

Primary Number System

MCQ Test, Set 03

Time: 30 minutes

Maximum marks: 25

Name: _____ Class: _____ Date: _____

1. There are 25 questions. Each has exactly one correct answer: choose A, B, C or D.
2. Each correct answer carries 1 mark. There is no negative marking.
3. The key sheet and worked solutions are at the end of this test.

1. Which of the following is a whole number but not a natural number?

- A.** 1 **B.** 10 **C.** 0 **D.** 5

2. Which of the following is an even number?

- A.** 2470 **B.** 365 **C.** 7259 **D.** 1001

3. The multiples of 9 between 40 and 70 are

- A.** 45, 54, 63 **B.** 45, 54, 63, 72 **C.** 49, 58, 67 **D.** 36, 45, 54, 63

4. Which of the following is a factor of 85?

- A.** 15 **B.** 35 **C.** 25 **D.** 5

5. How many divisors does 81 have?

- A.** 3 **B.** 6 **C.** 5 **D.** 4

6. A symbol which has a fixed value is called

- A.** a constant **B.** a multiple **C.** a literal **D.** a variable

7. In $-7m$, the number multiplying m is

- A.** 7 **B.** -7 **C.** m **D.** $-7m$

8. $8m + 5m =$

- A.** 13 **B.** $40m$ **C.** $13m^2$ **D.** $13m$

9. $17y - 9y =$

- A.** $8y$ **B.** $8y^2$ **C.** $26y$ **D.** 8

10. Which of the following equals $5c$?

- A.** $c \times c \times c \times c \times c$ **B.** $c + c + c + c + c$
C. $5 + c$ **D.** $c + c + c + c$

11. The square of 63 is

- A.** 3969 **B.** 126 **C.** 369 **D.** 567

12. $44 \times 44 =$
A. 352 B. 88 C. 1616 D. 1936
-
13. $19^3 =$
A. 57 B. 6859 C. 130321 D. 361
-
14. 9^4 is read as
A. 4 power 9 B. 9 times 4 C. 9 squared D. 9 power 4
-
15. The exponential form of 78125 with base 5 is
A. 5^8 B. 5^6 C. 5^7 D. 7^5
-
16. Which of the following numbers between 5000 and 6000 is divisible by 2?
A. 5043 B. 5636 C. 5407 D. 5565
-
17. Which of the following numbers between 3000 and 4000 is divisible by 3?
A. 3329 B. 3659 C. 3372 D. 3733
-
18. Which of the following numbers between 4000 and 5000 is NOT divisible by 3?
A. 4794 B. 4436 C. 4275 D. 4014
-
19. Which of the following numbers between 40000 and 50000 is NOT divisible by 4?
A. 49452 B. 49060 C. 40840 D. 48298
-
20. Which of the following numbers between 6000 and 7000 is divisible by 5?
A. 6309 B. 6354 C. 6652 D. 6120
-
21. Which of the following numbers between 5000 and 6000 is NOT divisible by 6?
A. 5866 B. 5454 C. 5382 D. 5172
-
22. Which of the following numbers between 6000 and 7000 is divisible by 6?
A. 6609 B. 6656 C. 6348 D. 6878
-
23. Which of the following numbers between 300 and 400 is divisible by 7?
A. 366 B. 386 C. 315 D. 337
-
24. To test 919 for divisibility by 7, twice the unit digit is subtracted from the remaining part. The result is
A. 73 B. 901 C. 109 D. 82
-
25. Among 2, 3, 4, 5 and 6, the number 34335 is divisible by
A. 5 only B. 3 and 5 only
C. 3, 4 and 5 only D. 3, 5 and 6 only
-

Key sheet

1. C	2. A	3. A	4. D	5. C
6. A	7. B	8. D	9. A	10. B
11. A	12. D	13. B	14. D	15. C
16. B	17. C	18. B	19. D	20. D
21. A	22. C	23. C	24. A	25. B

Solutions

1. Which of the following is a whole number but not a natural number?

Whole numbers are the natural numbers along with 0.

So 0 is a whole number but not a natural number.

Ans: (C) 0

2. Which of the following is an even number?

$$2470 = 2 \times 1235 + 0$$

Remainder is 0, so 2470 is an even number.

Ans: (A) 2470

3. The multiples of 9 between 40 and 70 are

$$9 \times 5 = 45, 9 \times 6 = 54, 9 \times 7 = 63$$

$$9 \times 4 = 36 \text{ is less than } 40 \text{ and } 9 \times 8 = 72 \text{ is more than } 70.$$

Ans: (A) 45, 54, 63

4. Which of the following is a factor of 85?

$$85 = 5 \times 17, \text{ so } 5 \text{ divides } 85 \text{ without remainder.}$$

15, 25, 35 leave a remainder.

Ans: (D) 5

5. How many divisors does 81 have?

$$81 = 1 \times 81$$

$$= 3 \times 27$$

$$= 9 \times 9$$

9×9 gives the divisor 9 only once.

Divisors: 1, 3, 9, 27, 81, so there are 5.

Ans: (C) 5

6. A symbol which has a fixed value is called

A symbol which has a fixed value is called a constant.

Ans: (A) a constant

7. In $-7m$, the number multiplying m is

$$-7m = -7 \times m, \text{ so the number is } -7 \text{ (with its sign).}$$

Ans: (B) -7

8. $8m + 5m =$

$$8m + 5m = (8 + 5)m = 13m$$

Ans: (D) $13m$

9. $17y - 9y =$

$$17y - 9y = (17 - 9)y = 8y$$

Ans: (A) $8y$

10. Which of the following equals $5c$?

c added 5 times is $5c$: $c + c + c + c + c = 5c$

Ans: (B) $c + c + c + c + c$

11. The square of 63 is

$$63^2 = 63 \times 63$$

$$63 \times 3 = 189$$

$$63 \times 6 = 378, \text{ written one place to the left: } 3780$$

$$189 + 3780 = 3969$$

Ans: (A) 3969

12. $44 \times 44 =$

$$44^2 = 44 \times 44$$

$$44 \times 4 = 176$$

$$44 \times 4 = 176, \text{ written one place to the left: } 1760$$

$$176 + 1760 = 1936$$

Ans: (D) 1936

13. $19^3 =$

$$19^3 = 19 \times 19 \times 19$$

$$19 \times 19 = 361, 361 \times 19 = 6859$$

$$= 6859$$

Ans: (B) 6859

14. 9^4 is read as

$9^4 = 9 \times 9 \times 9 \times 9$ is read as '9 power 4'.

Ans: (D) 9 power 4

15. The exponential form of 78125 with base 5 is

Divide by 5 again and again:

$$78125 \div 5 = 15625, 15625 \div 5 = 3125, 3125 \div 5 = 625$$

$$625 \div 5 = 125, 125 \div 5 = 25, 25 \div 5 = 5$$

$$78125 = 5 \times 5 \times 5 \times 5 \times 5 \times 5 \times 5 = 5^7$$

Ans: (C) 5^7

16. Which of the following numbers between 5000 and 6000 is divisible by 2?

A number is divisible by 2 if the digit at its unit place is 0, 2, 4, 6 or 8.

The digit at the unit place of 5636 is 6, so 5636 is divisible by 2.

The other three are not divisible.

Ans: (B) 5636

17. Which of the following numbers between 3000 and 4000 is divisible by 3?

A number is divisible by 3 if the sum of all its digits is divisible by 3.

Sum of the digits of 3372: $3 + 3 + 7 + 2 = 15$

15 is divisible by 3 ($15 = 3 \times 5$), so 3372 is divisible by 3.

Each of the others fails the test.

Ans: (C) 3372

18. Which of the following numbers between 4000 and 5000 is NOT divisible by 3?

A number is divisible by 3 if the sum of all its digits is divisible by 3.

Sum of the digits of 4436: $4 + 4 + 3 + 6 = 17$

17 is not divisible by 3 ($17 = 3 \times 5 + 2$), so 4436 is not divisible by 3.

Each of the others passes the test.

Ans: (B) 4436

19. Which of the following numbers between 40000 and 50000 is NOT divisible by 4?

A number is divisible by 4 if its last two digits together are divisible by 4.

Last two digits of 48298 together: 98; $98 = 4 \times 24 + 2$, so 48298 is not divisible by 4.

Each of the others passes the test.

Ans: (D) 48298

20. Which of the following numbers between 6000 and 7000 is divisible by 5?

A number is divisible by 5 if the digit at its unit place is 0 or 5.

The digit at the unit place of 6120 is 0, so 6120 is divisible by 5.

The other three are not divisible.

Ans: (D) 6120

21. Which of the following numbers between 5000 and 6000 is NOT divisible by 6?

A number is divisible by 6 if it is divisible by both 2 and 3.

The digit at the unit place of 5866 is 6, so 5866 is divisible by 2.

Sum of the digits of 5866: $5 + 8 + 6 + 6 = 25$

25 is not divisible by 3 ($25 = 3 \times 8 + 1$), so 5866 is not divisible by 3.

$\therefore$ 5866 is not divisible by 6.

Each of the others passes the test.

Ans: (A) 5866

22. Which of the following numbers between 6000 and 7000 is divisible by 6?

A number is divisible by 6 if it is divisible by both 2 and 3.

The digit at the unit place of 6348 is 8, so 6348 is divisible by 2.

Sum of the digits of 6348: $6 + 3 + 4 + 8 = 21$

21 is divisible by 3 ($21 = 3 \times 7$), so 6348 is divisible by 3.

$\therefore$ 6348 is divisible by 6.

Each of the others fails the test.

Ans: (C) 6348

23. Which of the following numbers between 300 and 400 is divisible by 7?

A number is divisible by 7 if the remaining part minus twice the unit digit is a multiple of 7 (or 0).

315: $31 - 5(2) = 31 - 10 = 21$; $21 = 7 \times 3$, a multiple of 7, so 315 is divisible by 7.

Each of the others fails the test.

Ans: (C) 315

24. To test 919 for divisibility by 7, twice the unit digit is subtracted from the remaining part. The result is

Remaining part = 91, unit digit = 9

$91 - 9(2) = 91 - 18 = 73$

Ans: (A) 73

25. Among 2, 3, 4, 5 and 6, the number 34335 is divisible by

The digit at the unit place of 34335 is 5, so 34335 is not divisible by 2.

Sum of the digits of 34335: $3 + 4 + 3 + 3 + 5 = 18$

18 is divisible by 3 ($18 = 3 \times 6$), so 34335 is divisible by 3.

Last two digits of 34335 together: 35; $35 = 4 \times 8 + 3$, so 34335 is not divisible by 4.

The digit at the unit place of 34335 is 5, so 34335 is divisible by 5.

Not divisible by both 2 and 3, so not by 6.

So 34335 is divisible by 3 and 5.

Ans: (B) 3 and 5 only
