Practice Set 1

1. Express the fraction 26/17 as a number up to 3 decimal points **[AMCAT-2018]**
(a) 1.429   (b) 1.535
(c) 1.321   (d) 1.529

2. What is the relationship between the fractions 14/15 and 37/40? **[AMCAT-2019]**
(a) 14/15 = 37/40 (b) 14/15 > 37/40
(c) 14/15 < 37/40 (d) Cannot be determined

3. c=a/b ; a-1=c What is the relation between a & b ?
(a) a = 1/b + 1   (b) a = 1/b – 1
(c) a = 1-b   (d) a = b/(b-1)

4. Find approx. value of
39.987/0.8102+1.987*18.02
(a) 72   (b) 56   (c) 86   (d) 44

5. Find the value of $16^{1/4}$ X $125^{1/3}$ X $27^{-1/3}$
(a) 5 1/3   (b) 4 1/3
(c) 2 3/4   (d) 3 1/3

6. Sara has 400 marbles. If she gives (1/5)th of her marbles to Sam and Sam gives (3/4)th of his marbles to David, then how many marbles does Sam have left? **[AMCAT-2018]**
(a) 80   (b) 20   (c) 60   (d) 200

7. A company rented a machine for Rs.700/- a month. Five years later the treasurer calculated that if the company had purchased the machine and paid Rs.100/- monthly maintenance charge, the company would have saved Rs.2000/-. What was the purchase price of the machine?**[AMCAT-2017]**
(a) Rs.24000   (b) Rs.34000
(c) Rs.36000   (d) Rs.40000

8. There are 3 societies a, b, c. a lent tractor to b and c as many as they had. After some time, b gave as many tractors to a and c as many as they have. After sometime c did the same thing. At the end of this transaction each one of them

had 24. Find the tractors each initially had.
(a) a had 35, b had 14, c had 21
(b) a had 39, b had 21, c had 12
(c) a had 14, b had 35, c had 45
(d) a had 13, b had 26, c had 39

9. 10^10 / (10^4) (10^2)
(a) 10^4   (b) 10^6
(c) 10^2   (d) None of these

10. Find the number which is nearest to 4207 and is exactly divisible by 23?
(a) 4786   (b) 4205
(c) 4209   (d) 4228

11. Which number should be added to 113257 so that it can be divisible by 9?
(a) 4   (b) 6
(c) 8   (d) 10

12. Which of the following numbers is divisible by 3x4?
(a) 946   (b) 947
(c) 948   (d) 949

13. If the number 357a25x is divisible by both 3 and 5, then the missing digits in the units place and the thousandth place respectively are:
(a) 0,6   (b) 5,6
(c) 5,4   (d) None of these

14. Find the least number which is divisible by all the numbers 1, 2, 3, 4, 5, …… up to12
(a) 28820   (b) 26620
(c) 27720   (d) 27620

15. Find the numbers lying between 1 and 1000 which are divisible by each of 6, 7 and 15
(a) 200,400,600,800   (b) 210,420,630,840
(c) 230,460,690,920   (d) 220,440,660,880

16. Three friends divided some bullets equally. After all of them shot 4 bullets the total number of remaining bullets is equal to that of has after

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division. Find the original number divided.
(a) 18   (b) 24   (c) 12   (d) 16

17. At 6'o clock ticks 6 times. The time difference between first and last ticks was 30sec. What is the time difference between first and last ticks at 12'o clock?
(a) 54 sec   (b) 60 sec
(c) 66 sec   (d) 360 sec

18. The least possible number of 3 digits when successively divided by 2,5,4,3 gives respective remainders of 1,1,3,1 is
a)372   (b) 275   (c) 273   (d) 193

19. Three wheels make 36, 24, 60 rev/min. Each has a black mark on it. It is aligned at the start of the qn. When does it align again for the first time?
(a) 14 sec   (b) 6 min
(c) 360 min   (d) 5 sec

20. A number when divided successively by 6, 7, 8, it leaves the respective remainders of 3, 5 and 4, what will be the last remainder when such a least possible number is divided successively by 8, 7, 6?
(a) 2   (b) 3   (c) 4   (d) 5

21. What is the largest integer that divides all three numbers 23400, 272304, 205248 without leaving a remainder?**(TCS- 2018)**
(a) 48   (b) 24   (c) 96   (d) 72

22. There are 65 decorative, flowering and fruit trees and small plants in a garden. There are twice as many decorative plants and four times as many flowering plants as fruit trees. There is only one decorative tree and only two fruit plants. There are 21 trees of which 13 are flowering trees. How many decorative plants and trees are there? **(Capgemini- 2017)**
(a) 11   (b) 12   (c) 15   (d) 17

23. What least number must be subtracted from 1936 so that the remainder when divided by 9, 10 and 15 will leave in each case the same reminder 7?
(a) 32   (b) 53   (c) 46   (d) 39

24. The greatest number which on dividing 1657 and 2037 leaves remainders 6 and 5 respectively, is
(a) 123 (b) 127 (c) 235 (d) 305

25. If the sum of two numbers is 55 and the H.C.F. and L.C.M. of these numbers are 5 and 120 respectively, then the sum of the reciprocals of the numbers is equal to:
(a) 11/120   (b) 601/55
(c) 55/601   (d) 120/11

26. The numbers 2272 and 875 are divided by a three digit number giving same remainders. The sum of the digits of this three digit number is,
(a) 12   (b) 13   (c) 10   (d) 11

27. Find the total number of factors for 10800
(a) 40   (b) 50   (c) 60   (d) 70

28. Find the sum of factors of 270.
(a) 1440   (b) 180   (c) 720 (d) 240

29. Find the number of ways of expressing 180 as a product of two factors.
(a)6   (b) 7   (c) 8   (d) 9

30. Find the number of zeros in 133!
(a) 32   (b) 31   (c) 30   (d) 34

31. Number of zeros at the end of the following expression:
$(5!)^{5!} + (10!)^{10!} + (50!)^{50!} + (100!)^{100!}$
(a) 120   (b) 1
(c) 100   (d) Can't be determined

32. Find the highest power of 12 in 100!
(a) 48   (b) 49   (c) 50   (d) 51

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33. Find the unit digit of $1^1 + 2^2 + 3^3 +$
.....$+10^{10}$?**(TCS- 2018)**
(a) 6   (b) 7   (c) 8   (d) 9

34. What is the unit digit in 27^{20}?
(a) 1   (b) 5   (c) 12   (d) 20

35. Find the last digit of $32^{32\wedge32}$
(a) 4   (b) 5   (c) 6   (d) 7

36. The last digit of the following expression is:
$(1!)^1 + (2!)^2 + (3!)^3 + ...+ (10!)^{10}$.
(a) 6   (b) 7   (c) 8   (d) 9

37. Find the reminder when $1! + 2! + 3! + ...$
. .. 99! + 100! is divided by the product of first 7
natural numbers
(a) 0   (b) 1   (c) 873 (d) Can't be determined

38. What is the remainder when $444^{444\wedge444}$ is
divided by 7 ?
(a) 1   (b) 2   (c) 3   (d) None of these

39. Find the 37th and 89th terms of the AP -1.5,
0, 1.5 ...
(a) 52.25, 130.5   (b) 52.5, 130.25
(c) 52.5, 130.5   (d) 52.15, 130.5

40. Find the 56th and 78th term of the GP
11,55,275, ...
(a) 11/5 55 , 11*577   (b) 11*5 55 , 11/577
(c) 11/5 55 , 11/577   (d) 11*5 55 , 11*577

41. Find the T7 and T15 term of the HP 1/15,
2/27, 1/12, ...
(a) 6,-6   (b) 1/6, -1/6
(c) 1/6, -6   (d) 6, -1/6

42. Five times the 5th term of an AP is equal to
six times the 6th term of the AP. What is the
value of the 11th term?
(a) 5 (b) Can't be determined   (c) 0   (d) None

43. Find the common ratio of three numbers in
G.P whose product is 216 and the sum of the

products taken in pairs is 114
(a) 2 or ½   (b) 2/3 or 3/2
(c) 3 /4 or 4/3   (d) 4 or ¼

44. Find the sum to n terms of the series
2+22+222+.......
(a){20*(10n-1)-n }/ 27
(b)(2/9)* { [10(10n-1)/9] –n}
(c) (1/9)* { [20*(10n-1)/9]–n}
(d) (4/9)*{ [10*(10n-1)/9] – n}

45. The sum of the infinite terms in a GP is 9/4.
The sum of the squares of then terms of the
series is 81/80. Find the second term of the
series.
(a)1/2   (b)2/3   (c)1/4   (d)4/3

46. There are n arithmetic means between 5
and 50 such that the sum of these arithmetic
means is 220, find n
(a) 10   (b) 9   (c) 8   (d)7

47. A ball is dropped from a height of 240 m. It
rebounds to 5/8 th of the height from which it
falls, If it continues to fall and rebound this way,
how much distance does the ball cover before
coming to rest?
(a) 640 m   (b) 1040 m
(c) 840 m   (d) 1280 m

48. How many terms of the GP 2,6,18, ... are
needed to give sum of 6560?
(a) 4   (b)6   (c)7   (d)8

49. From a sequence of consecutive numbers,
beginning with 1, one of the numbers is
deleted. The sum of the remaining numbers is
280. The number being deleted is **(CTS- 2018)**
(a) 8   (b) 10   (c) 20   (d) 25

50. 126 pencils are to be given to 'n' number of
students, such that 1≤ n ≤ 126. Each student
should get equal number of pencils. How many

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values can 'n' take? **(Infosys- 2018)**

(a) 12 (b) 3   (c) 4   (d) 6