

APTITUDE QUIZ

1. The HCF and LCM of two numbers are 21 and 84 respectively. If the ratio of the two numbers is 1:4, then the larger of the two numbers is

- (a) 48
- (b) 12
- (c) 84
- (d) 108

2. 55. Two pipes of length 1.5 m and 1.2 m are to be cut into equal pieces without leaving any extra length of pipes. The greatest length of the pipe pieces of same size which can be cut from these two lengths will be

- (a) 0.13 m
- (b) 26 m
- (c) 0.3 m
- (d) 0.41 m

3. Three bells ring at interval of 36 seconds, 40 seconds and 48 seconds respectively. They start ringing together at a particular time. They will ring together after every

- (a) 6 minutes
- (b) 12 minutes
- (c) 18 minutes
- (d) 24 minutes

4. The LCM of two numbers is 12 times their HCF. The sum of the HCF and LCM is 403. If one of the number is 93, then the other is

- (a) 116
- (b) 124
- (c) 112
- (d) 120

5. The least number which when divided by 6, 9,12,15,18 leaves the same remainder 2 in each case is:

- (a) 180
- (b) 176
- (c) 182
- (d) 178

6. The HCF and LCM of two numbers are 12 and 336 respectively. If one of the number is 84, the other number is:

- (a) 36
- (b) 48
- (c) 72
- (d) 96

7. The least number which when divided by 4, 6, 8, 12 and 16 leaves a remainder of 2 in each case is:

- (a) 46
- (b) 48
- (c) 50
- (d) 56

8. The maximum number of students among whom 1001 pens and 910 pencils can be distributed in such a way that each student gets same number of pens and same number of pencils, is:

- (a) 91
- (b) 910
- (c) 1001
- (d) 1911

9. Let x be the least number, which when divided by 5, 6, 7 and 8 leaves a remainder 3 in each case but when divided by 9 leaves remainder 0. The sum of digits of x is

- (a) 24
- (b) 21
- (c) 22
- (d) 18

10. The sum of the HCF and LCM of two number is 680 and the LCM is 84 times the HCF. If one of the number is 56, the other is:

- (a) 84
- (b) 12
- (c) 8
- (d) 96

11. Two poles of equal height are standing opposite to each other on either side of a road which is 100m wide. From a point between them on road, angle of elevation of their tops are 30° and 60° . The height of each pole (in meter) is

- (a) $25\sqrt{3}$
- (b) $20\sqrt{3}$

- (c) $28\sqrt{3}$
- (d) $20\sqrt{33}$ m

12. A helicopter, at an altitude of 1500m, finds that two ships are sailing towards it, in the same direction. The angles of depression of the ships as observed from the helicopter are 60° and 30° respectively. Distance between the two ships, in metres is

- (a) $100\sqrt{3}$
- (b) $350\sqrt{3}$
- (c) $500\sqrt{3}$
- (d) $450\sqrt{3}$

13. The angle of elevation of the top of an unfinished pillar at a point 150 metres from its base is 30° . The height (in metres) that the pillar must be raised so that its angle of elevation of the same point may be 45° , is (taking $\sqrt{3} = 1.732$)

- (a) 63.4
- (b) 86.6
- (c) 126.8
- (d) 173.2

14. If the angle of elevation of the sun decreases from 45° to 30° , then the length of the shadow of a pillar increases by 60m. The height of the pillar is

- (a) $60(\sqrt{3}+1)$ m
- (b) $30(\sqrt{3}-1)$ m
- (c) $30(\sqrt{3}+1)$ m
- (d) $60(\sqrt{3}-1)$ m

15. A man on the top of a tower, standing on the sea shore finds that a boat coming towards him takes 10 minutes for the angle of depression to change from 30° to 60° . How soon will the boat reach the sea shore?

- (a) 5 minutes
- (b) 7 minutes
- (c) 10 minutes
- (d) 15 minutes

16. Two ships are sailing in the sea on the two sides of a light house. The angle of elevation of the top of the light house as observed from the two ships are 30° and 45° respectively. If the light house is 100 m high, the distance between the two ships is : (take $\sqrt{3} = 1.73$)

- (a) 173 m/मी.
- (b) 200 m/मी.
- (c) 273 m/मी.
- (d) 300 m/मी.

17. A telegraph post is bent at a point above the ground. Its top just touches the ground at a distance of $8\sqrt{3}$ m from its feet and makes an angle of 30° with the horizontal. The height (in metre) of the post is

- (a) 12
- (b) 16
- (c) 18
- (d) 24

18. The average rainfall for a week excluding Saturday was 0.5 cm. But there was a heavy rain on Saturday and the average rainfall for the week raised by 1.5 cm. Then the rainfall on Saturday is:

- (a) 6 cm
- (b) 7.5 cm
- (c) 11 cm
- (d) 6.5 cm

19. If the average of 5 consecutive integers is x then, find the average of next to next 5 consecutive integers.

- (a) $x+5$
- (b) $x+5$
- (c) $x+10$
- (d) $x+25$

20. A team of 8 persons joins in a shooting competition. The best marksman scored 85 points. If he had scored 92 points, the average score for the team would have been 84. The number of points the team scored was

- (a) 672
- (b) 665
- (c) 645
- (d) 588

ANSWERS

- 1. c**
- 2. c**
- 3. b**

4. b

5. c

6. b

7. c

8. a

9. d

10. d

11. a

12. a

13. a

14. c

15. a

16. c

17. d

18. c

19. c

20. b

