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| **QUANTITATIVE APTITUDE** | | |
|
| **Lecture No. 12** | | **Topic: L.C.M. & H.C.F.** |
| **Sub topic: Highest Common Factor (H.C.F.)** | | |
| **Lecture Outcome:** After the session, student would be able to:  (i) Understand the fundamentals of Factors. (ii) Apply the concepts of Highest Common Factors in worded questions. | | |
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| **: Key concept Space :** | | |
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| **S. No.** | **Questions** | **workspace** |
| 1 | Find the Highest Common Factor of: (a) 24, 36, 108 (b) 144, 192, 360 (c) 12a2b3c4, 20abc10d, 24a6b2c8 |  |
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| 2 | The product of two numbers is 2028 and their H.C.F. is 13. The number of such pairs is |  |
| 3 | The sum of two numbers is 528 and their H.C.F. is 33. The number of pairs of numbers satisfying the above conditions is? |  |
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| 4 | If HCF of two natural number is 10. Sum of these two natural numbers is 90.  (a) How many pairs of numbers are possible? (b) What numbers are possible? |  |
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| 5 | Find the greatest number that divides 350, 400 and 750, leaves no remainder in each case. |  |
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| 6 | Find the greatest number that divides 150, 194 and 245, leaves remainders of 6, 2 and 5 respectively. |  |
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| 7 | Find the greatest number that divides 55, 127 and 175, leaves same remainder in each case. |  |
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| 8 | 48 rose plants, 72 marigold plants and 108 lotus plants have to planted in rows such that each row have equal number of plants and each row has plants of a particular variety only. What is the least number of rows required?  **[CAT Question]** |  |
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| 9 | The greatest possible length which can be used to measure exactly the lengths 7 m, 3 m 85 cm, 12 m 95 cm is:  **[Bank PO Previous year Question]** |  |
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| 10 | A rectangular cloth of (54\*90) units is to be cut into equal squares. Find how many minimum no. of square pieces are required such that no cloth is wasted.  **[JMET Question]** |  |
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| 11 | A merchant has three kinds of milk: 435 liters, 493 liters and 551 liters. Find the least number of casks of equal size required to store all the milk without mixing.  **[SSC Previous year Question]** |  |
| 12 | A man was employed on the promise that he will be paid the highest wages per day. The contract money to he paid was Rs. 1189. Finally he was paid only Rs. 1073 for how-many days did he actually work?  **[MAT Previous year Question]** |  |
| 13 | Find the LCM and HCF of following: |  |