Started on	Wednesday, 27 December 2023, 4:38 PM
State	Finished
Completed on	Wednesday, 27 December 2023, 5:03 PM
Time taken	24 mins 29 secs
Marks	10.00/25.00
Grade	**4.00** out of 10.00 (**40**%)

Question 1

Incorrect

Mark 0.00 out of 1.00

Find the highest power of 24 in 150!

Select one:

- 60
- 36 ✕
- 48
- 24

The correct answer is:
48

Question 2

Incorrect

Mark 0.00 out of 1.00

he number 2006! is written in base 22. How many zeroes are there at the end?

Select one:

- 200 ✕
- 450
- 199
- 500

The correct answer is:
199

Question 3

Incorrect

Mark 0.00 out of 1.00

A number when divided by 779 gives a remainder 47. By dividing the same number by 19, what would be the remainder?

Select one:

- 7
- 8 ✗
- 10
- 9

The correct answer is:
9

Question 4

Correct

Mark 1.00 out of 1.00

How many natural numbers 'n' are there, such that 'n!' ends with exactly 30 zeroes?

Select one:

- 2
- 3
- 1
- 0 ✓

The correct answer is:
0

Question 5

Incorrect

Mark 0.00 out of 1.00

Find the highest power of 72 in 100!

Select one:

- 26
- 20
- 22 ✗
- 24

The correct answer is:
24

Question 6

Incorrect

Mark 0.00 out of 1.00

A number when divided by 296 leaves 75 as remainder. When the same number is divided by 37, the remainder will be:

Select one:

- 3
- 4
- 2 ✗
- 1

The correct answer is:
1

Question 7

Incorrect

Mark 0.00 out of 1.00

Find the highest power of 30 in 50!.

Select one:

16

- 14
- 10 ✗
- 12

The correct answer is:
12

Question 8

Correct

Mark 1.00 out of 1.00

Find the digit in unit's place of the product 49237 × 3995 × 738 × 83 × 9.

Select one:

- 5
- 0 ✓
- 6
- 7

The correct answer is:
0

Question 9

Incorrect

Mark 0.00 out of 1.00

The difference between the squares of two consecutive odd integers is always divisible by?

Select one:

- 6
- 4 ✕
- 2
- 8

The correct answer is:
8

Question 10

Incorrect

Mark 0.00 out of 1.00

What is the largest power of 2 that can divide 269!?

Select one:

- 275
- 250
- 272 ✕
- 265

The correct answer is:
265

Question 11

Incorrect

Mark 0.00 out of 1.00

Find the unit's digits of $234!^{575}$.

Select one:

- 2 ✕
- 1
- 3
- 0

The correct answer is:
0

Question 12

Correct

Mark 1.00 out of 1.00

How many factors of $7^4 \times 3^2 \times 2^3$ are there?

Select one:

- 55
- 60 ✓
- 45
- 40

The correct answer is:
60

Question 13

Correct

Mark 1.00 out of 1.00

Find the last digit of 3^{40}.

Select one:

- 7
- 9
- 1 ✓
- 3

The correct answer is:
1

Question 14

Incorrect

Mark 0.00 out of 1.00

Find the units digit of the expression $25^{6251} + 36^{528} + 73^{54}$.

Select one:

- 6 ✗
- 4
- 5
- 0

The correct answer is:
0

Question 15

Correct

Mark 1.00 out of 1.00

Find the sum of all two digit numbers divisible by 5.

Select one:

- 945 ✓
- 439
- 568
- 874

The correct answer is:
945

Question 16

Correct

Mark 1.00 out of 1.00

Find the unit digits in 3 × 38 × 537 × 1256

Select one:

- 4
- 2
- 6
- 8 ✓

The correct answer is:
8

Question 17

Incorrect

Mark 0.00 out of 1.00

How many factors of 12 are there?

Select one:

- 2
- 5 ✗
- 4
- 6

The correct answer is:
6

Question 18

Incorrect

Mark 0.00 out of 1.00

What least number must be subtracted from 13601, so that the remainder is divisible by 87?

Select one:

- 31
- 33 ✗
- 29
- 23

The correct answer is:
29

Question 19

Incorrect

Mark 0.00 out of 1.00

If the product 4864*9 P 2 is divisible by 12, the value of p:

Select one:

- 1
- 4
- 2
- 3 ✗

The correct answer is:
1

Question 20

Correct

Mark 1.00 out of 1.00

If the number 517 × 324 is completely divisible by 3, then the smallest whole number in place of × will be:

Select one:

- 1
- 2 ✓
- 4
- 3

The correct answer is:
2

Question 21

Correct

Mark 1.00 out of 1.00

What smallest number should be added to 4456 so that the sum is completely divisible by 6?

Select one:

- 2 ✓
- 4
- 5
- 1

The correct answer is:
2

Question 22

Correct

Mark 1.00 out of 1.00

476 ** 0 is divisible by both 3 and 11. The non zero digits in the hundred's and ten's places are respectively:

Select one:

- 6 & 5
- 8 & 2
- 8 & 5 ✓
- 6 & 2

The correct answer is:
8 & 5

Question 23

Correct

Mark 1.00 out of 1.00

Find the units digits of 1! + 2! + 3! +----------+ 99!.

Select one:

- 3 ✓
- 4
- 2
- 0

The correct answer is:
3

Question 24

Incorrect

Mark 0.00 out of 1.00

How many of the following numbers are divisible by 132?
264, 396, 462, 792, 968, 2178, 5184, 6336

Select one:

- 6
- 5 ✗
- 4
- 7

The correct answer is:
4

Question 25

Incorrect

Mark 0.00 out of 1.00

What is the rightmost non-zero digit in 15!?

Select one:

- 6
- 8
- 5 ✗
- 7

The correct answer is:
8