

Primary Number System

MCQ Test, Set 09

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 statements is true?

- A. 1 is not a whole number.
- B. 0 is a natural number.
- C. Every whole number is a natural number.
- D. Every natural number is a whole number.

2. The next even number after 598 is

- A. 599
- B. 600
- C. 596
- D. 602

3. The 10th multiple of 24 is

- A. 240
- B. 216
- C. 264
- D. 34

4. Which of the following is a factor of 133?

- A. 9
- B. 13
- C. 7
- D. 3

5. Which of the following is NOT a factor of 60?

- A. 25
- B. 15
- C. 20
- D. 12

6. Which of the following lists has only constants?

- A. 2, x , 14
- B. 9, y , z
- C. 2, 9, 14
- D. a , b , c

7. In x , the number multiplying x is

- A. 1
- B. -1
- C. 0
- D. x

8. $15p + 7p =$

- A. $22p^2$
- B. $22p$
- C. 22
- D. $105p$

9. $24y - 17y =$

- A. $7y$
- B. $41y$
- C. $7y^2$
- D. 7

10. c^5 is read as

- A. 5 power c
- B. c power 5
- C. c plus 5
- D. 5 times c

11. The square of 28 is
A. 784 B. 280 C. 464 D. 56
-
12. $74 \times 74 =$
A. 4916 B. 5476 C. 814 D. 148
-
13. 11^6 is read as
A. 11 squared B. 6 power 11 C. 11 times 6 D. 11 power 6
-
14. 3^{11} means
A. $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3$
B. $11 \times 11 \times 11$
C. $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3$
D. 3×11
-
15. The exponential form of 27000 with base 30 is
A. 30^4 B. 3^{30} C. 30^3 D. 30^2
-
16. Which of the following numbers between 4000 and 5000 is divisible by 2?
A. 4963 B. 4936 C. 4347 D. 4909
-
17. Which of the following numbers between 40000 and 50000 is divisible by 3?
A. 48196 B. 48133 C. 40196 D. 42474
-
18. The smallest number greater than 5310 that is divisible by 3 is
A. 5313 B. 5311 C. 5312 D. 5316
-
19. Which of the following numbers between 10000 and 20000 is NOT divisible by 4?
A. 10824 B. 19920 C. 19344 D. 19034
-
20. Which of the following numbers between 40000 and 50000 is divisible by 5?
A. 45259 B. 48504 C. 42620 D. 46854
-
21. Which of the following numbers between 80000 and 90000 is NOT divisible by 6?
A. 87348 B. 85042 C. 80010 D. 83130
-
22. Which of the following numbers between 90000 and 100000 is divisible by 6?
A. 91274 B. 96705 C. 99686 D. 94800
-
23. Which of the following numbers between 900 and 1000 is divisible by 7?
A. 926 B. 935 C. 959 D. 955
-
24. To test 892 for divisibility by 7, twice the unit digit is subtracted from the remaining part. The result is
A. 888 B. 87 C. 93 D. 85
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- 25.** Among 2, 3, 4, 5 and 6, the number 99330 is divisible by
- | | |
|-----------------------------------|---------------------------|
| A. all of 2, 3, 4, 5 and 6 | B. 2, 5 and 6 only |
| C. 2, 3, 5 and 6 only | D. 2, 3 and 5 only |
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Key sheet

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

Solutions

1. Which of the following statements is true?

Whole numbers are the natural numbers along with 0, so every natural number is a whole number.
0 is a whole number but not a natural number.

Ans: (D) Every natural number is a whole number.

2. The next even number after 598 is

Even numbers go up in steps of 2.

$$598 + 2 = 600$$

Ans: (B) 600

3. The 10th multiple of 24 is

$$10\text{th multiple} = 24 \times 10 = 240$$

Ans: (A) 240

4. Which of the following is a factor of 133?

$$133 = 7 \times 19, \text{ so } 7 \text{ divides } 133 \text{ without remainder.}$$

3, 9, 13 leave a remainder.

Ans: (C) 7

5. Which of the following is NOT a factor of 60?

$$60 = 12 \times 5, 60 = 15 \times 4, 60 = 20 \times 3$$

$60 = 25 \times 2 + 10$ leaves remainder 10, so 25 is not a factor of 60.

Ans: (A) 25

6. Which of the following lists has only constants?

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

2, 9, 14 all have fixed values.

Ans: (C) 2, 9, 14

7. In x , the number multiplying x is

$$\text{As } 1 \times a = a, x = 1 \times x.$$

Ans: (A) 1

8. $15p + 7p =$

$$15p + 7p = (15 + 7)p = 22p$$

Ans: (B) $22p$

9. $24y - 17y =$

$$24y - 17y = (24 - 17)y = 7y$$

Ans: (A) $7y$

10. c^5 is read as

$c^5 = c \times c \times c \times c \times c$ is read as 'c power 5'.

Ans: (B) c power 5

11. The square of 28 is

$$28^2 = 28 \times 28$$

$$28 \times 8 = 224$$

$$28 \times 2 = 56, \text{ written one place to the left: } 560$$

$$224 + 560 = 784$$

Ans: (A) 784

12. $74 \times 74 =$

$$74^2 = 74 \times 74$$

$$74 \times 4 = 296$$

$$74 \times 7 = 518, \text{ written one place to the left: } 5180$$

$$296 + 5180 = 5476$$

Ans: (B) 5476

13. 11^6 is read as

$11^6 = 11 \times 11 \times 11 \times 11 \times 11 \times 11$ is read as '11 power 6'.

Ans: (D) 11 power 6

14. 3^{11} means

3^{11} is 3 multiplied by itself 11 times.

Ans: (C) $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3$

15. The exponential form of 27000 with base 30 is

Divide by 30 again and again:

$$27000 \div 30 = 900, 900 \div 30 = 30$$

$$27000 = 30 \times 30 \times 30 = 30^3$$

Ans: (C) 30^3

16. Which of the following numbers between 4000 and 5000 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 4936 is 6, so 4936 is divisible by 2.

The other three are not divisible.

Ans: (B) 4936

17. Which of the following numbers between 40000 and 50000 is divisible by 3?

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

$$\text{Sum of the digits of 42474: } 4 + 2 + 4 + 7 + 4 = 21$$

21 is divisible by 3 ($21 = 3 \times 7$), so 42474 is divisible by 3.

Each of the others fails the test.

Ans: (D) 42474

18. The smallest number greater than 5310 that is divisible by 3 is

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

5311: digit sum 10, not divisible by 3

5312: digit sum 11, not divisible by 3

5313: digit sum 12, divisible by 3

Ans: (A) 5313

19. Which of the following numbers between 10000 and 20000 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 19034 together: 34; $34 = 4 \times 8 + 2$, so 19034 is not divisible by 4.

Each of the others passes the test.

Ans: (D) 19034

20. Which of the following numbers between 40000 and 50000 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 42620 is 0, so 42620 is divisible by 5.

The other three are not divisible.

Ans: (C) 42620

21. Which of the following numbers between 80000 and 90000 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 85042 is 2, so 85042 is divisible by 2.

Sum of the digits of 85042: $8 + 5 + 0 + 4 + 2 = 19$

19 is not divisible by 3 ($19 = 3 \times 6 + 1$), so 85042 is not divisible by 3.

$\therefore$ 85042 is not divisible by 6.

Each of the others passes the test.

Ans: (B) 85042

22. Which of the following numbers between 90000 and 100000 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 94800 is 0, so 94800 is divisible by 2.

Sum of the digits of 94800: $9 + 4 + 8 + 0 + 0 = 21$

21 is divisible by 3 ($21 = 3 \times 7$), so 94800 is divisible by 3.

$\therefore$ 94800 is divisible by 6.

Each of the others fails the test.

Ans: (D) 94800

23. Which of the following numbers between 900 and 1000 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).

959: $95 - 9(2) = 95 - 18 = 77$; $77 = 7 \times 11$, a multiple of 7, so 959 is divisible by 7.

Each of the others fails the test.

Ans: (C) 959

- 24.** To test 892 for divisibility by 7, twice the unit digit is subtracted from the remaining part. The result is
Remaining part = 89, unit digit = 2
 $89 - 2(2) = 89 - 4 = 85$
Ans: (D) 85
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- 25.** Among 2, 3, 4, 5 and 6, the number 99330 is divisible by
The digit at the unit place of 99330 is 0, so 99330 is divisible by 2.
Sum of the digits of 99330: $9 + 9 + 3 + 3 + 0 = 24$
24 is divisible by 3 ($24 = 3 \times 8$), so 99330 is divisible by 3.
Last two digits of 99330 together: 30; $30 = 4 \times 7 + 2$, so 99330 is not divisible by 4.
The digit at the unit place of 99330 is 0, so 99330 is divisible by 5.
Divisible by both 2 and 3 means divisible by 6.
So 99330 is divisible by 2, 3, 5 and 6.
Ans: (C) 2, 3, 5 and 6 only
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