GLOBAL TALENT SEARCH EXAMINATION

MATHEMATICS

Class : IV

Max Marks : 80

Time : 9:00 to 10:30 a.m.

Instructions to Candidates :

01. This question paper has 40 objective questions. In addition to this question paper, you are also given an answer-sheet.

02. Read the instructions carefully for each section before attempting it.

03. For each correct answer **2 marks** will be awarded and there is no negative marking.

04. On the answer-sheet, fill up all the entries carefully in the space provided, **ONLY IN BLOCK CAPITAL LETTERS**.

05. Incomplete / incorrect / carelessly filled information may disqualify your candidature.

06. On the answer-sheet, use **PENCIL / BLUE or BLACK BALL PEN.**

07. No extra sheet will be provided for rough-work. Use the space available in the paper for your rough- work.

08. Use of calculator is not permitted.

09. No student is permitted to leave the examination hall before time is complete.

10. Use of unfair means shall invite cancellation of the test.

Roll No.

Centre No.

Male / Female _____

Name of the candidate : (In English only, as you would like it to be printed on the certificate).

_____

_____

_____

_____

Signature of the invigilator

Signature of the candidate

AMITY INSTITUTE FOR COMPETITIVE EXAMINATIONS

Each question has four alternatives marked (A), (B), (C) and (D), but only one of these alternatives is the correct answer.

1. A plant grows 0.4 millimetre everyday. How much will it grow in one year ?

(A) 16.40 centimetre

(B) 14.60 centimetre

(C) 15.60 centimetre

(D) 14.40 centimetre

2. Find the result of the following expression :

$(180 \div 4 + 5) - (180 \div 5 + 4)$

(A) 30   (B) 20

(C) 10   (D) 0

3. Find the unknown numbers x and y such that the sum of the numbers along each row, along each column and along each diagonal of the grid is 45

(A) 11, 20

(B) 20, 11

(C) 19, 12

(D) 12, 19

16		x
		y
18		14

4. Which one of the following numbers is not a perfect square?

(A) 192   (B) 169

(C) 144   (D) 121

5. If ♣ × 🌷 × ✡ = 3360 and ♣ × 🌷 = 240, then the value of ✡ is equal to

(A) 16   (B) 15

(C) 14   (D) 12

6. $3.5 + 5.25 + \dfrac{1}{2} + \dfrac{1}{4}$ is equal to

   (A) 9.5   (B) 10.00

   (C) 9.00   (D) 9.25

7. How many different numbers can be formed by using the digits 1, 2 and 3 such that no digit is repeated and all the numbers have all these three digits ?

   (A) 6   (B) 5

   (C) 4   (D) 3

8. What number is exactly in the middle of the numbers 367 and 479 ?

   (A) 424   (B) 423

   (C) 422   (D) 421

9. Shyam noted that his heart makes 7 beats in 5 seconds. How many beats will Shyam's heart make in 2 minutes ?

   (A) 164   (B) 166

   (C) 168   (D) 172

10. If $\dfrac{2}{3}$ of a number of flowers is 16, then $\dfrac{3}{4}$ of this number of flowers is
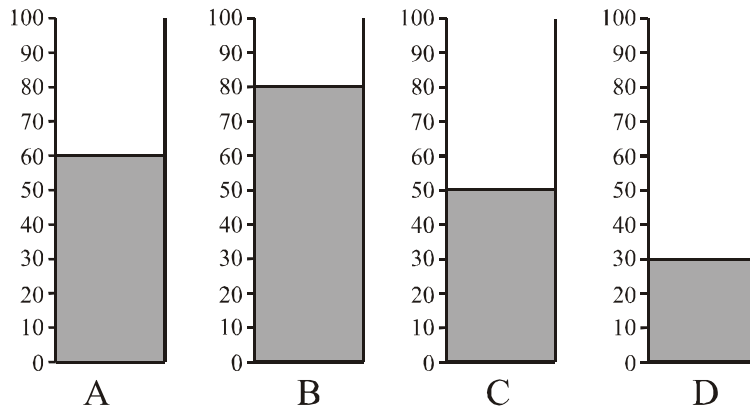
   (A)

   (B)

   (C)

   (D)

11. 43 ⓐ 16 ▢ 13 = 40.

In the above statement, which of the mathematical operations shown by ⓐ and ▢, respectively, will give the correct equation ?

   (A) +   +   (B) +   −

   (C) −   −   (D) −   +

12. Rashmi has equal number of ten-rupee notes and five-rupee notes. If total money with Rashmi is Rs. 435, then find the number of her ten-rupee notes.

   (A) 28   (B) 29

   (C) 30   (D) 31

13. Count the number of days from July 16, 2008 to November 22, 2008

   (A) 131 days   (B) 130 days

   (C) 129 days   (D) 128 days

14. A clock takes exactly 1 second to strike 3 O'clock and the strikings are uniformly spaced. To strike 9 O'clock, the same clock will take

   (A) 4.5 seconds   (B) 4.0 seconds

   (C) 3.5 seconds   (D) 3.0 seconds

15. If FRIEND can be written as GSJFOE, then MOTHER can be written as

   (A) LPUIFS   (B) NPUGFS

   (C) NPSIFQ   (D) NPUIFS

16. *ABC* is an equilateral triangle. On each side, squares are made. If perimeter of the triangle is 18 cm, then perimeter of the figure *ADECFGBHIA* will be

   (A) 66 cm

   (B) 60 cm

   (C) 54 cm

   (D) 48 cm

17. The volumes of liquid in the following four jars *A, B, C* and *D* are in mL (millilitre).

How much more liquid is required to fill completely all the four jars ?

(A) 210 mL   (B) 190 mL

(C) 180 mL   (D) 170 mL

18. When the square of 32 is subtracted from the square of 33, the result obtained is
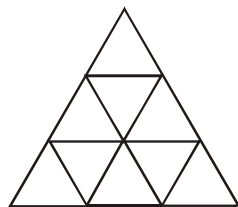
(A) 55   (B) 65
(C) 75   (D) 85

19. [9 – 8 { 7 – 6 (5 – 4) }]   is equal to

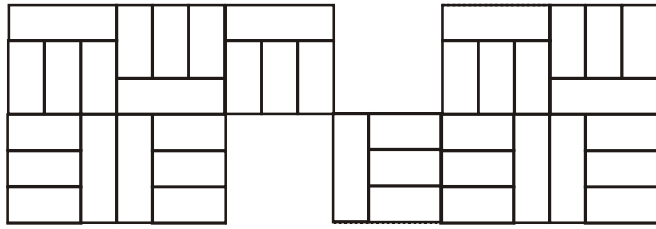(A) 5   (B) 3
(C) 2   (D) 1

20. In the following figure, the total number of possible triangles would be
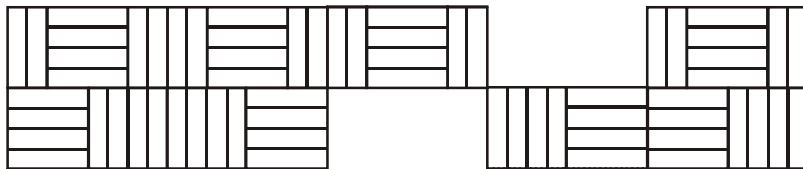
(A) 13

(B) 12

(C) 11

(D) 10

21.

Which one of the following is the missing part of the above regular pattern ?
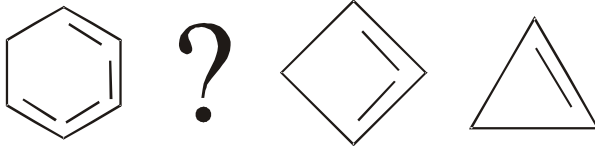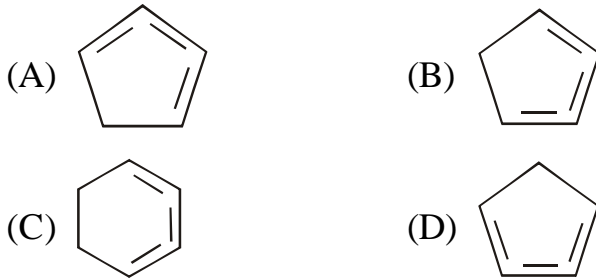
(A)

(B)

(C)

(D)

22.

Which one of the following is the missing part in the gaps of the above regular pattern ?

(A)

(B)

(C)

(D)

23. Study the pattern given below :

Which one of the following should replace the sign (?) such that the same pattern is maintained ?

(A)

(B)

(C)

(D)

24. Following four types of boats are available for joy-ride in a lake. Each boat has different ticket-price and also different trip-times.

Name of boat	Ticket-price	Trip-time
Fancy-boat	Rs. 30	40 minutes
Boat with oars	Rs. 27	45 minutes
Paddle-boat	Rs. 21	30 minutes
Motor-boat	Rs. 20	25 minutes

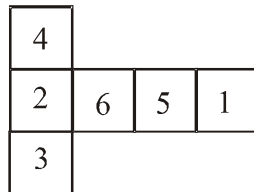Which boat charges more per minute ?

(A) Fancy-boat   (B) Boat with oars

(C) Paddle-boat   (D) Motor-boat

25. In the above question which boat charges least per minute?

(A) Fancy-boat   (B) Boat with oars

(C) Paddle-boat   (D) Motor-boat

26. A hollow cubical box is made of hard paper and each face of the box is numbered, from 1 to 6. Then the sides of the box are so cut that when it is spread, it looks as under :

4			
2	6	5	1
3			

When it is folded, it becomes a box again. The numbers on the opposite faces of the box are

(A) 1-2, 3-5, 4-6   (B) 1-6, 3-4, 2-5

(C) 1-3, 2-5, 4-6   (D) 1-5, 2-3, 4-6

Maximum and minimum temperatures of a city on some days are as under :

Date	Maximum Temperature	Minimum temperature
January, 5	16ºC	–2ºC
November, 20	28ºC	13ºC
September, 15	34ºC	23ºC
June, 20	39ºC	27ºC

Using the above Table, answer the following two questions.

27. Maximum difference between the maximum temperature of any day and the minimum temperature of any other day is

(A) 42ºC   (B) 41ºC

(C) 40ºC   (D) 37ºC

28. The maximum variation of temperature was recorded on

(A) November, 20   (B) September, 15

(C) June, 1   (D) January, 5

29. Salary of a person is Rs. 8,000 per month. For his punctuality, he is given an award of Rs. 3,600. In the salary, he is given a mobile and a cash of Rs. 5,950. What is the cost of the mobile ?

Rs. 5,950/- +

(A) 6,650   (B) 6,550

(C) 5,650   (D) 5,550

30. Numbers in the following square grid are written in a particular order. Find the missing number, which is given as one of the four alternatives given below.

(A) 36

(B) 32

(C) 44

(D) 40

24	16	8
32	20	12
66	..?..	22

In the following two questions, numbers in each series follow a particular but different pattern.

Find the number from the four alternatives given below each series of the question such that when it replaces the sign ...?..., the same pattern of the numbers is maintained.

31. 2, 4, 6, 10, 16, 26, ...?...

(A) 38   (B) 36

(C) 42   (D) 40

Rough Work

32. 5, 10, 20, 35, 55, ...?...

(A) 65   (B) 70

(C) 75   (D) 80

33. *ABCD* is a rectangular plane board. Rajan cut it into 4 parts of different shapes, but his younger sister Rajni put it in jumbled form and inverted some shapes also. These are shown as under.

Arrange the above shapes in order, starting from left side, to fit them completely in the rectangle *ABCD*.

(A) 3 4 2 1   (B) 3 2 1 4

(C) 1 2 4 3   (D) 1 4 2 3

34. You are given only the following 7 numbers and no number is to be repeated for addition in the problem :

1, 4, 8, 11, 18, 24, 33

How many numbers can be added to get a sum of 40 ?

(A) 3   (B) 4

(C) 5   (D) 6

35. On a particular day in winter, the sun rises at 7.15 AM and sets at 5.40 PM. On another day in summer the sun rises at 6.15 AM and sets at 6.50 PM. By how much time is the summer day longer than the winter-day ?
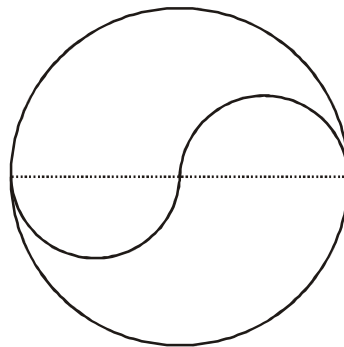
(A) 140 minutes   (B) 135 minutes

(C) 130 minutes   (D) 120 minutes

36. Which of the following sets of three numbers gives maximum value on addition ?

(A) 346, 543, 453   (B) 463, 354, 534

(C) 364, 543, 463   (D) 436, 534, 364

37. In the outer circle, two semi-circles are drawn as shown. The ratio of (i) the length of the line forming outer circle and (ii) the length of the line forming two semi-circles is

(A) 4 : 3

(B) 3 : 1

(C) 3 : 2

(D) 2 : 1

If values from 1 to 26 are allotted as position values to alphabets such that A = 1, B = 2, ... J =10,........ T = 20, ... Z = 26, then answer the following three questions.

38. If C $\times$ H = X, then X $-$ H =

(A) M   (B) P

(C) O   (D) C

39. Which alphabet will decrease the vlaue of [(P × H) – (S × D)] to 36 ?

   (A) S   (B) R

   (C) Q   (D) P

40. Which alphabet will increase the value of (V + Q + O – F) to 60 ?

   (A) M   (B) L

   (C) K   (D) J

Rough Work

Answers Class IV Maths

1	B	2	C	3	D	4	A	5	C
6	A	7	A	8	B	9	C	10	B
11	D	12	B	13	B	14	B	15	D
16	C	17	C	18	B	19	D	20	A
21	C	22	C	23	B	24	D	25	B
26	B	27	B	28	D	29	C	30	C
31	C	32	D	33	D	34	B	35	C
36	C	37	D	38	B	39	D	40	B