	Brihan I	Mumbai Gar	nit Adhyapa	k Mandal	, Mumbai		
August 1, 2021 Std. : VIII		Maths Concept Exam 2021		1	Time : 11 a.m. to 1 p.m. Max. Marks : 100		
1.	In \triangle ABC, m \angle B = 90°, AB = 7 and BC = 24 Find the length of AC.						
	A) 20	B) 25	C) 35	D) 45			
2.	A In the adjoining figure, $m \angle ABC = 60^{\circ}$, $m \angle ACD = 100^{\circ}$ Find the measure of $m \angle BAC$.						
	A) 260°	B) 40 [°]	C) 50 [°]	D) 80 ^o			
3.	5.5 × 1.3	$5.5 \times 0.8 = ?$					
	A) 2.75	B) 2.55	C) 2.85	D) 22.7			
4.	1515*5 is divisible by 15 then what is the smallest digit in the place of $*$?						
	A) 1	B) 4	C) 9	D) 5			
5.	What is the po	oint of concurrence	of the angle bisect	ors of a triangle	e ?		
	A) Orthocen	tre B) Inc	centre C) Cir	cumcentre	D) Centroid		
6.	. From the figure given below, which is the pair of opposite rays ?						
	←		→ → →				
		B E M	D F				
	A) Ray EB and ray BE B) Ray EM and ray EB						
	C) ray EM and ray ED D) ray ED and ray DM						
7.	If $3.57 \times 0.12 = 0.4284$ then what is the value of $35.7 \times 120 = ?$						
	A) 428.4	B) 42.840	C) 42.8404	D) 4284			
8	In the secuer	ace of triangular pur	mbers what is the /	1 th number after	2.9		
0.	A) 21	B) 25	C) - 26	D) 8	5.		
	11) 2 1	<i>D) 20</i>	0) 20	2) 0			
9.	Find the ratio	of 25 mm to 0.5 m.					
	A) 1 : 20	B) 20:1	C) 1:2	D) 2 : 1			
10.	In a twenty four hours clock the time is 19:20. In twelve hour clock the time will be						
	A) 7 : 20 a.n	n. B) 7:20 p.1	m. C) 5 : 20 p.r	m. D) 6:20) a.m.		
11.	A rectangle has axes of symmetry						
	A) one	B) two	C) three	D) four			
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18. If a car is sold for Rs. 528000 there is a loss of 12 %. Find the cost price of the car.

A) Rs. 600000 B) Rs. 660000 C) Rs. 6.5 lakh D) Rs. 6.4 lakh

19. Find the length of the wire required for fencing a circular ground with radius 10 meters . ($\pi = 3.14$) A) 62.8 m. B) 68.2 m. C) $\frac{430}{7}$ m. D) 314 m.

20. Find the total surface area of the box with length 5 cm., breadth 5 cm. and height 3 cm. ?
A) 55 sq.cm.
B) 75 sq. cm.
C) 150 sq.cm.
D) 110 sq.cm.

21.	By the simple interest, in how many years would a sum of money double itself at rate 10 % per annum ?					
	A) 4 years	B) 8 years	C) 10 years	D) 5 years		
22.	$6\frac{2}{3} - 2\frac{2}{9}$	= ?				
	A) $4\frac{2}{9}$	B) $\frac{37}{9}$	C) $4\frac{1}{27}$	D) $4\frac{4}{9}$		
23.	How much wire is required to make a square of side 85 cm. ?					
	A) 340 sq.cm.	B) 240 cm.	C) 7225 sq. cm.	. D) 340 cm.		
24.	Convert $2\frac{1}{6}$ into decimal fraction :					
	A) 2.66	B) 2.1 6	C) 2.16	D) 2.6		
25.	GCD of two numbers is 7 and LCM is 2310. If one number is 105 find the other.					
	A) 735	B) 125	C) 154	D) 451		
26.	The average of 7 numbers is 28. But by mistake one of the number is written as 46 instead of 53. After the correction what will be the average of the numbers ?					
	A) 27	B) 2.9	C) 2.7	D) 29		
27.	$\frac{6^3 \times 2^4 \times 3^{-2}}{3 \times 2^5} = 4$?				
	A) 4	B) <u>4</u> <u>9</u>	C) $\frac{4}{3}$	D) 2		
28.	Find the value of x if $4(x+1) = 76$					
	A) 20	B) 18	C) 88	D) 1.8		
29.	If A and B together complete the work in 8 days. B alone does the same work in 12 days. How many days does A require to complete the same work alone ?					
	A) 6 days	B) 20 days	C) 24 days	D) 96 days		
30.	Arun scored 196 marks out of 250. What was the percentage of the marks he scored ?					
	A) 125%	B) 98%	C) 7.84 %	D) 78.4%		
31.	The sum of the interior angles of a hexagon is					
	A) 360°	B) 180°	C) 540°	D) 720°		

32. Mother's present age is 2 more than thrice the present age of her son. What was the sum of their ages 2 years ago ? (Let the son's present age be x years.)

A) 3x + 2 B) 3x + 4 C) 4x + 2 D) 4x - 2

- 33. What should be subtracted from $3m^2 m^3 + 4m + 8$ to get the polynomial $m^3 3m + 2m^2 5$ A) $5m^2 + m + 8$ B) $2m^3 + m^2 + 7m + 13$ C) $-2m^3 + m^2 + 7m + 13$ D) $-5m^2 + m 8$
- 34. Length and breadth of a rectangular floor is 4.2 m and 3.6 m. How many square tiles of side 60 cm. will be required to cover it ?
 - A) 70 B) 13 C) 84 D) 42

35. $1.21 - (2.2 \times 0.8) + 0.64 =$ _____ A) 0.3 B) 0.09 C) 0.9 D) 0.03

- 36.How many faces, vertices and edges does a triangular prism have ?A) 3, 4, 5B) 4, 4, 6C) 3, 3, 4D) 5, 6, 9
- 37. Find the value of m if 4 3m = 16A) 4 B) -4 C) $\frac{20}{3}$ D) $\frac{-20}{3}$
- 38. $54 a^{3}b^{2}c^{2} \div 9 ab^{2}c = ?$ A) $6 a^{2}b^{2}c$ B) $6 a^{2}c$ C) $6 ac^{2}$ D) 6 abc
- 39. Lengths of three sides of the triangle are given below. Which triangle is impossible to draw ?
 A) 5.1, 4.9, 10 B) 3.4, 4.3, 6.2 C) 5.1, 3.5, 7.7 D) 4.6, 9.6, 5.5
- 40.Find the complementary angle of the supplementary angle of 130° A) 50° B) 40° C) 90° D) 30°
- 41. If the side of a cube is 7 cm. Find its total surface area.A) 343 sq. cm. B) 294 sq. cm. C) 343 cu. cm. D) 49 sq. cm.
- 42. Identify the Pythagorean triplet from the following ?
 A) 9, 41, 40
 B) 9, 30, 31
 C) 15, 17, 18
 D) 9, 10, 11

43.	Factorise 49 m ² - $\frac{n^2}{16} =$				
	A) $(49m - \frac{n}{16}) (49m + \frac{n}{16})$	B) $(7m - \frac{n}{4}) (7m + \frac{n}{4})$			
	C) $(49m - \frac{n}{16}) (49m - \frac{n}{16})$	D) $(7m + \frac{4}{n}) (7m - \frac{4}{n})$			
44.	The measure of the reflex angle is				
	A) Between 0° and 90°	B) Between 90° and 180°			
	C) 360°	D) Between 180° and 360°			
45.	Find the value of $\sqrt{745.29}$				
	A) 2.37 B) 27.3	C) 2.73 D) 273			
46.	Factorize : $5a^2 - 20b^2$				
	A) $(5a+4b)(5a-4b)$	B) $5(a+2b)(a-2b)$			
	C) $5(a+4b)(a-4b)$	D) (5a - 4b) (5a - 4b)			
47.	Multiply : $(2x - 4)(x + 2)$				
	A) $2x^2 + 8x + 8$ B) $2x^2 - 2x$	x - 8 C) $2x^2 + 8$ D) $2x^2 - 8$			

48. Which of the following statements is false ?

- A) Adjacent angles have one common arm.
- B) Adjacent angles have one common vertex .
- C) Adjacent angles have separate interiors.
- D) Adjacent angles are always supplementary.

49.
$$\left(\frac{a}{2} + \frac{b}{5}\right)^2 = ?$$

A) $\frac{a^2}{4} + \frac{b^2}{25}$
B) $\frac{a^2}{2} + \frac{b^2}{5}$
C) $\frac{a^2}{4} + \frac{ab}{5} + \frac{b^2}{25}$
D) $\frac{a^2}{4} + \frac{2ab}{5} + \frac{b^2}{25}$

50. Anay and Vinay started a business with an investment of Rs.50000 and Rs.70000 respectively. In the business they got an profit of 14%. What will be share of Vinay in the profit?

A) Rs. 7000 B) Rs. 16800 C) Rs. 8900 D) Rs. 9800

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