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**ENT - 23**

**Total No. of Pages : 16**

**SHIVAJI UNIVERSITY, KOLHAPUR**  
**MCA (Science) Entrance Examination May -2023**  
**Sub. Code: 58729**

**Day and Date : Tuesday, 18-07-2023**

**Total Marks : 100**

**Time : 01.00 p.m. to 02.30 p.m.**

- Instructions:** 1) All questions are COMPULSORY.  
2) There is NO negative marking.  
3) Each question carries ONE mark.

- 1) Who has been crowned Miss Universe India 2023?
  - a) Divita Rai
  - b) Aishwarya Rai
  - c) Madhuri Sharma
  - d) Rani Ramcharan
- 2) Which country launched the world's first nationwide 5G mobile network?
  - a) Japan
  - b) Malaysia
  - c) South Korea
  - d) China
- 3) A billionth of a second is defined as a .....
  - a) picoseconds
  - b) milliseconds
  - c) microseconds
  - d) nanoseconds
- 4) Kisan Credit Cards are issued to .....
  - a) all the categories of farmers
  - b) persons engaged in fisheries
  - c) persons engaged in animal husbandry
  - d) all of these
- 5) Which company has overtaken Apple as world's most valuable brand in 2023?
  - a) Microsoft
  - b) Google
  - c) Walmart
  - d) Amazon





18) If "+" implies "subtract", "\*" implies "division", "-" implies "addition", "/" implies "multiply",  $5 - 3/6 * 3 + 4 = ?$

- a) 6
- b) 7
- c) 8
- d) 9

19) In a span of 24 hours, how many times would the two hands of a clock point exactly in opposite directions?

- a) 10
- b) 11
- c) 22
- d) 24

20) How many consonants are present between the first and fourth vowel in the sequence of English alphabet ?

- a) 13
- b) 12
- c) 11
- d) 10

21) Choose the correct alternative having the same relation as the words on one side of (::) the given pair:

**Confirmed: Inveterate :: Financial: ?**

- a) Economic
- b) Incredible
- c) Bankrupt
- d) Knot

22) Find out the **ODD** one from the given options:

- a) Rebuke
- b) Admonish
- c) Reprimand
- d) Commend

23) What number should come next in the series: 4, 7, 12, 19, 28.....

- a) 49
- b) 36
- c) 30
- d) 39

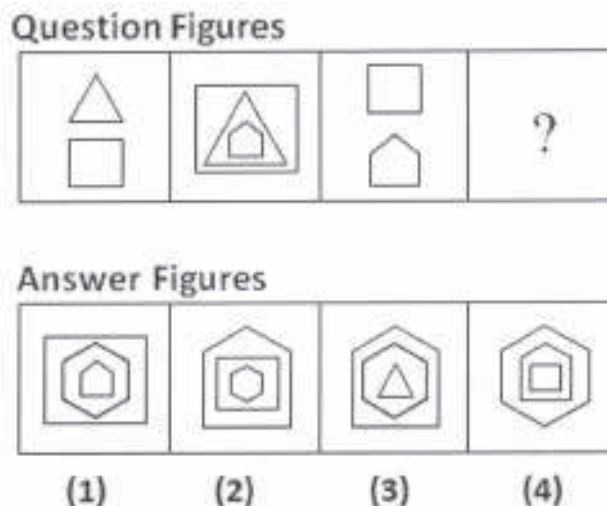
24) What should come next in the series: JAK, KBL, LCM, MDN, ?

- a) NEO
- b) MEN
- c) OEN
- d) NEM

25) If South-East becomes North, North-East becomes West and so on. What will West become?

- a) North-West
- b) North-East
- c) South-East
- d) South-West

26) In the following question, first and second figure from the Question figures follow a relationship. Which **Answer figure** should replace the question mark (?) to have the same relationship with the third figure:



- a) 1
- b) 2
- c) 3
- d) 4

27) Sumptuous means .....

- a) Delirious
- b) Gorgeous
- c) Perilous
- d) Luxurious

28) Sound of apes is called .....

- a) Clang
- b) Gibber
- c) Moan
- d) Bray

- 29) A person who is unable to pay debts .....
- a) Bankrupt                                      b) Indebted
- c) Impoverished                                d) Insolvent
- 30) Despite the ..... of the storm, the construction workers continued to work.
- a) magnitude                                    b) duration
- c) intensity                                      d) frequency
- 31) The value of a motor depreciates at the rate of 10% every year. It was purchased 3 years ago. If its present value is Rs. 5832, its purchase price was:
- a) 10000    b) 8000
- c) 12000    d) 8500
- 32) A person incurs a loss of 5% by selling a watch for Rs. 1140. At what price should he sell to earn 5% profit.
- a) Rs. 1200                                      b) Rs. 1230
- c) Rs. 1260                                      d) Rs. 1290
- 33) The difference between the simple interest received from two different sources on Rs. 3000 for 3 years is Rs. 27. The difference between their rates of interest is:
- a) 0.1%    b) 0.2%
- c) 0.3%    d) 0.4%
- 34) A sum of money placed at compound interest doubles itself in 4 years. In how many years will it amount to 8 times?
- a) 6 years    b) 10 years
- c) 12 years                                         d) 8 years

- 35) In what time an athlete can cover a distance of 500 m if he runs at a speed of 36 kmph?
- a) 50 seconds                                      b) 55 seconds
- c) 72 seconds                                      d) 80 seconds
- 36) A train 800 m long is running at a speed of 78 km/hr. If it crosses a bridge in 1 minute, then the length of the bridge is:
- a) 540 m    b) 130 m
- c) 500 m    d) 260 m
- 37) The speed of a boat in still water is 15 km/hr and the rate of current is 3 km/hr. The distance travelled downstream in 12 minutes is:
- a) 1.2 km                                        b) 1.8 km
- c) 2.4 km                                        d) 3.6 km
- 38) In a kilometre race, A beats B by 200 metres or 25 seconds. Speed of B is:
- a) 8 m/s                                         b) 10 m/s
- c) 15 m/s                                        d) 20 m/s
- 39) Anil alone can complete a work in 10 days while Bikash alone can complete it in 15 days. In how many days can they together complete the same work?
- a) 4 days                                        b) 5 days
- c) 6 days                                        d) 8 days
- 40) Two pipes A and B can fill a tank in 20 and 30 minutes respectively. If both the pipes are opened together, the tank will be filled in:
- a) 10 min                                        b) 12 min.
- c) 14 min                                        d) 16 min

- 41) In a class of 10 students, the average marks obtained by them is 30. The average marks obtained by the first six students is 20, and the last five is 42. The marks obtained by the sixth student is:
- a) 35  
b) 27  
c) 30  
d) 40
- 42) An amount of Rs.6240 is divided among A, B and C in the ratio  $1/2 : 1/3 : 1/4$ . Find the share of C?
- a) Rs. 1280  
b) Rs. 1380  
c) Rs. 1400  
d) Rs. 1440
- 43) A dairy man pays Rs 64 per litre of milk. He adds water and sells the mixture at Rs 80 per litre thereby making a profit of 37.5%. Find the ratio of the water to milk in the sold product?
- a) 1:15  
b) 1:20  
c) 1:12  
d) 1:10
- 44) Amit is younger than Balbeer by 8 years. If the ratio of their ages is 3:5, find the age of Amit(in years).
- a) 10  
b) 12  
c) 14  
d) 16
- 45) The least number which when divided by 12, 27 and 35 leaves 6 as remainder, is:
- a) 3576  
b) 7164  
c) 7146  
d) 4786
- 46) In how many ways 4 persons can be seated on 4 chairs?
- a) 20  
b) 24  
c) 26  
d) 120







60) It is our problem, not .....

- a) their
- b) theirs
- c) there
- d) there's

61) As there were no buses, she ..... home last night

- a) has to walk
- b) has to walked
- c) had to walk
- d) had to walked

62) I saw a ..... of cows in the field.

- a) group
- b) herd
- c) swarm
- d) flock

63) Rajeev failed in the examination because none of his answers were..... to the questions asked.

- a) allusive
- b) revealing
- c) pertinent
- d) referential

64) Man who has committed such an ..... crime must get the most severe punishment.

- a) injurious
- b) uncharitable
- c) unworthy
- d) abominable

65) This is a good ..... for a picnic.

- a) plot
- b) spot
- c) scene
- d) landscape

66) Ram the prince of Ayodhya ..... his siblings.

- a) adorned
- b) adored
- c) vitiated
- d) endangered

67) A wise person is one who learns from his .....

- a) errors
- b) mistakes
- c) falsities
- d) lies

68) I wonder whether I ..... ever see him again.

- a) shall
- b) will
- c) should
- d) would

69) The dog has been ..... by the car.

- a) run out
- b) run over
- c) run into
- d) run for

70) ..... you apologize I shall punish you.

- a) until
- b) unless
- c) till
- d) None of these

71) The function  $f: A \rightarrow B$  defined by  $f(x)=4x+7, x \in \mathbb{R}$  is .....

- a) one-one
- b) many-one
- c) odd
- d) even

72) The value of  $\sin (2\tan^{-1} (0.75))$  is equal to .....

- a) 0.75
- b) 1.5
- c) 0.96
- d)  $\sin 1.5$

73) If a matrix  $A$  is both symmetric and skew-symmetric, then

- a)  $A$  is a diagonal matrix
- b)  $A$  is a zero matrix
- c)  $A$  is a scalar matrix
- d)  $A$  is a square matrix



81) Find the equation of plane passing through the points P(1, 1, 1), Q(3, -1, 2), R(-3, 5, -4).

a)  $x+2y = 0$

b)  $x-y = 2$

c)  $-x+2y = 2$

d)  $x + y = 2$

82) The locus represented by  $xy+yz = 0$  is .....

a) A pair of perpendicular lines

b) A pair of parallel lines

c) A pair of parallel planes

d) A pair of perpendicular planes

83) If  $P(A) = 0.4$ ,  $P(b) = 0.8$  and  $P(B|A) = 0.6$ , then  $P(A \cup B)$  equal to .....

a) 0.24

b) 0.3

c) 0.48

d) 0.96

84) The number of elements in a null set is .....

a) zero

b) one

c) two

d) infinite

85) If a set A has 3 elements then find the number of elements in power set of set A.

a) 1

b) 2

c) 8

d) 27

86) If set  $A = \{1,2,3,4\}$  and  $B = \{3,4,5,6\}$ . Find  $B-A$ .

a)  $\{1,2,3,4,5,6\}$

b)  $\{3,4\}$

c)  $\{1,2\}$

d)  $\{5,6\}$

87) The finite set can have number of elements.

a) only zero

b) only one

c) at least one

d) zero or more but not infinite



