

TEST

AMO Grade 2 Mock Test Paper 3

ANSWERS

SECTIONS

1. Sec A MCQs - 15 Questions
2. Sec B Integers - 10 Questions

Section 1 : Sec A MCQs - 15 Questions

1 8

2 5.40 pm

3 19

4 Monday

5 10

6 $+\div\times$

7 990

8 297

9 C

10 11

11 36

12 45

13 6.30 pm

14 15

15 36

Section 2 : Sec B Integers - 10 Questions

16 146

17 26

18 11

19 96

20 36

21 48

22 15

23 13

24 58

25 45

TEST

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SOLUTIONS

SECTIONS

1. Sec A MCQs - 15 Questions
2. Sec B Integers - 10 Questions

Section 1 : Sec A MCQs - 15 Questions

1

In $5654+6545+5465+4556$ notice that for each place value we have digits 4,5,5 and 6. Therefore, (for all place values) we have $4+5+5+6=20$ ones, 20 tens, 20 hundred and 20 thousand

$$5654+6545+5465+4556 = 20000+2000+200+20 = 22220$$

$$\text{Sum of digits} = 2+2+2+2+0=8$$

2

Total time spent = $10 + 45 + 15 + 10 = 80$ minutes = 1 hour and 20 minutes

He reached home at 7.00 pm so, he must have left at 5.40 pm.

3

3-digit numbers with digit sum 1 = 100 – 1 number

3-digit numbers with digit sum 2 = 101, 110, 200 – 3 numbers

3-digit numbers with digit sum 3 = 102, 111, 120, 201, 210, 300 – 6 numbers

3-digit numbers with digit sum 4 = 103, 130, 310, 301, 121, 112, 211, 202, 220 – 9 numbers

The number of 3-digit numbers with a digit sum less than 5 = $1+3+6+9 = 19$

4

The last day of May = the 31st day is a Friday

April has 30 days

$$30+30=60$$

$$60 \div 7 = 8 \text{ R } 4$$

8 weeks before Friday was still Friday and 4 days before Friday is Monday, so 1st April was Monday.

5

5 postmen deliver 200 letters in 2 days.

Thus, 1 postman delivers 40 letters in 2 days or 20 letters in 1 day.

600 letters in 3 days mean 200 letters in 1 day.

$200 \div 20 = 10$ postmen will be needed to deliver 600 letters in 3 days.

6

$$(45 + 54) \div 11 \times 2 = (99 \div 11) \times 2 = 9 \times 2 = 18$$

7

Any number which is divisible by 5 and 11 is divisible by 55. The greatest 3-digit number is 999

$$999 \div 55 = 18 \text{ R } 10$$

Thus, $999 - 10 = 989$ is the greatest 3-digit number divisible by 5 and 11

8

5 hundred 3 tens and 8 ones = 538

New number = 835

$$\text{Difference} = 835 - 538 = 297$$

Thus, 297 must be added to get the desired result.

9

Since B is standing first in line and A is in between B and D, the order starting from left to right should be B, A or D.

Given that E is not standing in the last place, C, the only person left, must be the one standing in the last place.

10

Possible solutions:

111111111, 111111112, 11111122, 1111222, 112222, 111115, 11125, 1225, 22222, 55, 10

11

Total points scored by 4 players = $100+100+88+76= 364$

$400-364= 36$ points were scored by the 5th player.

12

Note that in the given sequence every term is 15 more than the previous term. Therefore, the difference between the 15th and 18th terms will be $15 \times 3 = 45$.

13

1 hour = 60 minutes = $60 \times 60 = 3600$ seconds

$5400-3600=1800$ seconds = 30 minutes

So, the time after 5400 seconds or 1 hour and 30 minutes from 5 pm is 6.30 pm.

14

$A+5+0+9=A+14$ gives us a number with ones digit 6, thus $A=2$ and 1 get carried over. Now, $7+B+7+0+1=15+B$ gives a sum with the ones digit 2, thus $B=7$ with 2 carried over. $3+C+2+2=7+C$ gives us a sum with the ones digit 0, thus $C=3$ and 1 get carried over. Lastly, $1+D+1=D+2=8$ gives $D=6$.

Therefore, $A=2$, $B=7$, $C=3$, and $D=6$.

$A+B+D=2+7+6=15$

Answer: A

15

One-fourth of 48 = $48 \div 4 = 12$ pages were written

More pages to be completed = $48-12=36$

Section 2 : Sec B Integers - 10 Questions

16

The difference between the ages always remains the same. So, if 5 years ago, the sum of their ages was 76, 30 years later the sum will be

$$76 + (35 \times 2) = 76 + 70 = 146$$

17

Any three consecutive numbers can be considered in the given form, $1 \text{ unit} - 1$, 1 unit , and $1 \text{ unit} + 1$. The sum of these three numbers will be 3 units .

$$81 \div 3 = 27$$

Thus, the smallest number will be $27 - 1 = 26$.

18

There are 10 gaps among 11 lamps.

$$10 \text{ gaps} = 110 \text{ metres}$$

$$1 \text{ gap} = 11 \text{ metres}$$

19

-

If two squares are joined to form a new rectangle, the length = $16 + 16 = 32 \text{ cm}$ and the breadth = 16 cm .

$$\text{Perimeter} = 2 \times (32 + 16) = 2 \times 48 = 96 \text{ cm}$$

- -

20

$30 \div 5 = 6$ groups of red balls are exchanged with green balls

Every group that is exchanged has one extra ball ($6 - 5 = 1$). Thus for 6 groups that are exchanged, we will have 6 extra balls in the basket.

21

Since apples were bought at \$60 per dozen (12 apples) and $60 \div 12 = 5$, the cost of each apple is \$5.

Apples were sold for \$6.

So, gain per apple is $\$6 - \$5 = \$1$.

$$\text{Number of apples sold} = 4 \times 12 = 48$$

$$\text{So, his gain} = 48 \times \$1 = \$48$$

22

4 at the ones place:

34,44,54,64,74 – 5 times

4 at the tens place:

40,41, 42, 43, ..., 49 – 10 times

Thus, digit 4 appears $5+10=15$ times from numbers 31 to 80.

23

Possible numbers: 1 to 6

A sum of 13 is possible in any of the following ways:

(6,6,1) product =36

(6,5,2) product = 60

(6,4,3) product = 72

(5,5,3) product =75

(5,4,4) product =80

The highest product is 80 when he got 5, 4, 4 and the sum is $5+4+4=13$.

24

After Luna gives 18 bows, she will have $56-18=38$.

So, her friend will have $38 \times 2 = 76$ bows after she got 18 bows from Luna.

So, her friend had $76-18=58$ bows.

25

9 lemon = 3 peaches; so, 3 lemon = 1 peach

6 Peaches =2 Mangoes: so, 3 Peaches = 1 Mango

1 Mango = $3 \times 3 = 9$ Lemons

5 Mangoes = $9 \times 5 = 45$ Lemons