New Look Central School K.H./LODHA/PARTAPUR/SAGWARA/HALOL

NLCS/ANNUAL/11-12/VIII/Maths/405

Time: 3 hrs.

(i)

(ii)

(iii)

General instructions:

All questions are compulsory.

In Section-B Q.No. 13 has internal choice.

In Section-C Q.No. 17, 21, 23 have internal choice.

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M.M.: 90

SECOND SUMMATIVE ASSESSMENT: 2011-12

Subject: MATHEMATICS

Class: VIIIth

| (iv) | In S | In Section-D Q.No. 27 and 34 have internal choice. | | | | | | | | |
|------|--------------------------------|--|---------|-------------------|--------|--------------------|--------|--------------|------|-------|
| | SECTION-A | | | | | (8×1=8) | | | | |
| 1. | The squre root of 64 is — | | | | | | | | | |
| | (a) | 4 | (b) | 6 | (c) | 8 | (d) | 36 | [|] |
| 2. | The | The value of 3^3 is $-$ | | | | | | | | |
| | (a) | 9 | (b) | 27 | (c) | 6 | (d) | 30 | [|] |
| 3. | The number 27 is divisible by- | | | | | | | | | |
| | (a) | 5 | (b) | 2 | (c) | 3 | (d) | 7 | [|] |
| 4. | Solv | re: x-4= 6 | | | | | | | | |
| | (a) | x= 3 | (b) | x= 4 | (c) | x=2 | (d) | x= 10 | [|] |
| 5. | Sha | shi invested Rs | s. 5000 |) in a bank for 1 | l year | r at end of 1 year | ar she | receives Rs. | 6000 | as |
| | the | amount. What | is the | e interest she re | ceive | d ? | | | | |
| | (a) | Rs. 500 | (b) | Rs. 6000 | (c) | Rs. 1000 | (d) | Rs. 500 | [|] |
| 6. | The | value if x in | 5:4 | ::: x:20 | | | | | | |
| | (a) | 25 | (b) | 20 | (c) | 30 | (d) | 10 | [|] |
| 7. | The | formula of vo | lume | of cuboid is :- | | | | | | |
| | (a) | LxLxL | (b) | LxBxH | (c) | L+B+H | (d) | LxBxB | [|] |
| S. | Hov | v many differe | ent ou | itcomes when w | e tos | s a one rupee c | oin :- | | | |
| | (a) | 1 | (b) | 2 | (c) | 3 | (d) | 4 | [|] |
| | | | | | | | | | Cont | ••••• |
| | | | | | | | | | | |

SECTION – B (SHORT ANSWER TYPE-I)

 $6 \times 2 = 12$

- 9. Find the square root of 144 by prime factorisation method.
- 10. Check 576 is a perfect cube or not.
- 11. Find the value of unknowns:

$$\begin{array}{ccc}
7 & a \\
-b & 3 \\
\hline
3 & 9
\end{array}$$

- 12. Thrice a number is 60. Find the number.
- 13. If Santosh borrowed Rs. 7000 from the bank at 7% interest for 3 years; find the simple interest and the amount she had to pay.

OR

Find the compound interest on Rs.1000 at 10% p.a. for 2 years, compounded annually.

14. In a motor factory, five varieties of vehicles were manufactured in one year whose break up is given below :

| motorbikes | cars | pick-up | vans | mini trucks |
|------------|------|---------|------|-------------|
| 900 | 600 | 1200 | 500 | 400 |

Represent this data as a pie chart.

SECTION - C (SHORT ANSWER TYPE-II)

10×3=30

- 15. Find the simplest answer for $\sqrt{16x^4y^8}$
- 16. Which is the smallest number that must divide 10584 to make it a perfect cube.
- 17. Which of these number are divisible by 2, 3 and 5? Give reason also.
 - (i) 918
- (ii) 108

OR

Which of these number are divisible by 9 and 10? Give reason also.

- (i) 270
- (ii) 600
- 18. Five time Raju's pocket money is Rs. 80. What is his pocket money?
- 19. Solve: (x-6)(x+7) = (x+3)(x-11)

Cont.....

- 20. A sum of money invested at compound interest of 8% p.a. compounded annually, amounted to Rs.7290 in 2 years, find the sum invested.
- 21. Two numbers are in ratio of 4 : 5. The first number is 60. What is the other number ?

OR

The monthly income of Sonu and Raja are Rs. 14400 and Rs.12800. Find the ratio of Sonu's salary is to Raja's salary as a ratio in the simplest form.

22. Weight of 20 students in a class in kilograms.

40, 41, 43, 48, 49, 50, 54, 52, 54, 50, 53, 42, 48, 50, 48, 52, 53, 51, 52, 50

Group the given data and represent it as a bar graph.

23. Find the cost of painting a tank of dimensions 3m×2m×1.5m at Rs. 20 per square metre.

OR

A rectangular tank's capacity is 189 kilolitres. It is 7m long and 4.5m high. Find its breadth.

24. What is the probability of drawing a white ball from a bag of 30 green balls and 30 white balls?

SECTION-D (LONG ANSWER TYPE) 10×4=40

- 25. A boy was flying a kite which was at a height of 40m just above a tree. The string was 50m long. How far away from the tree was the boy flying the kite?
- 26. Find cube root of -216 by prime factorisation. 35937
- 27. If one side of a square is increased by 2m and the other side is reduced by 2m, a rectangle is formed whose perimeter is 48m. Find the side of the original square.

OR

A car leaves Agra at 11:00 am travelling at 50 km/hr. How fast would be a second car travelling if it leaves Agra an hour later and overtakes the first car at 5:00 pm?

28. In how many years will a sum of Rs. 6400 compounded semi-annually at 5% p.a. amount to Rs. 6560 ?

Cont.....

- 29. The population of a town increases at the rate of 7% every year. If the present population is 90000, what will it be after 2 years?
- 30. If x varies directly as y and x=7 when y=28, find x, when y is 84.
- 31. Draw a histogram to represent the following data:

| Years | Exports in crores of Rs. |
|-----------|--------------------------|
| 1997-1998 | 6 |
| 1998-1999 | 8 |
| 1999-2000 | 10 |
| 2000-2001 | 5 |

32. Find the arithmetic mean of the following data:

| Marks | Number of students |
|-------|--------------------|
| 0-10 | 5 |
| 10-20 | 10 |
| 20-30 | 15 |
| 30-40 | 17 |
| 40-50 | 13 |
| Total | 60 |

- 33. A pillar in the shape of a cylinder has 21cm radius and 3m height. Find the curved surface area and the volume of the pillar.
- 34. What is the probability of getting a sum 9 if two dice are tossed together.

OR

Find the probability of getting at least one tails when two coins are tossed.
