

# **DELHI PUBLIC SCHOOL, GWALIOR**

(Under the Aegis of DPS Society, New Delhi) <u>MODEL TEST PAPER</u> <u>CLASS – VI</u> SUBJECT – MATHEMATICS

## Time: 3 hrs.

General Instructions:

- *(i)* All questions are compulsory.
- (ii) The question paper consists of 40 questions divided into four sections A, B, C & D.
- (iii) Section A comprises of 20 questions of 1 mark each. Section B comprises of 6 questions of 2 marks each. Section C comprises of 8 questions of 3 marks each. Section D comprises of 6 questions of 4 marks each.
- (iv) There is no overall choice. However internal choices has been provided in some questions.

(v) Use of calculators is not permitted.

#### Section - A

#### **Multiple Choice Questions:**

1.	The place value					
	(a) 6	(b) 632950		(c) 6000	00	(d) none of these
2.	LX = (a) 40	(b) 60		(c) 80		(d) none of these
3.	Which of the foll (a) 91 and 72	lowing are co-primes? (b) 34 and 51	g are co-primes? (b) 34 and 51		nd 36	(d) none of these
4.	The figure obtain (a) ray	tained when a line segment i (b) angle		t is extended in one direction is (c) plane		(d) none of these
5.	An angle formed by the two opposite rays is cal (a) right angle (c) straight angle			led a (b) zero angle (d) none of these		
6.	24679 x 92 + 246 (a) closure	24679 x 92 + 24679 x 8 is an example of which property? a) closure (b) commutative (c) associative (d) distributive				e
7.	The predecessor (a) 999	of 10000 is - (b) 9999	(c) 99		(d) none of the	ese
8.	The additive inverse of -5 is - (a) 5 (b) 55 (c)		(c) 1/5	(d) none of th		ese
9.	On subtracting 8 (a) 12	from – 4 we get - (b) – 12	(c) 4		(d) none of the	ese
10.	Number of pairs of parallel lines in a trapezium is –(a) two(b) three(c) one(d) none of these				ese	

M.M.: 80

[1x10=10]

<u>Fill</u>	in the blanks:-	[1x5=5]		
11.	A triangle whose two sides are equal is known as			
12.	Diameter = 2 x			
13.	156 + (-156) =			
14.	A prime number has only factors.			
15.	Whole numbers are not closed under and			
	<u>OR</u>			
	A number which has more than two factors is called a			
Ans	wer the following questions	[1x5=5]		
16.	Which whole number is on the left of other on the number line in 390, 309?			
17.	How many million are there in 1 crore?			
18.	Is 48562 divisible by 6 or not?			
19.	Find the first common multiple of 2 and 4.			
20.	What is the HCF of two consecutive odd numbers?			
	OR			
	Find the LCM of 5, 20 in which one number is the factor of the other.			
	Section - B			
21.	. Find the sum of the place values of two 5's in 650052.			
22.	Write all the factors of: (a) 24 (b) 12	[2]		
23.	Write opposites of the following: (a) Increase in weight (b) Loss of 700	[2]		
	OR			
	Use number line and add $(-1) + (-2) + (-3)$			
24	Write the shapes of the following: (a) A road roller (b) A brick	[2]		
25.	Express the following as the sum of two odd primes: (a) 44 (b) 18	[2]		
	<u>OR</u>			
	Fill in the blanks with $<, =, > (-21) - (-10) $ (-31) + (-11)			
26.	<ul><li>(i) Write the predecessor of 10001.</li><li>(ii) Write the successor of 10199.</li></ul>	[2]		
	<u>Section - C</u>			
27	Find the sum of $(-10) + 92 + 84 + (-15)$ .	[3]		
28.	Using divisibility test, determine whether 12582 is divisible by 9 or not.	[3]		
	<u>OR</u>			

Using divisibility test, determine whether 7138965 is divisible by 11 or not.

29.	<ul> <li>(i) Write four negative integers greater than -10.</li> <li>(ii) Write four negative integers less than -15.</li> </ul>	
	(iii) Write four integers greater than $-1$ .	[3]
30.	Add the following numbers and check by reversing the order of the addends.	[3]
	16509 + 114	
31.	Name the type of triangles in the following: (a) $\triangle$ PQR such that PQ = QR = PR = 5 cm.	[3]

- (b)  $\triangle$  DEF with m  $\angle$  D = 90<sup>0</sup>.
- (c)  $\triangle$  ABC with AB = 8.7 cm , AC = 7 cm and BC = 6 cm.

#### <u>OR</u>



- 32. Make a factor tree of 36.
- 33. (i) Insert commas suitably and write the name of the number 9854670 according to Indian System of Numeration.
  - (ii) Insert commas suitably and write the name of the number 74592083 according to International System of Numeration.
- 34. The length, breadth and height of a room are 825 cm, 675 cm and 450 cm respectively. Find the longest tape which can measure the three dimensions of the room exactly. [3]

### <u>OR</u>

Find the smallest 4 digit number which is divisible by 18, 24 and 32.

#### Section – D

- 35. Draw any circle and mark
  (a) its centre
  (b) a radius
  (c) a diameter
  (d) a sector
  (e) a segment
  (f) a point in its interior
  (g) a point in its exterior
  (h) an arc
- 36. A machine, on an average manufactures 2,825 screws a day. How many screws did it produce in the month of Jan 2011? [4]

## <u>OR</u>

A vendor supplies 32 litres of milk to a hotel in the morning and 68 litres of milk in the evening. If the milk costs  $\gtrless$  20 per litre, how much money is due to the vendor per day?

[3]

[3]

[4]

37. Following is the list of temperatures of four places in India on a particular day of the year. [4]

Place	Temperature
Siachin	8° C below 0° C
Gwalior	30° C above 0° C
Srinagar	5° C below 0° C
Delhi	20° C above 0° C

- a) Write the name of these places in the form of integers.
- b) Represent the temperature of the cities along with their names on a number line.
- c) Which is the coolest and hottest place?
- d) Write the names of the places where temperature is below  $0^{0}$ C but more than  $-10^{0}$ C.
- 38. a) Write the name of any 4 angles in given figure
  - b) Draw a rough diagram and illustrate.(i) open curve(ii) closed curve

## <u>OR</u>

Draw a rough sketch of a quadrilateral PQRS. Draw its diagonals and name them. Is the meeting point of the diagonals in the interior or exterior of the quadrilateral?

39. Three tankers contain 403 litres, 434 litres, 465 litres of diesel respectively. Find the maximum capacity of container that can measure the diesel of the three containers exact number of times.

OR

Three measuring rods are 45cm, 50cm and 75cm in length. What is the least length (in metres) of a rope that can be measured by the full length of each of these three rods?

- 40. A school organised a card making activity in which students were asked to make "Thank you cards" for the people who helped them in some way. Assorted cards were made with different titles. Their numbers are given below:
  - 1. T cards for teachers are 120.
  - 2. F cards for friends are 540.
  - 3. S cards for servants are 90.
  - 4. P cards for parents are 240.
  - 5. G cards for grandparents are 150.

Find the H.C.F. and L.C.M. of all the different numbers of cards.

-----X-----

[4]

[4]

[4]