br>C. $(x-3)^{\sup>2\sup>/7}$<br>D. None                                   |
| 191 | $9218 - 3546 + 2354 = ?$                                                                                                                                                                                                                                 | A. 8026<br>B. 8116<br>C. 10410<br>D. 23174                                                                    |

A. 600

192 What is the sum of money, of which 6% is 18 dollars ?

- A. 300
- B. 200
- C. 300
- D. 10

193 If 7 apples cost y cents, how many apples will x dollars buy?

- A.  $x/7y$
- B.  $7x/y$
- C.  $7x/100y$
- D.  $700x/y$