|  | Department of $\qquad$ Mathematics © $\qquad$ | INDIAN SCHOOL AL WADI AL KABIR <br> Class VI, Mathematics Playing with Numbers - Worksheet 1 <br> 09-05-21 |
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| Descriptive Questions-Short Answer Type (2 marks each) |  |  |
| Q1. | Write all the factors of <br> a) 39 <br> b) 28 |  |
| Q2. | Write the first 5 multiples of <br> a) 20 <br> b) 12 |  |
| Q3. | Find the product of the smallest and the greatest prime numbers between 1 and 100. |  |
| Descriptive Questions- Long Answer Type 1 (3 marks each) |  |  |
| Q4. | Check whether 28 is a perfect number. Show proper steps. |  |
| Q5. | List all the composite numbers between 30 and 40. |  |
| Q6. | Write any three pairs of twin primes less than 30. |  |
| Q7. | List three prime numbers between 40 and 50. |  |
| Q8. | List all the multiples of 7, which are less than 50. |  |
| Q9. | Identify whether the following numbers are prime or composite. Give reasons. <br> a) 99 <br> b) 47 <br> c) 87 |  |
| Q. 10 | State whether the following statements are true or false. If it is false, give reason. <br> a) All prime numbers are odd. <br> b) All the natural numbers have minimum two factors. <br> c) The smallest prime number is 1 . |  |
| Q. 11 | Find the product of the greatest factor of 25 and the smallest multiple of 15 |  |


| Descriptive Questions Long Answer Type 2 (4 marks each) |  |  |  |  |  |  |  |  |
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| Q. 12 | Express the following numbers as a sum of 2 odd primes: a) 36 |  |  |  |  |  | b) 40 |  |
| Q. 13 | Check whether 246 is: <br> a) divisible by 2 <br> b) divisible by 3 |  |  | c) divisible by 5 <br> d) divisible by 10 <br> Give reasons in each case. |  |  |  |  |
| Q. 14 | Write 4 pairs of prime numbers whose difference is 10. |  |  |  |  |  |  |  |
| Q. 15 | Find four pairs of prime numbers whose sum is a multiple of 4 . |  |  |  |  |  |  |  |
| $$ | 1a | 1,3,13,39 | 1b | 1,2,4,7,14,28 | 2a | $\begin{aligned} & 20,40,60,80, \\ & 100 \end{aligned}$ | 2b | 12,24,36,48,60 |
|  | 3 | $\begin{aligned} & 2 \times 97 \\ & =194 \end{aligned}$ | 4 | $\begin{aligned} & 1+2+4+7+14 \\ & +28=56=2 \times 28 \\ & 28 \text { is perfect } \end{aligned}$ | 5 | $\begin{aligned} & 32,33,34,35,36,38, \\ & 39 \end{aligned}$ | 6 | $\begin{aligned} & (11,13),(17,19), \\ & (3,5) \end{aligned}$ |
|  | 7 | 41,43,47 | 8 | $\begin{aligned} & 7,14,21,28,35, \\ & 42,49 \end{aligned}$ | 9 | a) Composite, more than 2 factors <br> b) Prime, only 2 factors <br> c)Composite, More than 2 factors | 10 | a) False, 2 is an even prime number <br> b) True <br> c) False, smallest prime number is 2 |
|  | 11 | $\begin{aligned} & 25 \times 15= \\ & 375 \end{aligned}$ | 12 | a) $36=31+5$ <br> b) $40=37+5$ | 13 | a) Yes, ones place is even. <br> b) Yes, sum of digits divisible by 3 <br> c) No, ones place is not 0 or 5 <br> d) No, ones place is not 0 | 14 | $\begin{aligned} & (7,17),(13,23) \\ & (19,29),(31,41) \end{aligned}$ |
|  | 15 | $\begin{aligned} & (3,5), \\ & (11,13), \\ & (7,17), \\ & (13,23) \end{aligned}$ |  |  |  |  |  |  |

