# P.E.S. College of Engineering, Mandya - 571401 

(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: $11 / 2 h r$
Max. Marks: 50

## Instructions:

i) Questions 1-50 carry one mark each; Put a ( $(\mathbf{)}$ mark against correct option in the answer sheet.

1. Ram is twice as efficient as Sunita and can finish a piece of work in 25 days less than Sunita. Sunita can finish this work in how many days?
A. 45 Days
B. 30 Days
C. 90 Days
D. 50 Days
2. A can do a piece of work in 10 days, and B can do the same work in 20 days. With the help of C, they finished the work in 4 days. C can do the work in how many days, working alone?
A. 10 Days
B. 20 Days
C. 30 Days
D. 40 Days
3. The number of four-digit telephone numbers having at least one of their digits repeated is
A. 9,000
B. $1,00,00$
C. 3,240
D. 4960
4. In a cricket championship, there are 21 matches. If each team plays one match with every other team, the number of teams is
A. 7
B. 9
C. 10
D. None of these
5. By selling an article for Rs 600 more, Karthik would have made $5 \%$ profit on his sale instead of a $11 \%$ loss. What was his cost price?
A. Rs. 3750
B. Rs. 4000
C. Rs. 2250
D. Rs. 6,000
6. I make a profit of $20 \%$ by selling an article. What would be the profit percent if it were calculated on the selling price instead of the cost price?
A. $10 \%$
B. $20 \%$
C. $30 \%$
D. $16.67 \%$
7. Find the greatest 6 -digit number, which is a multiple of 12 .
A. 999980
B. 999990
C. 999984
D. None of these
8. Find the greatest three number which is multiple of 7 .
A. 993
B. 995
C. 994
D. None of these
9. What is the H.C.F. of $4 / 9,10 / 21$ and $20 / 63$ ?
A. $4 / 189$
B. $6 / 63$
C. 2/63
D. $20 / 21$
10. The H.C.F. of two numbers is 12 and their difference is 12 . Which of the following can be the numbers?
A. 66, 77
B. 70,84
C. 94,108
D. 84,96
11. What percentage of numbers from 1 to 30 has 1 or 9 in the unit's digit?
A. 12
B. 15
C. 20
D. 22
12. If $M=y \%$ of $z$ and $B=z \%$ of $y$, then which of the following must be true?
A. M is lesser than N .
B. M is more than N
C. Relation between M and N cannot be determined.
D. None of these
13. A dice is thrown, what is the probability that the number obtained is a prime number.
A. $1 / 6$
B. $1 / 8$
C. $1 / 2$
D. $1 / 3$
14. Find the probability of throwing a total of 8 in a single throw with two dice.
A. $1 / 36$
B. $5 / 36$
C. $25 / 36$
D. $12 / 36$
15. If a dice is thrown twice, what is the probability of not getting a one on either throw?
A. $1 / 12$
B. $1 / 18$
C. 25/36
D. $12 / 36$
16. In certain code 'FROZEN' is written as 'OFAPSG'. Then how would 'MOLTEN' be written in that code?
A. OFPOMN
B. OFSMPN
C. OFUMPN
D. OFUNPM
17. In a certain code 'ROAR' is written as 'URDU'. How is 'URDU' written in that code?
A. V X D Q
B. XUGX
C. ROAR
D. VSOV

DIRECTIONS for questions $18 \& 19$ : In each of the questions below are given three statements, followed by conclusions: I, II, III, 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: All Carrots are birds. Some telephones are Carrots. All bedsheets are telephone. Conclusion:
I. All bedsheet are birds
II. Some bedsheet are birds
III. Some birds are telephone
IV. All telephone are birds
A. Only I follows
B. Only II follows
C. Only I and III follow
D. Only III follows
19. Statements: Most CPUs are keyboards. No keyboard is a Mouse. All Mouses are CPU.

## Conclusion:

I. Some keyboards are CPU
II. All CPU's are Mouse
III. No Mouse is a keyboard
IV. Some Mouse are keyboard
A. Only I follows
B. Only II and III follow
C. Only I and III follow
D. Only II follows
20. An article is bought for Rs. 675 and sold for Rs. 900 , find the gain percent?
A. $162 / 3 \%$
B. $30 \%$
C. 33 1/3\%
D. $331 / 6 \%$
21. Neither of the two stUdents _ in the library now.
A. is
B. are
22. A pair of jeans _ in the bathroom.
A. is
B. are
23. My glasses on the table this morning.
A. was
B. were
24. Mathematics considered to be a diffiCUlt school SUbject among stUdents.
A. is
B. are
25. Five and seven twelve.
A. is
B. are
26. We are going to watch movie $\qquad$ this coming Friday.
A. To
B. on
C. in
D. from
27. Two persons are sitting $\qquad$ chair
A. To
B. on
C. in
D. from
28. They went to Manali ____ train.
A. By
B. from
C. on
D. into
29. There is another man sitting $\qquad$ to Sachin
A. Opposite
B. in
C. on
D. by
30. The train went $\qquad$ the tunnel
A. To
B. from
C. in
D. through
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. Taj mahal is built of ----- marble
A. a
B. an
C. the
D. no article
34. He is ----- European
A. an
B. a
C. no article
D. the
35. Let us play ----- chess
A. no article
B. a
C. an
D. the
36. ----- lion is a ferocious animal
A. a
B. an
C. the
D. no article
37. ----- unit means a measurement
A. a
B. an
C. no article
D. the
38. He is ----- honest official.
A. a
B. an
C. the
D. no article
39. New York is ----- large city
A. a
B. an
C. the
D. no article
40. Are you attending ----- reception today
A. a
B. an
C. the
D. no article
41. ----- Oranges are grown in Nagpur
A. a
B. an
C. the
D. no article
42. She wants to become ----- engineer
A. a
B. an
C. the
D. no article

## 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

