LCM and HCF

MATHEMATICS Comprehensive Book

QUESTIONS

1.	Which one among the following statements is not true?			
	(b) The LCM of two or more given numbers is the lowest of their common multiple.			
	(a) The HCF of two or more given numbers is the highest of their common factors.			
	(c) The numbers having more than two factors are called coprime numbers.			
	(d) All the above			
	(e) None of these			
2.	The ratio between two numbers is 8 : 5 and their LCM is 360. The larger number is			
	(a) 24	(b) 72		
	(c) 48	(d) 36		
	(e) None of these			
3.	Which one among the following is most appropriate for coprimes?			
	(a) Numbers having more than two factors are called coprimes.			
	(b) Two numbers are called coprimes, if there is no common factor other than 1, between these two numbers			
	(c) Two numbers are called coprimes, if there is no common factor other than 2, between these two numbers			
	(d) Pair of prime numbers are called coprimes.			
	(e) None of these			
4.	The least number which when divided by 4, 5 and 6 leaves remainder 3 in each case, is			
	(a) 63	(b) 67		
	(c) 71	(d) 252		
	(e) None of these			
5.	Find the LCM of 9, 14, 15, 18, 12.			
	(a) 126	(b) 252		
	(c) 630	(d) 1260		
	(e) None of these			
6.	The LCM of three prime numbers are 4991. Find the between these prime numbers,			
	(a) 47	(b) 19		
	(c) 29	(d) 31		
	(e) None of these			
7.	The LCM of two numbers is 27. The numbers cannot be			
	(a) 3, 27	(b) 1.27		
	(c) 3, 9	(d) 9, 27		
	(e) None of these			
8 .	The HCF of two numbers is 48. The product of the numbers can be			
	(a) 3200	(b) 2400	(c) 48	
	(d) 4608	(e) None of these		

9.	The product of two numbers is 324. Their HCF can be			
	(a) 54	(b) 9		
	(c) 4	(d) 27		
	(e) None of these			
10.	The product of two numbers is 840. Their LCM can be			
	(a) 210	(b) 70		
	(c) 420	(d) All the above		
	(e) None of these			
11.	The HCF and LCM of the numbers 780 and 210 are respectively			
	(a) 30, 5460	(b) 60, 2730		
	(c) 90, 10920	(d) 30, 2730		
	(e) None of these			
12.	A rectangular courtyard with length 10m 50cm an	A rectangular courtyard with length 10m 50cm and breadth 4m 20cm is to be paved with square stones of the same		
	size. The least number of such stones required are			
	(a) 20	(b) 10		
	(c) 8	(d) 6		
	(e) None of these			
13.	Least common multiple number of two numbers is 360. Then which one of the following cannot be the highest			
	common factor of the numbers.			
	(a) 36	(b) 24		
	(c) 16	(d) 15		
	(e) None of these			
14.	Find the LCM of the numbers 10, 7, 8, 11, 52, 27.			
	(a) 1181820	(b) 1081080		
	(c) 2162160	(d) 540540		
	(e) None of these			
15.	The least common multiple of four numbers is 72	0. If three numbers are $16,10$ and 40 then fourth number can be		
	(a) 75	(b) 144		
	(c) 80	(d) 54		
	(e) None of these			
16.	The product of two numbers is 11016 and their HCF is 18. Find their LCM.			
	(a) 1224	(b) 612		
	(c) 112	(d) 560		
	(e) None of these			
17.	The HCF of the greatest two digit prime numbers	and the greatest four digit numbers is		
	(a) 195	(b) 199		

	(c) 1	(d) 97		
	(e) None of these			
18.	The sum of two numbers is 324 and their HCF is 9. Find the numbers.			
	(a) 18, 306	(b) 315, 9		
	(c) 27, 297	(d) All the above		
	(e) None of these			
19.	The HCF and LCM of two numbers are 28 and 1176 respectively. If the difference between the numbers is 308, then			
	the numbers can be			
	(a) 1176, 28	(b) 412, 104		
	(c) 392, 84	(d) 402, 94		
	(e) None of these			
20.	Swapnesh wants to mail three parcels to three village schools. He finds that the postal charges are Rs 42, Rs 63 and			
	Rs 294. He wants to buy stamps only of one denomination. Find the greatest denomination of stamps he must buy			
	to mail the three parcels.			
	(a) 23	(b) 21		
	(c) 27	(d) 31		
	(e) None of these			
21.	The HCF of two numbers is 35 a	The HCF of two numbers is 35 and the other two factors of their LCM are 11 and 17. Find the larger of the two		
	numbers.			
	(a) 595	(b) 365		
	(c) 275	(d) 385		
	(e) None of these			
22.	Six bells are tolled together They	toll at the interval of 3, 5, 8, 9, 12 and 15 seconds respectively in 24 hours, how		
	many times do they toll together?			
	(a) 4	(b) 120		
	(c) 12	(d) 240		
	(e) None of these			
23.	In a school library there are 1080 books of Mathematics and 792 books of Science. Ms Shilpi, the librarian of the			
	school wants to store these books in shelves such that each shelf should have the same number of books of each			
	subject. What should be the minimum number of each subject in each shelf?			
	(a) 72	(b) 36		
	(c) 108	(d) 2310		
	(e) None of these			
24.	The product of two numbers is 9126. If HCF of the numbers is 39, find the larger numbers.			
	(a) 39	(b) 78		
	(c) 156	(d) 117		
	(e) None of these			

25.	HCF of two numbers is 42. If the product of the numbers is 15876, then possible number of such pairs is			
	(a) 1	(b) 2		
	(c) 3	(d) 4		
	(e) None of these			
26.	The least multiple of 7 which leaves a remainder of 5 when divided by 13, 15, 18 and 36, is			
	(a) 2345	(b) 235		
	(c) 335	(d) 2340		
	(e) None of these			
27.	Three tankers can contain 391 litres, 483 litres and 667 litres of diesel respectively. Find the maximum capacity of a			
	container which can measure the diesel of the three containers exact number of times,			
	(a) 17 litres	(b) 21 litres		
	(c) 23 litres	(d) 29 litres		
	(e) None of these			
28.	The least number which when doubled will be exactly divisible by 24, 16, 21 and 28 is			
	(a) 336	(b) 168		
	(c) 672	(d) 330		
	(e) None of these			
29.	The smallest 5 digit number exactly divisible by 6, 7, 8, 9and 10 is			
	(a) 10080	(b) 25200		
	(c) 10008	(d) 10540		
	(e) None of these			
30.	Find the least possible length which	Find the least possible length which can exactly measure the lengths 12 m, 14 m 85 cm and 10 m 8 cm.		
	(a) 8316 m	(b) 3456 m		
	(c) 5468 m	(d) 6902 m		
	(e) None of these			
31.	The HCF of 2.59, 6.29 and 3.7 is			
	(a) 0.74	(b) 7.4		
	(c) 0.37	(d) 3.7		
	(e) None of these			
32.	The LCM of 174, 319 and 377 is			
	(a) 24882	(b) 24412		
	(c) 329246	(d) 29264		
	(e) None of these			
33.	Which of the following statements is correct?			
	(a) The HCF of two distinct prime numbers is not 1.			
	(b) The HCF of two co prime numbers is not 1.			
	(c) The HCF of an even and odd number is not even.			

	(d) The HCF of two consecutive odd numbers is not 1.			
	(e) None of these			
34.	The greatest number which on dividing 6997 and 5222, leaves a remainder of 12 and 15 respectively, is			
	(a) 127	(b) 129		
	(c) 133	(d) 141		
	(e) None of these			
35.	The largest number which divides 625,856 and 1626 to leave the same remainder, is			
	(a) 33	(b) 21		
	(c) 77	(d) 147		
	(e) None of these			
36.	Six bells commence tolling together and toll at the intervals of 3, 5, 8, 10, 12 and 15 seconds respectively in 2 hours.			
	How many times they will toll toget	ther?		
	(a) 30	(b) 12		
	(c) 60	(d) 1		
	(e) None of these			
37.	If the ratio of two numbers is 5: 6 and their HCF is 8, then find their LCM.			
	(a) 300	(b) 120		
	(c) 240	(d) 160		
	(e) None of these			
38 .	If the product of two numbers is 12	If the product of two numbers is 1259712 and their HCF is 27 then find their LCM.		
	(a) 46656	(b) 48658		
	(c) 52560	(d) 38902		
	(e) None of these			
39.	Among three co-prime numbers, the product of the first two is 18304 and the product of the last two is 72576, find			
	the sum of these numbers«			
	(a) 588	(b) 764		
	(c) 686	(d) 838		
	(e) None of these			
40.	Find the HCF of $\frac{2}{3}, \frac{10}{9}, \frac{4}{15}$.			
	(a) $\frac{1}{9}$	(b) $\frac{2}{45}$		
	(c) $\frac{1}{33}$	(d) $\frac{1}{18}$		
	(e) None of these			

ANSWER - KEY				
1 . (c)	2. (b)	3. (b)	4. (a)	5. (d)
6. (d)	7. (c)	8. (d)	9. (b)	10. (c)
11. (a)	12. (b)	13. (c)	14. (b)	15. (b)
16. (b)	17. (c)	18. (b)	19. (c)	20. (b)
21 . (a)	22. (d)	23. (a)	24. (b)	25. (a)
26. (a)	27. (c)	28. (b)	29. (a)	30. (a)
31. (c)	32. (a)	33. (c)	34. (a)	35. (c)
36. (c)	37. (c)	38. (a)	39. (d)	40. (b)