

11

The Competition in

Advanced Mathematics Skills

Advanced Maths Test I & II

MODEL PAPERS

Class : IV



Eduranet

Intellectual Olympiad Foundation

(Promoted by Eduranet Educational Society (Regd. 309/09))

Hyderabad | India

Eduranet Intellectual Olympiad Foundation

10-3-304/A/2,
Humayun Nagar,
Hyderabad-500 028.
Andhra Pradesh,
India.

Phone : 040 - 23530999

Eduranet is a registered trademark of Eduranet Educational Services (P) Ltd., in India.

© Copyrights - Eduranet Intellectual Olympiad Foundation
2010

First Published - 2012

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing, of Eduranet Intellectual Olympiad Foundation.

ISBN - 81- 89528- 03-3

SYLLABUS

1. Give and Take
2. Multiplication and Division
3. Measurement
4. Fractions
5. Multiples and Factors
6. Unitary Method
7. Time
8. Money
9. Patterns and Shapes
10. Smart Charts
11. Perimeter and Area
12. Geometry
13. Carts and Wheels

TABLE OF CONTENTS

- 1) **Advanced Maths Test - I 5 - 24**
- 2) **Advanced Maths Test - II 25 - 32**

ADVANCED MATHS TEST-I

Code : 1141

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 Percil 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. The Hindu - Arabic numeral of XXXIX is :

- | | |
|-------|-------|
| a) 39 | b) 41 |
| c) 29 | d) 50 |

2. The Roman numeral for 100 is :

- | | |
|-------|--------|
| a) XX | b) XXX |
| c) LL | d) C |

-
- 7. The predecessor of the largest 5-digit number is:**
- a) 10,000
 - b) 99,999
 - c) 99,998
 - d) 1,00,001
- 8. The difference between the place value and the face value of the digit 5 in 49526 is :**
- a) 500
 - b) 505
 - c) 5
 - d) 495
- 9. 1 million = ____ thousands.**
- a) 1
 - b) 10
 - c) 100
 - d) 1000
- 10. 1 million - 900 tens = ____**
- a) 1009000
 - b) 991000
 - c) 91000
 - d) 919000
- 11. The difference between 7 times 8 and 9 times 10 is**
- a) 43
 - b) 34
 - c) 56
 - d) 144

12. When zero is not one of the addends the sum is ___ each one of the addend.

- a) equal to
- b) greater than
- c) lesser than
- d) zero

13. $7000+7+17=$ _____

- a) 7717
- b) 7177
- c) 7024
- d) 7204

14. Which number is 1 less than 10000 ?

- a) 0
- b) 1
- c) 10000
- d) 9999

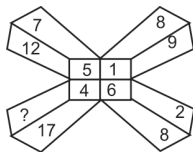
15. If a number is subtracted from itself the difference is:

- a) 1
- b) number itself
- c) zero
- d) none of these

16. Neha is arranging her father's books in a new bookshelf which has 3 shelves. After putting 12 books in each shelf, she finds that 7 books are still left outside. How many books are there in total ?

- a) 43
- b) 36
- c) 29
- d) 42

17. Find the missing term in the following



- a) 11
- b) 12
- c) 13
- d) 14

18. $6 \square 3 = 2$

- a) +
- b) -
- c) ×
- d) ÷

19. $81 \div 3 \times 6 =$

- a) 152
- b) 172
- c) 162
- d) 192

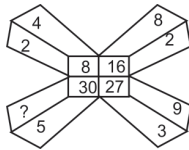
20. $3 + 3 + 3 + 3 =$

- a) 3×4
- b) 3×2
- c) 3×3
- d) 3×6

21. Twice a certain number is 42. Six times that number will be:

- a) 6×42
- b) $6 + 42$
- c) 3×42
- d) 12×42

22. Find the missing term in the following?



- a) 5
- b) 6
- c) 25
- d) 12

23. Observe the following multiplications and then find the product of 707×707 ?

$404 \times 404 = 163216$

$505 \times 505 = 255025$

$606 \times 606 = 367236$

- a) 499864
- b) 494949
- c) 499849
- d) 499649

24. Estimate the product $15 \times 31 \times 78$ by rounding each number to the nearest ten ?

- a) 24,000
- b) 48,000
- c) 42,000
- d) 21,000

25. $0 * 21 = 0$

This will be true if * is replaced by :

- a) + or –
- b) \times or +
- c) \times or \div
- d) \div or +

26. 10 students planted 530 trees. if each students planted equal number of trees, how many trees did each student plant ?

- a) $530 \div 10$
- b) 530×10
- c) $530 - 10$
- d) $530 + 10$

27. $7000+0+70+1=$ _____

- a) 7001
- b) 7701
- c) 7071
- d) 7017

28. The HCF is also known as:

- a) GCD
- b) LCM
- c) COF
- d) MOG

29. The LCM of 12 and 24 is :

- a) 25
- b) 26
- b) 29
- d) 24

30. The HCF of 2 co - prime number is

- a) 2
- b) 1
- c) 4
- d) 10

31. $126 \div 2 = 63$, this implies

- a) 2 is a factor of 126
- b) 63 is a multiple of 2
- c) 126 is a factor of 2
- d) 63 is the remainder

32. ____ is a pair of co-prime numbers .

- a) 11 and 22
- b) 16 and 14
- c) 91 and 92
- d) 30 and 40

33. Which of the following numbers is divisible by 3 ?

- a) 632
- b) 633
- c) 631
- d) 431

34. Ravi had 400 coins and wanted to put them into a box. If number of boxes is equal to number of coins in each box, then find how many boxes did he need? The answer required is a multiple of :

- a) 10
- b) 3
- c) 6
- d) 7

35. In a unit fraction, the numerator is:

- a) 0
- b) 1
- c) 2
- d) 3

36. $1\frac{2}{8} + 2\frac{3}{8}$ _____ $3\frac{11}{8}$

- a) <
- b) >
- c) =
- d) None of these

37. The lowest term equal to $\frac{36}{60}$ is:

- a) $\frac{3}{5}$
- b) $\frac{6}{15}$
- c) $\frac{6}{12}$
- d) $\frac{2}{10}$

38. The diagram shows a number line.



The value of P is ____

- a) $\frac{1}{5}$
- b) $\frac{1}{4}$
- c) $\frac{1}{3}$
- d) $\frac{1}{2}$

39. $\frac{8}{19} - \frac{5}{19} = \frac{3}{\square}$

- a) 19
b) 21
c) 20
d) 16

40. _____ make one whole.

- a) one half
b) Two halves
c) 3 halves
d) 5 halves

41. $13\frac{1}{8} + 12\frac{1}{8} = 25\frac{\square}{8}$

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

42. Which of the following set is from greatest to the least ?

- a) $\frac{12}{11} > \frac{9}{11} > \frac{13}{11} > \frac{14}{11}$
b) $\frac{14}{11} > \frac{9}{11} > \frac{13}{11} > \frac{12}{11}$
c) $\frac{13}{11} > \frac{12}{11} > \frac{9}{11} > \frac{14}{11}$
d) $\frac{14}{11} > \frac{13}{11} > \frac{12}{11} > \frac{9}{11}$

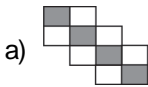
43. The decimal form of $\frac{15}{1000}$ is :

- a) 15
- b) 150
- c) 0.15
- d) 0.015

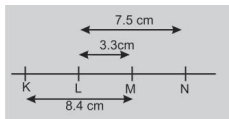
44. $\frac{5}{10} + \frac{3}{1000} = \underline{\hspace{2cm}}$

- a) 53
- b) 0.53
- c) 0.530
- d) 0.503

45. In which figure does the shaded part represents 0.3 ?



46. The diagram show a straight line KLMN.

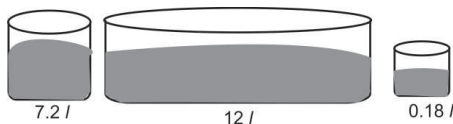


What is the distance between points K and N.

- a) 11.7 cm
 - b) 12. 6 cm
 - c) 15.9 cm
 - d) 19. 2 cm
47. Which decimal number is the same as $\frac{3}{4}$?

- a) 0.34
- b) 0.75
- c) 15.0
- d) 3.4

48. The diagram shows the volume of water in the three containers.



Find the total volume, in litres, of water in the containers.

- a) 8.58
- b) 19.2
- c) 19.38
- d) 21

49. Value : Rs. 10, Rs. 58, Rs.34, Rs. 5

- a) Rs.10 < Rs.58 < Rs.34 < Rs. 5
- b) Rs.10 < Rs.34 < Rs.58 < Rs .5
- c) Rs.58 < Rs.5 < Rs.0 34 < Rs .10
- d) Rs.5 < Rs.10 < Rs.34 < Rs 58

50. Value : 4200 p = Rs ____.

- a) 42
- b) 420
- c) 4.2
- d) 42000

51. The price of one chocolate = Rs. 6.19. If the price of a packet of chips is Rs. 3.11 more than the chocolate then the price of a packet of chips = ____.

- a) Rs. 9.30
- b) Rs. 9.32
- c) Rs. 9.38
- d) Rs. 9.49

52. $\frac{2}{3}$ rd of Rs. 30 = Rs ____.

- a) 20
- b) 30
- c) 40
- d) 50

53. If 1 \$ = Rs. 46 then 10\$ = Rs. _____.

- a) 400
- b) 460
- c) 420
- d) 480

54. Rs.5.98 _____ Rs.5.99

- a) <
- b) >
- c) =
- d) None of these

55. Abhey went to the playground in the evening. He played on the swings for 35 minutes and then went on see-saw for 45 min. He left the ground at 6:40 PM. What time was it when he arrived at the play ground ?

- a) 6:30 PM
- b) 5:20 PM
- c) 5.55 PM
- d) 6 :55 PM

56. If shcool begins at 8:30 it is said :

- a) Quarter past 8
- b) Half past 8
- c) fifteen minutes to 8
- d) Quarter past 9

-
- 57. Amanda has 10 cookies. If she eats two cookies each day, how many days will her cookies last ?**
- a) 5 days
 - b) 6 days
 - c) 1 day
 - d) 10 days
- 58. Rameshwar arrived at the doctor's clinic at 12:30 PM. He finally saw the doctor at 12:40 PM. How long did he wait?**
- a) 210 minutes
 - b) 220 minutes
 - c) 15 minutes
 - d) 10 minutes
- 59. Band rehearsal for sports Day started at quarter to three. It lasted for 1 hr 15 minutes. At what time did it end?**
- a) Quarter Past 4
 - b) 4 0' clock
 - c) half past 3
 - d) 3 0' clock
- 60. The students started their assignment at 8:30 and completed it after 35 minutes. They finished it at :**
- a) Half past 10
 - b) Quarter past 9
 - c) 5 minutes past 9
 - d) 10 min past 10

61. 2 quintals = _____ kg

- a) 100 kg
- b) 200 kg
- c) .02 kg
- d) 2 kg

62. 92 hm = _____ mt

- a) 920 mt
- b) 9200 mt
- c) 9.20 mt
- d) 92 mt

63. .0189 m = _____ cm

- a) 1.089 cm
- b) 1.0089 cm
- c) 1.89 cm
- d) .189 cm

64. 1 decameter _____ 30 m

- a) <
- b) >
- c) +
- d) None of these

70.  $\angle AOB$ is a _____ angle.

- a) Straight angle b) obtuse angle
c) Scalene triangle d) Acute angle

71. 1 cm = _____ mm.

- a) 10 mm b) 100 mm
c) 1 mm d) 0.1mm

72. The perimeter of square is 36 meters. It's total area is

- a) 72 m² b) 12 m²
c) 81 m² d) 80 m²

73. Area of a rectangle = 39 mm². If the width of the rectangle = 3 mm, then it's perimeter is

- a) 32 mm b) 16 mm
c) 10 mm d) 20 mm

74. Priyanka's scarf measures 30 inches by 10 inches. She wants to sew a border of ribbon around the scarf. How much ribbon will she need?

- a) 40 inches b) 80 inches
c) 192 inches d) 300 inches

75. One side of an equilateral triangle = 12 cm. Its perimeter is

- a) 40 cm b) 36 cm
c) 360 m d) 48 cm

KEY TO MODEL PAPER - I

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

ADVANCED MATHS TEST-II

Code : 1142

FINALS

Max. Marks : 40

Duration : 60 Mins.

General Instructions :

1. Please find the separate Answer Sheets along with the question paper.
2. Mention your Test Code, Student ID, Name, Class, Section, Contact no. and School Name on the Answer Sheet as per Question Paper and Hall Ticket.
3. This question paper contains IV sections, duration is 60 minutes.
4. Please read the instructions carefully before attempting the question.
5. Answer questions in Answer Sheet only.
6. Don't write or tick anything on the question paper.
7. Use only Black or Blue Ball Point Pen to answer the question in Answer Sheet.
8. Submit only answer sheet(s) to the invigilator.

SECTION - I

10 × 1 = 10

DIRECTIONS : (1-10) : Complete the following statements with an appropriate word/term to be written in the answer sheet.

1. 1 quintal equals _____ kgs.
2. The lowest form of $\frac{10}{12}$ is _____.
3. _____ numbers are divisible by 2 and _____ numbers are not.

-
4. $\frac{1}{2}$ a decade = _____ years
5. 4 years 9 months – 1 year = _____ years ____ months
6. The graph help us to understand the data and makes it _____.
7. $34.142 \text{ Lt} + 64.280 \text{ Lt} + 30 \text{ Lt} =$ _____
8. The perimeter of a square is 40ft, then the measure of each side is _____.
9. For every 2 bags of chips you buy you get sticker 1 free. For every 6 bags of chips you get 3 stickers .To get 5 stickers you must buy _____ bags of chips
10. The product of the two numbers is 36 and their HCF is 6 then the LCM is _____.

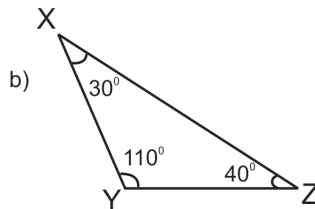
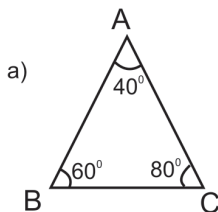
SECTION - II

$10 \times 1 = 10$

DIRECTIONS: (11 - 20) : Read the following statements and write true or false with reasons or solutions; in the answer sheet.

11. The sum of 349625, 12136 and 40219 is 709869.
12. 6428 is divisible by 4 and 2
13. If 1 bottle can hold 5 lt of water, then 10 such bottles can hold 500 ml of water.

14. $2\frac{3}{6}$ and $\frac{12}{18}$ both are proper fractions
15. If $\frac{1}{3}$ rd of students in a school are boys then the fraction of the number of girls would be $\frac{4}{3}$.
16. Each letter A to F stands for the given digits respectively: 1, 3, 4, 6, 8, 9 Then $(F \times B) = (C \times D) + B$.
17. If the cost of 7 m of cloth is Rs 294, then cost of 5 m of cloth is Rs.210.
18. A circle divided into 4 halves is known as semi circle .
19. The distance covered by a farmer around a field of 120 m length and 80 m width is 400 m.
20. The following triangle are belongs to acute angle triangles.

**SECTION - III** **$10 \times 1 = 10$**

DIRECTIONS: (21 - 30) : Each question contains statements given in two columns which have to be matched. Match the statements (21,22,...30) in column I with statements (a,b,...p) in column II.

Arrange the matched statements in order and write in the answer sheet.

Column I**Column II**

21) $5760 \text{ m} =$

a) $\frac{7}{8}$

22) What should be added to $\frac{16}{7}$
to get $\frac{24}{7}$?

b) 3

23) The HCF of 27 and 81 is

c) Right Angle

24) If a number is divisible by 9 and 5,
it is also divisible by

d) 5.76 Km

25) 3 days =

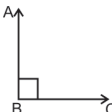
e) 6

26) 1 CHF = RS. 34.90 then 16 CHF = ____

f) $\frac{1}{2} \times b \times h$

27) Area of a triangle is

g) $\frac{8}{7}$

28)  $\angle ABC$ is ____

h) 45

29) The perimeter of square is 40m. It's
total Area

i) 72 hours

30) L.C.M of 4,18,12

j) 10 m

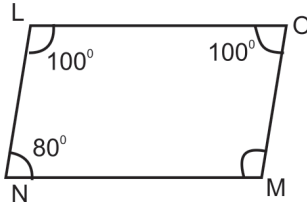
k) Rs. 558.40

- l) $b \times h$
- m) Straight angle
- n) 558.04
- o) 36
- p) 100 m^2 .

SECTION - IV **$10 \times 1 = 10$** **DIRECTIONS: (31 - 40) : Short Answer Questions:**

31. Neha read 38 pages of her storybook on Monday. She read 27 pages more on Tuesday than she had read on Monday. She found that there were still another 216 pages left.
- (i) How many pages did Neha read on Tuesday?
32. Going in alphabetic order. If the alphabets have their values $a = 1$, $b = 2$, $c = 3$, $d = 4$, $e = 5$, $f = 6$ then find the $\frac{f}{b} + \frac{b}{d} = ?$
33. What fraction of a year are 26 weeks?
34. Ravi went to a money changer to get his money converted into pounds. If he has Rs. 7800, how many pounds will he get if the value of 1 pound is equal to Rs 78?
35. Samuel swam 34 laps on Thursday, 40 laps on Friday, 46 laps on Saturday, 52 laps on Sunday and 58 laps on Monday. If this pattern continues, how many laps will he swim on Tuesday?
36. Madhavi eats one full bar of chocolate. Then she divides another one into 5 equal parts and eats 3 of those parts. The total number of chocolates that she has eaten:

37. Write the following number word form in International system
345,367,937
38. In a Quadrilateral $\angle L = 100$, $\angle N = 80$, $\angle O = 100$ then find $\angle M$



39. The temperature dropped 15 degree Celsius in the last 30 days.
If the rate of temperature drop remains the same, how many
degrees will the temperature drop in the next 10 days?
40. Solve : $\left(\frac{3}{5} + \frac{9}{25}\right) \times \left(\frac{3}{2} - \frac{1}{2}\right)$

SOLUTIONS TO MODEL PAPER - II**SECTION - I****Fill in the Blanks**

- 1) 100 2) $\frac{5}{6}$ 3) Even, Odd 4) 5
5) 3, 9 6) easier 7) 128.422 8) 10 ft
9) 10 10) 6

SECTION - II**True / False**

- 11) False 12) True 13) False 14) False
15) False 16) True 17) True 18) False
19) True 20) False

SECTION - III**Match the Following**

- 21) → d; 22) → g; 23) → b; 24) → h;
25) → i; 26) → k; 27) → f; 28) → c;
29) → p; 30) → o

SECTION - IV
Short Answer Questions

31) 65 pages on Tuesday

32) $\frac{7}{2}$

33) $\frac{1}{2}$

34) 100

35) 64 laps on Tuesday

36) $\frac{8}{5}$

37) 3 billion 45 million three hundred sixty seven thousand 9 hundred thirty seven

38) $\angle M = 80^\circ$

39) 5°

40) $\frac{24}{25}$