ADVANCED MATHS TEST-I

Code : 1151

PRELIMS

Max. Marks : 75 **Duration : 75 Mins.**

General Instructions :

1. Please find the Answer Sheets (OMR) with in the envelop given to you.
2. Mention your Test Code, Student ID, Name, Class, Section and School Name on the OMR Sheet as per Question Paper and Hall Ticket.
3. This question paper contains 75 Questions, duration is 75 minutes.
4. Do rough work in the empty sheet provided along with this question paper.
5. Answer questions in OMR sheet only.
6. Don't write or tick anything on the question paper.
7. Use only Black or Blue Ball Point Pen or Dark Perncil to answer the question in OMR sheet.
8. Indicate the correct answer by darkening one of the 4 or 5 responses provided.
9. Submit only OMR sheet to the invigilator

1. Thirteen lakh, seven thousand and five is

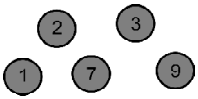
a) 1307005

b) 1300705

c) 1370050

d) 1300075

2. The greatest number formed by these blown digits is



a) 21379 b) 79132

c) 97321 d) 91237

3. Which of the following is the smallest Number?

a) 25,17,01,294 b) 15,27,01,294

c) 25,17,40,294 d) 15,27,27,274

4. If 50,000 is subtracted from 3,00,000 it will be 50,000 more than

a) 20,000 b) 2,00,000

c) 20,00,000 d) 2000

5. Compare 1,00,002 ☐ 10,000,02

a) > b) <

c) = d) None of these

6. The smallest 7-digit number is:

a) 10,00,000

b) 1 + greatest 6 digit number

c) either A or B

d) none of these

7. Numeral for thirteen lakhs thirteen thousand three hundread and thirteen

a) 1,31,31,313 b) 13,13,013

c) 13,01,313 d) 13,13,313

8. First 8 multiple of 11 is

a) 10,20,30,40,50,60,70,80

b) 12,24,36,48,60,72,84,96

c) 9,18,27,36,45,54,63,72

d) 11,22,33,44,55,66,77,88

9. 5796 is divisible by

a) 2 and 3 b) 5

c) 5 and 9 d) 7 and 5

10. What is the relation between H.C.F and L.C.M of two numbers ?

a) Product of two numbers = H.C.F × L.C.M

b) Division of two numbers = H.C.F × L.C.M

c) Sum of two numbers = H.C.F + L.C.M

d) Difference of two number = H.C.F – L.C.M.

11. Common multiples of 2 and 3 are

a) 6 and 4 b) 6 and 12

c) 6 and 3 d) 2 and 12

12. Which is prime factorization of 315 ?

Hint : $3^3 \equiv 3\times3\times3, 3^4 = 3\times3$

a) $3^3.5$ b) $3^3.7$

c) $3^2.5.7$ c) 5.7

13. The multiples of 3 that are between 15 and 25 are

a) {18,21,24} b) {3,15,9}

c) {6,9,18} d) {15,18,9}

14. Which is the only prime number that is not odd ?

a) 4 b) 2 c) 6 d) 8

15. The HCF and LCM of two numbers are 3 and 180 respectively. If one number is 12, then the other number is,

a) 40 b) 45 c) 50 d) 55

16. Which of the following numbers are divisible by 5 but not by 10 ?

a) 8,605 b) 54,805

c) 2,73,915 d) 6,83,090

17. A, B and C starts at the same time in the same direction to run around a circular stadium. A completes a round in 252 seconds, B in 308 seconds and C in 198 seconds, all starting at the same point. After what time will they meet again at the starting point ?

a) 46 min 12 seconds

b) 56 min 12 seconds

c) 67 min 12 seconds

d) 86 min 12 seconds

18. Find the largest number which exactly divides 280 and 1,245 leaving remainders 4 and 3 respectively.

a) 148 b) 138

c) 158 d) 168

19. 53.194 + 436.087 + 501.190 is

a) 99.0471 b) 990.471

c) 9904.71 d) 99047.1

20. 5/9 = A/18, then A is equal to

a) 3 b) 10

c) 7 d) 9

21. The fraction representing the un-shaded portion of the given figure is

a) 1/3 b) 2/3

c) 3/2 d) $\frac{3}{1}$

22. The difference of $14\frac{1}{2}$ *and* $9\frac{3}{4}$ **is**

a) $4\frac{3}{4}$ b) $2\frac{3}{4}$

c) $5\frac{3}{4}$ d) $1\frac{3}{4}$

23. $\frac{8}{9}$ **of 72 is equal to**

a) 46 b) 56

d) 64 d) 75

24. The reciprocal of '0' is

a) 1 b) $\frac{1}{0}$

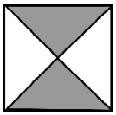
c) '0' does not have a reciprocal d) $\frac{1}{0.1}$

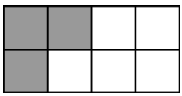
25. Shelly is 1/4 Dolly's age. Shelly is 2yrs. Old, Dolly's age is

a) 2 years b) 4 years

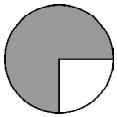
c) 8 years d) 6 years

26. Which model is shaded to show a fraction equivalent to 3/6 ?

a) 

b) 

d) 

d) 

27. The closest estimated value of 3.43 × 49 is____.

a) 3 × 50 b) 4 × 45

c) 3 × 45 d) 4 × 50

28. 53.194 + 436.087 + 501.190 is

a) 99.0471 b) 990.471

c) 9904.71 d) 99047.1

29. Which of the following is the same as 25/1000?

a) 0.25 b) 0.025

c) 2.5 d) 0.52

30. If $\frac{3}{4}$ is divided by $\frac{6}{8}$, the quotient will be

a) 1 b) 2 c) 3 d) 4

31. 55.899 is ..... when rounded off to 2 decimal places.

a) 55.00 b) 55.80 c) 55.90 d) 56

32. Suppose you were born on 29th february. Then your birthday comes

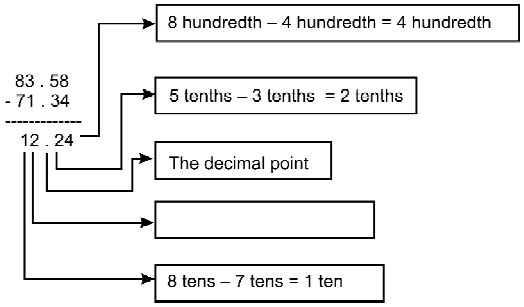
a) Every year

b) Twice in a year

c) After every 4 year

d) After every two year

33. Given a step by step procedure of subtractiion of two decimal numbers through a chart. Complete it by choosing the correct option.



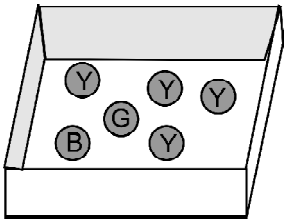
a) 3 hundredth - 1 hundredth = 2 hundredth

b) 3 tenths - 1 tenths = 2 tenths

c) 3 ones – 1 one = 2 ones

d) can not find

34. Look at the box of balls. B denotes Blue ball. Y denotes yellow Ball. and G denotes Green ball



What is the fraction of the blue ball to other balls in the box?

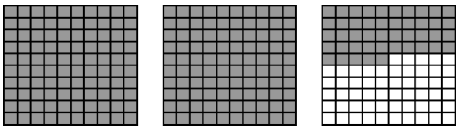
a) 1/6

b) 2/5

c) 2/3

d) 2/7

35. The given model is shaded to represent $2\frac{45}{100}$



What decimal does the model represent ?

a) 245.0 b) 0.245

c) 2.45 d) 24.5

36. Expanded form of 78.059 is:

a) $78+\frac{5}{10}+\frac{9}{100}$

b) $70+8+0+\frac{5}{100}+\frac{9}{1000}$

c) $70+8+\frac{5}{10}+\frac{9}{100}$

d) none of these

37. If $2805\div 2.55=1100$, then $280.5\div 25.5=$ _____

a) 1.1 b) 1.01 c) 0.11 d) 11

38. The smallest possible decimal fraction upto three decimal places is:

a) 0.101 b) 0.111 c) 0.001 d) 0.011

39. Which of the following is equal to 104 × 50 ?

a) (100 × 5) + (4× 5) b) (100×5) +(4×50)

c) (100× 50) + (40×50) d) (100× 50) + (4×50)

40. Mr.Rohan solved the division problem shown below.

$252 \div 7 = 36$

Which of the following could Mr. Rohan use to check his answer ?

a) 7 × 42 b) 36 × 252

c) 36 × 7 d) 252 × 7

41. Ram wants to show 15 pictures he took. He wants to put an equl number of pictures on 3 posters. Which number sentence shows how many pictures Ram should put on each poster?

a) $15 \div 3 = 5$ b) 15 × 3 = 45

c) 15 + 3 =18 d) 15 – 3 =12

42. Choose the correct option to complete the given sentence

Dividend = ...× quotient + ...

a) Remainder, Divisor

b) Product, Multiplier

c) divisor, Remainder

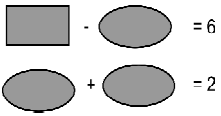
d) Multiplier, Product.

43. If 13 more people went to a music stall, then 217 people would have visited in total. So, number of people visited the music stall were.

a) 230 b) 200

c) 204 d) 214

44. If both equations shown below are true, then which of the following equations from the four options must also be true ?



a) 

b) 

c) 

d) 

45. Meena was reciting the 26 letters of the alphabet in grops of 3 : " ABC, DEF, GHI, ...". Before she could finish, her friend Mohan said, "There will be 2 letters left over." Which of the following suggests that Mohan is correct ?

a) 13 multiplied by 2 equals 26.

b) 6 divided by 3 equals 2.

c) 26 divided by 3 leaves a remainder of 2.

d) 26 divided by 4 leaves a remainder of 2.

46. On a chess board percentage of black coloured squares is :

a) 50% b) 60%

c) 15% d) 75%

47. A student has to reach his school in 15 minutes. If the school is 800 metres away, at what speed should he walk?

a) $\frac{800}{15} m/s$ b) $\frac{1}{15} m/s$

c) $\frac{8}{9} m/s$ d) None of these

48. In what time will Rs. 72 become Rs. 81 at $6\frac{1}{4}\%$ per annum simple interest ?

a) $1\frac{1}{2}$ years

b) 2 years

c) $2\frac{1}{2}$ years

d) None of these

49. Finishing time – Elapsed time = ?

a) Starting time

b) Ending time

c) Elapsed time

d) Finishing time

50. Normal human body temperature is

a) 98.6^0 F

b) 96.8^0F

c) 94.6^0F

d) 96.4^0F

51. Which is the correct formula to convert the temperature into fahrenheit.

a) $^\circ F = \frac{5}{9} \times^0 C + 32$

b) $^\circ F = \frac{9}{5} + 32 \times C$

c) $^\circ F = \frac{9}{5} \times^0 C + 32$

d) $^\circ F = \frac{5}{9} + 32 \times^0 C$

52. Which clock shows a time between 2 : 15 P.M. and 3 : 00 P.M. ?

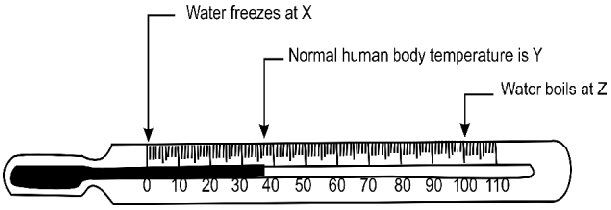
a) 

b) 

c) 

d) 

53. Study the figure and identify the lables X, Yand Z from the given options.



a) X = 37^0C, Y = 0^0C, Z = 100^0C

b) X = 37^0C, Y= 100^0C, Z = 0^0C

c) X = 100^0C, Y = 0^0C, Z = 37^0C

d) X = 0^0C, Y = 37^0C, Z= 100^0C

54. Saturday was a holiday for Republic Day. 14th of the next month is again a holiday for Shivratri. What day was it on the 14th ?

a) Monday b) Tuesday c) Thursday d) Friday

55. The train for Lucknow leaves every two and half hours from New Delhi Railway Station. An announcement was made at the station that the train for Lucknow had left 40 minutes ago and the next train will leave at 18.00 hrs. At what time was the announcement made ?

a) 15.30 hrs b) 17.10 hrs

c) 16.00 hrs d) None of these

56. Clinical thermometers are marked in ___scale.

a) Celsius b) Fahrenheit

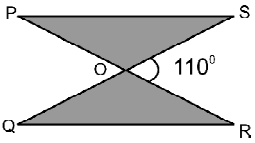
c) Both A and B d) None of these

57. A = 5 : 20 the angle formed between the two hands of a clock is:

a) obtuse b) right

c) acute d) none of these

58. The measure of $\angle POQ$ in the following figure is:



a) 90^0 b) 70^0 c) 20^0 d) 110^0

59. The complementary angle of 30^0 is :

a) 60^0 b) 90^0 c) 150^0 d) none of these

60. A set of circles with a common centre and different radii are called as:

a) concentric circles b) designs

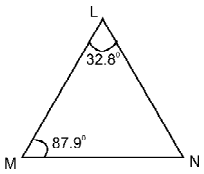
c) patterns d) none of these

61. A triangleis formed by joining three ____ points.

a) collinear b) non-collinear

c) equal d) none of these

62. Measure of $\angle N$ in $\triangle LMN$ is :



a) 198.7^0 b) 87.9^0 c) 59.3^0 d) 8.97^0

63. The angles in a right angled isosceles triangle are :

a) $90^0, 30^0, 60^0$ b) $90^0, 20^0, 70^0$

c) $90^0, 40^0, 50^0$ d) $90^0, 45^0, 45^0$,

64. Each angle of a square has the measure of ____ degrees.

a) 60^0 b) 90^0 c) 100^0 d) 360^0

65. Perimeter of a square is the sum of the lengths of all the ___sides.

a) 3 b) 2 c) 5 d) 4

66. Area of a square whose side measures 13 m is :

a) 9 m b) 9 sq m

c) 169 sq m d) 169 m

67. The length of a rectangle is $\frac{6}{5}th$ of its breadth. If its perimeter is 132 m. its area will be ____.

a) 1,080 m^2 b) 640 m^2

c) 1,620 m^2 d) 2,160 m^2

68. When the perimeter and area of a square are numerically equal, then the numerical value of its side is :

a) 1 b) 2

c) 4 d) 8

69. Edge of a cube whose volume is $\frac{1}{125}$ cu m is :

a) $\frac{1}{15}m$ b) $\frac{1}{5}m$ c) $\frac{1}{25}m$ d) 125 m

70. Volume of a suitcase with clothes init is ___ the volume of empty suitcase. (Both suitcases are of same size)

a) more than b) less than

c) equal to d) none of these

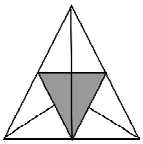
71. A cuboid measures 36 m × 24 m × 18 m . How many cubes of edge 6 m can be cut from the cuboid?

a) 72 b) 144 c) 36 d) 288

72. How many triangles are there in the given figure ?

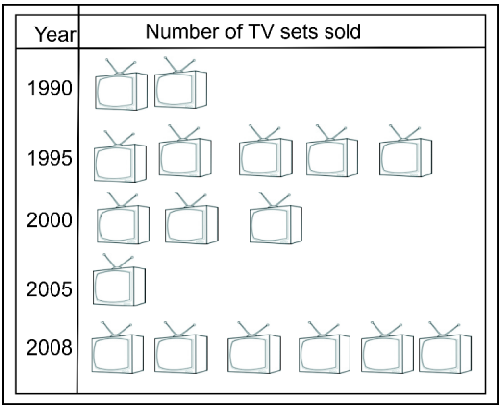
a) 10 b) 11

c) 13 d) 15



73. Each  **represents 500 TV sets.**

Number of TV sets sold in the year 1990

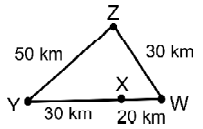


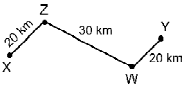
a) 1000 b) 2 c) 1 d) 2000

74. The pictography shows the distances of towns W, X and Y from town Z.

Team W	⊙ ⊙ ⊙
Team X	⊙ ⊙
Team Y	⊙ ⊙ ⊙ ⊙ ⊙

Which of the following road maps shows the correct positions of towns W, X, Y and Z ?

a)


b)


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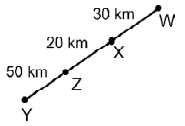

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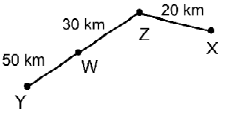
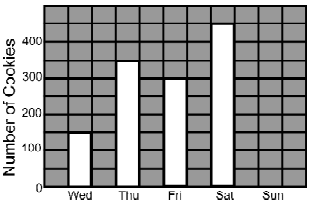


75. The incomplete bar graph shows the number of cookies sold by Raju in 5 days.



The total number of cookies sold was 2,000. How many cookies were sold on Sunday ?

a) 750 b) 850

c) 800 d) 950

KEY TO MODEL PAPER - I

1. a	2. c	3. b	4. b	5. b	6. c
7. d	8. d	9. a	10. a	11. b	12. c
13. a	14. b	15. b	16. d	17. a	18. b
19. b	20. b	21. b	22. a	23. d	24. c
25. c	26. a	27. a	28. b	29. b	30. a
31. c	32. c	33. c	34. a	35. c	36. b
37. d	38. c	39. d	40. c	41. a	42. c
43. c	44. a	45. c	46. a	47. c	48. b
49. a	50. a	51. c	52. d	53. d	54. c
55. d	56. b	57. c	58. d	59. a	60. a
61. b	62. c	63. d	64. b	65. d	66. c
67. a	68. c	69. b	70. c	71. c	72. d
73. a	74. b	75. a			