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| **QUANTITATIVE APTITUDE** | | |
|
| **Lecture No. 13** | | **Topic: L.C.M. & H.C.F.** |
| **Sub topic: Least Common Multiple (LCM)** | | |
| **Lecture Outcome:** After the session, student would be able to: (i) Understand the fundamentals of Multiples. (ii) Apply the concepts of Least Common Multiples in worded questions. | | |
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| **: Key concept Space :** | | |
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| **S. No.** | **Questions** | **Workspace** |
| 1 | Find the LCM of (a) 13, 23 and 48 (b) 24, 36, 44 and 62 (c) 22, 33, 45, and 72 (d) 13, 17, 21 and 33 |  |
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| 2 | Find the least number which when divided by 45 and 72, gives no remainder. |  |
| 3 | What is the least number which when divided by 8,9,12 and 15 leaves the same remainder 1 in each case? |  |
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| 4 | A toyshop owner has a number of toys in such a way that when he put 2, 3 or 5 toys in a packet, he is always left with 1 toy. Find the minimum number of toys he can possess. |  |
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| 5 | The least multiple of 7, which leaves a remainder of 4, when divided by 6, 9, 15 and 18 is? |  |
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| 6 | A fruit vendor has some mangoes. When he packs mangoes in the packets of 2, 3 or 5 he is always left with 1 mango but when 13 mangoes are packed in a packet nothing is left. Find the minimum number of mangoes the fruit vendor possess. |  |
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| 7 | What is the least number which when divided by 3, 4 and 7 gives remainder of 2, 3 and 6 respectively? |  |
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| 8 | What is the least multiple of 13, which when divided by 5 and 7 gives remainder of 3 and 5 respectively? |  |
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| 9 | What is the least number possible which when divided by 5 and 7 gives remainder of 3 and 2 respectively? |  |
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| 10 | The least numbers which can be added to and Subtracted to 763 so that it is completely divisible by 57 is? |  |
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| 11 | Find the least number of 5 digits that is exactly divisible by 79 |  |
| 12 | How many numbers between 200 and 400 are divisible by 13? |  |
| 13 | Two alarm clocks ring their alarms at regular intervals of 24 seconds and 36 seconds. If they first beep together at 1 pm, at what time will they beep again for the first time? |  |
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| 14 | The traffic lights at three different road crossings change after every 48 sec, 72 sec. and 108 sec. respectively. If they all change simultaneously at 8 : 20 : 00 hrs; then they will again change simultaneously at? |  |
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| 15 | Six bells commence tolling together and toll at intervals of 2, 4, 6, 8 10 and 12 seconds respectively. In 30 minutes, how many times do they toll together? |  |
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