

**P.E.S. College of Engineering, Mandya - 571 401***(An Autonomous Institution affiliated to VTU, Belgaum)***Third Semester, MCA - Semester End Examination; Dec. - 2019****Aptitude and Reasoning Development Beginner (ARDB)****(Common to all Branches)***Time: 1½hr**Max. Marks: 50***Instructions:****i) Questions 1 - 50 carry one mark each; Put a (✓) mark against correct option in the answer sheet.**

1. X can do a piece of work in 20 days. He worked at it for 5 days and then Y finished it in 15 days. In how many days can X and Y together finish the work?  
A. 10 Days                      B. 15 Days                      C. 18 Days                      D. 24 Days
2. X can do a piece of work in 30 days. Y can do it in 20 days, and Z can do it in 24 days. In how many days will they all do it together?  
A. 6 Days                      B. 5 Days                      C. 4 Days                      D. 8 Days
3. A box contains three white balls, four black balls and three red balls. The number of ways in which three balls can be drawn from the box so that at least one of the balls is black is  
A. 50                      B. 100                      C. 150                      D. 200
4. The number of straight lines that can be drawn out of 12 points of which 8 are collinear is  
A. 39                      B. 29                      C. 49                      D. 59
5. A tradesman marks his goods 25% above the cost price and allows his customers 12 % reduction on their bills. What percent profit does he make?  
A. 14 %                      B. 10%                      C. 18%                      D. 12.5%
6. In order to maintain the price line, a trader allows a discount of 12 % on the marked price of goods in his shop. However, he still makes a gross profit of 32 % on the cost price. Find the profit percent he would have made on the selling price had he sold at the marked price.  
A. 28.07 %                      B. 50 %                      C. 31.21 %                      D. 23 % E. 40%
7. The seven digit number 43567X is divisible by 3, where X is a single digit whole number. Find X.  
A. 2                      B. 5                      C. 8                      D. All of these
8. The six digit number 54321A is divisible by 9 where A is a single digit whole number. Find A.  
A. 0                      B. 2                      C. 4                      D. 3
9. The HCF of two numbers is 29 & their sum is 174. The possible numbers are  
A. 1,174                      B. 74,100                      C. 29, 154                      D. 29, 145
10. Find the side of the largest square slab which can be paved on the floor of a room 5 meters 44cm long and 3 meters 74 cm broad.  
A. 56 cm                      B. 42 cm                      C. 38 cm                      D. 34 cm
11. In ABC College, 63% of students are less than 20 years of age. The number of students more than 20 years of age is 2/3 of number of students of 20 years of age which is 42. What is the total number of students in the ABC College?  
A. 75                      B. 90                      C. 130                      D. 200
12. A student erroneously multiplied a number by 2/5 instead of 5/2. What is the percentage error in the calculation?  
A. 24%                      B. 54%                      C. 74%                      D. 84%
13. A card is drawn from a pack of 52 cards. What is the probability that the card is a Queen?  
A. 1/52                      B. ¼                      C. 1/16                      D. None of these

14. Two cards are drawn in succession from a pack of 52 cards, without replacement. What is the probability, that the first is a Queen and the second is a Jack of a different suit?  
 A.  $1/52$                       B.  $1/13$                       C.  $4/13$                       D.  $1/221$
15. Two dice are thrown, what is the probability that both the dices are not having the same number.  
 A.  $1/4$                       B.  $5/6$                       C.  $1/9$                       D.  $1/12$
16. In a certain code 'LIMCA' is written as 'HJLDZ'. Which of the following words is written as 'IFWJBP'?  
 A. M E X I C O                      B. MERCURY                      C. JAPAN                      D. MIDNIGHT
17. In certain code 'HILTON' is written as 'I H T L N O'. How is 'BILLION' written in that code?  
 A. IBLLION                      B. IBOILLN                      C. IBLLOIN                      D. IBLOILN

**DIRECTIONS for questions 18 & 19: In each of the questions below are given three statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.**

18. **Statements:** Some eyes are ears. Some ears are lungs. All lungs are hands

**Conclusion:**

- |                          |                         |
|--------------------------|-------------------------|
| I. Some hands are eyes.  | II. Some hands are ears |
| III. Some lungs are eyes | IV. No hand is eye      |
| A. None follow           | B. Only IV follows      |
| C. Only II follows       | D. Only III follows     |

19. **Statements:** All liquids are solids. Some solids are gases. All gases are clouds

**Conclusion:**

- |                             |                             |
|-----------------------------|-----------------------------|
| I. Some clouds are solids   | II. Some clouds are liquids |
| III. Some gases are liquids | IV. Some solids are clouds  |
| A. None follows             | B. Only I and II follow     |
| C. Only III and IV follow   | D. Only I and IV follow     |

20. An article is bought for Rs.600 and sold for Rs.500, find the loss percent?

- |                      |              |           |                      |
|----------------------|--------------|-----------|----------------------|
| A. $16\frac{4}{3}\%$ | B. $100/3\%$ | C. $16\%$ | D. $16\frac{2}{3}\%$ |
|----------------------|--------------|-----------|----------------------|

21. It's not the teachers BUt the director of the school who on the COUrse schedUle.

- |           |            |
|-----------|------------|
| A. decide | B. decides |
|-----------|------------|

22. Forty percent of the milk been sold since the morning.

- |        |         |
|--------|---------|
| A. has | B. have |
|--------|---------|

23. It is only Mike, not his classmates that \_ lUnch in the classroom.

- |        |         |
|--------|---------|
| A. eat | B. eats |
|--------|---------|

24. Everyone at the SUpermarket looking for the missing girl.

- |        |         |
|--------|---------|
| A. was | B. were |
|--------|---------|

25. Either my Uncle or my grandparents \_ going to bUy me a laptop.

- |       |        |
|-------|--------|
| A. is | B. are |
|-------|--------|

26. The Moon is a barren, rocky world \_\_\_\_\_ air and water

- |            |       |         |       |
|------------|-------|---------|-------|
| A. Without | B. to | C. from | D. in |
|------------|-------|---------|-------|

27. The dog ran

- |         |         |           |            |
|---------|---------|-----------|------------|
| A. Into | B. from | C. behind | D. without |
|---------|---------|-----------|------------|

28. Sweater will protect you \_\_\_\_\_ cold.

- |         |       |        |         |
|---------|-------|--------|---------|
| A. From | B. to | C. for | D. with |
|---------|-------|--------|---------|

29. Students are responsible \_\_\_\_\_ any kind irresponsible behaviour.  
A. With                      B. to                      C. for                      D. from
30. Ramesh is sitting \_\_\_\_\_ of the laptop  
A. In front of              B. to                      C. with                      D. into
31. Shakespeare has written dramas appealing to all people of all ages.  
A. simple present              B. present continuous  
C. past perfect              D. present perfect
32. I shall visit the book fair tomorrow.  
A. simple past              B. simple present  
C. simple future              D. future continuous
33. ----- lion is a ferocious animal  
A. a                      B. an                      C. the                      D. no article
34. ----- unit means a measurement  
A. a                      B. an                      C. no article              D. the
35. He is ----- honest official.  
A. a                      B. an                      C. the                      D. no article
36. Taj mahal is built of ----- marble  
A. a                      B. an                      C. the                      D. no article
37. New York is ----- large city  
A. a                      B. an                      C. the                      D. no article
38. Are you attending ----- reception today  
A. a                      B. an                      C. the                      D. no article
39. ----- Oranges are grown in Nagpur  
A. a                      B. an                      C. the                      D. no article
40. She wants to become ----- engineer  
A. a                      B. an                      C. the                      D. no article
41. He is ----- European  
A. an                      B. a                      C. no article              D. the
42. Let us play ----- chess  
A. no article              B. a                      C. an                      D. the

**Directions: Read the passage. Then answer the questions below.**

There are many kinds of boats. One kind of boat is called a sailboat. A sailboat uses the wind to move. Wind makes a sailboat move in the water. The wind pushes the sailboat. Wind fills the sails. The sailboat moves when the wind blows. One kind of boat is called a motorboat. A motorboat uses a motor to move. The motor gives power to the boat. The motorboat moves when the motor is running. The motorboat makes a loud noise. One kind of boat is called a rowboat. A rowboat needs people to move it. People make a rowboat move in the water. People use oars to move a rowboat. Oars are long and flat. Oars go into the water. A rowboat moves when people use the oars. As you can see, there are many kinds of boats. 43. Which boat uses the wind to move? A. a sailboat B. a rowboat C. a motorboat

44. Which boat makes a loud noise?  
A. a sailboat                      B. a motorboat                      C. a rowboat
45. What is used to move a rowboat?  
A. wind                      B. a motor                      C. oars
46. According to the passage, oars are  
A. short and fat                      B. long and flat                      C. big and heavy

47. This passage is mainly about  
A. different kinds of boats                      B. where to use a rowboat                      C. how to make a boat
48. Which boat(s) can still move if there is no wind?  
I. a motorboat                      II. a rowboat                      III. a sailboat  
A. I only                      B. I and II only                      C. I, II, and III
49. Tom doesn't like loud noises. Which boat(s) does he probably like to ride in?  
I. a sailboat                      II. a rowboat                      III. a motorboat  
A. I only                      B. I and II only                      C. I, II, and III
50. What would be the best title for this passage?  
A. Boats that Make Noise  
B. The Sailboat and the Motorboat  
C. Three Kinds of Boats

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