Date:
Total number of questions: 100
Time: 2 Hours (10.30 AM-12.30 PM)

Name of the student: _____
Seat number: IMCOM-E1-2021-

Instructions: *(i) Each question carries 1 mark.*
(ii) No negative marking.
(iii) Answers are to be marked on the answer sheet provided.
(iv) Use of calculators is allowed.
(v) Use of any other electronic gadgets is strictly prohibited.

SECTION-A: MATHMATICAL APTITUDE

1) The degree of a quadratic expression is
    a) 1
    b) 3
    c) 2
    d) 0

2) The selling price of an article is Rs. 500 and the marked price is Rs. 600. The percentage of discount offered is
    a) 17%
    b) 16%
    c) 16.67%
    d) 20%

3) The simple interest on a sum of Rs. 5000 invested for 5 years @ 8% p.a. is
    a) Rs. 4000
    b) Rs. 400
    c) Rs. 2000
    d) Rs. 200

4) The L.C.M. of 15 and 9 is
    a) 54
    b) 135
    c) 45
    d) 3

5) Alka spends 90% of the money that she receives every month, and saves Rs. 120. Her monthly income is
    a) Rs.1080
    b) Rs. 1280
    c) Rs. 1200
    d) Rs. 1000

6) The frequencies of classes 0 to 5, 5 to 10, 10 to 15 and 15 to 20 are 3, 8, 7, 2. The mean of this data is
   a) 9
   b) 8
   c) 20
   d) 9.5

7) Prachi bought 160 kg of mangoes at Rs. 48 per kg and sold 70% of them @ Rs. 70 per kg. The remaining she sold at Rs. 40 per kg. The overall gain or loss was
   a) 27.08% loss
   b) 27.08% gain
   c) Neither gain nor loss
   d) Cannot be determined

8) The average of first 50 natural numbers is ………….
   a) 1275
   b) 25.5
   c) 12.75
   d) 25.25

9) The number of 3-digit numbers divisible by 6, is ………….. .
   a) 149
   b) 150
   c) 151
   d) 148

10) Which of the following numbers gives 240 when added to its own square?
   a) 15
   b) 14
   c) 13
   d) 16

11) The simplest form of 1.5 : 2.5 is …………… .
   a) 3:5
   b) 1:2
   c) 6:10
   d) 1:1

12) The wages of 10 workers for a six-day week is Rs. 1200. What are the wages for a day for 4 workers?
   a) Rs. 50
   b) Rs. 300
   c) Rs. 80
   d) Rs. 40

13) The difference between simple interest and compound interest on a certain sum of money for 2 years is Rs. 500. The sum when the interest is compounded annually is __
   a) Rs. 48000
   b) Rs. 50000
   c) Rs. 52000
   d) Rs. 51000

14) In a two-digit number, the digit in the unit's place is two more than three times of the digit in ten's place. If the sum of the two digits is 6, the number is _____
   a) 51
   b) 15
   c) 42
   d) 24

15) What percentage should be added to 40 to make it 50?
   a) 25
   b) 50
   c) 10
   d) 20

16) Which is the smallest fraction of the following?
   a) 6/7
   b) 7/6
   c) 3/4
   d) 2/3

17) A car covers a distance of 200km in 2 hours 40 minutes, whereas a jeep covers the same distance in 2 hours. What is the ratio of their speed?
   a) 3:4
   b) 4:3
   c) 6:5
   d) 5:6

18) A number is greater than 3 but less than 8. Also the number is greater than 6 but less than 10. What is the number?
   a) 4
   b) 5
   c) 6
   d) 7

19) If $b^2 - 4ac > 0$, and perfect square, then roots of $ax^2 + bx + c = 0$ are
   a) rational
   b) irrational
   c) equal
   d) imaginary

20) If 2 sets A and B are given, then the set consisting of all the elements which are either A or in B or in both is called
   a) Intersection of A and B
   b) union of A and B
   c) complement of A
   d) complement of B

21) The sum of squares of two numbers is 80 and the square of difference between the two numbers is 36. The product of two numbers.
   a) 11
   b) 22
   c) 36
   d) 42

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22) The quotient in a division sum is 403. The divisor is 100 and the remainder is 58. The dividend is ……… .
    a) 43058
    b) 40358
    c) 40538
    d) 40835

23) Each edge of a cube is increased by 50%. What will be the percent increase in its volume?
    a) 150%
    b) 50%
    c) 200.5%
    d) 237.5%

24) A long rope has to be cut to make 23 small pieces. If it is double folded to start with how many times does it need to be cut?
    a) 9
    b) 23
    c) 11
    d) 12

25) Find the median of the given data: 13, 16, 12, 14, 19, 12, 14, 13, 14.
    a) 13
    b) 13.5
    c) 14.5
    d) 14

26) A car can cover a distance of 522 km on 36 litres of petrol. How far can it travel on 14 litres of petrol?
    a) 302
    b) 213
    c) 223
    d) 203

27) The locus of a point in a plane equidistant from a fixed point is known as
    a) Line
    b) Segment
    c) Circle
    d) Square

28) The set of all the ordered pair (x, y) which satisfies the system of equations is called
    a) Solution Set
    b) Null Set
    c) Subset
    d) Complex Set

29) The value of third proportional to 4, 12 should be
    a) 20
    b) 18
    c) 36
    d) 34

30) If two quantities are related in such a way that increase in 1 quantity causes increase in other quantity, then this variation is said to be
    a) Inverse Variation
    b) Direct Variation
    c) Joint Variation
    d) Extreme Variation

31) The most frequent occurring observation in the data is called
    a) Mean
    b) Median
    c) Mode
    d) Standard Deviation

32) A tabular arrangement for classifying data into different groups is called
    a) Standard Deviation
    b) Frequency Polygon
    c) Frequency Distribution
    d) Categorisation

33) The measures that are used to determine the degree or extent of variation in a data set are called
    a) Mean
    b) Median
    c) Measures of Dispersion
    d) Measures of Central Tendency

34) Factorization of $a(a - b + c) - bc$ is equal to
    a) $(a - b)(a + c)$
    b) $(a - b)(a - c)$
    c) $(a + b)(a + c)$
    d) $(a - b)(a - c)$

35) If $x - a$ is a factor of $P(x)$, then $P(a)$ should be
    a) 1
    b) a
    c) x
    d) 0

36) If $x = 0$ then $|x|$ is equal to
    a) x
    b) 0
    c) -1
    d) 1

37) The value of 'x' in $\sqrt{(x - 1)} = 4$ should be
    a) 5
    b) 15
    c) 6
    d) 17

38) After selling 50 pens a shopkeeper lost an amount equivalent to the selling price of
   10 pens. The percentage of loss incurred is
   　　　a) 16
   　　　b) 20
   　　　c) 25
   　　　d) 16.66

39) A number is increased by 20% and then decreased by 20%, the percentage increase or
   decrease is
   　　　a) 4% decrease
   　　　b) 4% increase
   　　　c) 6% increase
   　　　d) 96% decrease

40) The mean proportional or geometric mean of the numbers 4 and 9 is
   　　　a) 36
   　　　b) 4
   　　　c) 9
   　　　d) 6

SECTION-B: LOGICAL REASONING

41) Arrange the following words in a meaningful sequence.
   1. Infection
   2. Consultation
   3. Doctor
   4. Treatment
   5. Recovery
   Codes:
   　　　a) 1, 3, 4, 5, 2
   　　　b) 1, 3, 2, 4, 5
   　　　c) 1, 2, 3, 4, 5
   　　　d) 2, 3, 5, 1, 4

42) Manoj covered a distance of 50 m towards the North. He then turned to his left and
   walked 20 m. He again turned left and walked 60m. Finally, he turned to his right at
   an angle of 45°. In which direction is he moving finally?
   　　　a) South-East
   　　　b) South-West
   　　　c) North-West
   　　　d) North-East

43) In a certain code, 'REACTION' is written as 'RAETCOIN'. How is 'BEAUTY' written
   in that code?
   　　　a) BAETUY
   　　　b) BTUAEY
   　　　c) BTAUEY
   　　　d) None of these

44) Which word does not belong to others?
   a) Violin
   b) Guitar
   c) Flute
   d) Mandolin

45) Choose the pair that best represents a similar relationship to the one expressed in the original pair of words.

   Candle   lamp   floodlight
   hut   cottage   _____
   a) tent
   b) city
   c) dwelling
   d) house

46) Choose the pair that best represents a similar relationship to the one expressed in the original pair of words.
   FRAME: PICTURE
   a) Criminal: Crime
   b) River: Forest
   c) Nail: Hammer
   d) Binding: Book

47) CKDL, EKFL, GKHL, _, KKLL, find the missing letters.
   a) IJKL
   b) IKJL
   c) MNOP
   d) MNPQ

48) Which number would fill the empty space in the series; 4, 7, 12, 19, _, 39?
   a) 28
   b) 26
   c) 24
   d) 22

49) Find the next numbers in the series 42 40 38 35 33 31 28
   a) 25 22
   b) 26 23
   c) 26 24
   d) 25 23

50) Team A has scored more goals than Team B
   Team C has scored fewer goals than Team B
   Team A has scored fewer goals than Team C.
   If the first two statements are true, the third statement is
   a) True
   b) False
   c) Uncertain

51) During the past year, Josh saw more movies than Stephen.
    Stephen saw fewer movies than Darren.
    Darren saw more movies than Josh.
    If the first two statements are true, the third statement is
        a) True
        b) False
        c) Uncertain

52) Statement: You know that your suit is excellent when people ask about your tailor
    who tailored the suit.
    Assumptions:
    I. People do not ask about your tailor if your suit is not good.
    II. The people want to know the criterion of an excellent suit.
        a) Only assumption I is implicit
        b) Only assumption II is implicit
        c) Either I or II is implicit
        d) Neither I nor II is implicit

53) Statements:
    I) All heroes are villains.
    II) All villains are zeros.
    III) Some heroes are jokers.
    Conclusion:
    i) Some Jokers are heroes
    ii) Some villains are jokers
    iii) Some zeros are villains
        a) Only conclusion I, II follow
        b) All conclusions I, II, III follows
        c) Only conclusion I, III follow
        d) None of these

54) Choose a word which is most relevant to the word "book"
        a) Fiction
        b) Pages
        c) Pictures
        d) Learning

55) Here are some words translated from an artificial language.
    gorblflur means fan belt
    pixngorbl means ceiling fan
    arthtusl means tile roof
    Which word could mean "ceiling tile"?
        a) gorbltusl
        b) flurgorbl
        c) arthflur
        d) pixnarth

56) When all the digits in each of the given numbers are arranged in ascending order, which number becomes the highest?

      a) 435
      b) 224
      c) 786
      d) 823

57) Pointing to a photograph of a boy Mr.Ram said, "He is the son of the only son of my mother." How is Mr Ram related to that boy?

      a) Brother
      b) Uncle
      c) Cousin
      d) Father

58) B is the brother of A, and A is the son of C. D is C's father. How is B related to D?

      a) Grandfather
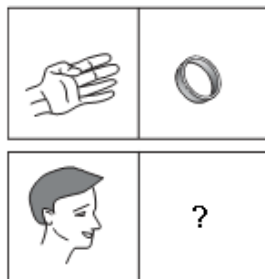   b) Brother
      c) Grandson
      d) Father

59) Look carefully at the sequence of symbols and find the correct pattern.

EmE | mmm | EⱱE | ⱱ ? ⱱ

Ⲙ   E   ⱱ   Ⲙ
(1)   (2)   (3)   (4)

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

60) Choose the picture that would go in the empty box so that the two bottom pictures are related in the same way as the top two are related.

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

SECTION-C: KNOWLEDGE OF COMMERCE

61) Which of the following is not the function of Reserve Bank of India (RBI)?
   a) Issue of bank notes
   b) Banker to Government
   c) To open saving bank account for general public
   d) Custodian of cash reserves of Commercial Banks

62) Which of the following is not a non-cash expenditure for a company?
   a) Expenditure on advertising
   b) Depreciation
   c) Goodwill impairment
   d) Amortisation

63) The income tax in India is
   a) Direct and Proportional
   b) Indirect and Progressive
   c) Direct and Progressive
   d) Indirect and Proportional

64) KYC means
   a) Keep Your Customers Cool
   b) Keep Your Credit Card
   c) Know Your Customers
   d) Keep Your Cool

65) The regulator of the insurance business in India is
   a) PFRDA
   b) IRDA
   c) FMC
   d) SEBI

66) Which of the following terms is not covered under General insurance?
   a) Marine Insurance
   b) Fire Insurance
   c) Motor Insurance
   d) Life Insurance

67) Value added services means
   a) Low cost products
   b) High cost products
   c) Additional services for the same cost
   d) Giving discounts

68) An increase in price of which of these products will have a ripple effect in increasing the prices of many products, thereby resulting in inflation?
   a) Smartphones
   b) Automobiles
   c) Petroleum
   d) Medicines

69) To which of the following sectors of the economy, the activity of agriculture and services belong to?
a) Primary and Tertiary respectively
b) Primary and Secondary respectively
c) Tertiary and Secondary respectively
d) Secondary and Quaternary respectively

70) Advertisements are required for
a) Boosting the production levels
b) Motivating the employees
c) Boosting the sales
d) All of these

71) Market share means
a) Market price of shares
b) Sensex
c) Share market
d) Share of business among peers

72) _____ are financial assets.
a) Bonds
b) Machines
c) Stocks
d) a) & c)

73) Which of the following is the internal user of financial statements?
a) Creditor of the business
b) Government agency
c) Shareholder of the business
d) Manager of the business

74) Disinvestment in Public Sector is called
a) Privatisation
b) Globlisation
c) Liberalisation
d) Industrialisation

75) According to ownership, A Government Company means ………
a) Whose paid-up share capital's 48%, shares are owned by Government
b) Whose paid-up share capital's 49% shares are owned by Government
c) Whose paid-up share capital's 50% shares are owned by Government
d) Whose paid-up share capital's 51% shares are owned by Government

76) Which of the following is not a banking related term?
a) SME Finance
b) Equinox
c) Overdraft
d) Sanctioning Authority

77) Bad loans in banking terminology are generally known as–
   a) BPOs
   b) Prime Asset
   c) NPAs
   d) CBS

78) Taj Group of hotels is a chain of hotels from
   a) Tatas
   b) Fortune
   c) Oberois
   d) Four Seasons

79) "Asli Masaale Sach Sach" is a tagline of _____
   a) Mohinder Das Hasmukhlaal Pvt Ltd.
   b) Mahashian Di Hatti Pvt Ltd.
   c) Manish Dey Hansraj Pvt Ltd.
   d) Monica Devi Hemlal Pvt Ltd

80) What is the tagline for V! (Vodafone Idea)
   a) Make. Believe
   b) Digital Life
   c) Together for Tomorrow
   d) Dare to Leap

SECTION-D: GENERAL KNOWLEDGE

81) The Palk Strait separates India from
   a) UAE
   b) Maldives
   c) Sri Lanka
   d) Pakistan

82) Which among the following is the tallest building in the world?
   a) Burj Khalifa
   b) Shanghai Tower
   c) Lotte World Tower
   d) Shanghai World Financial Center

83) Which organ of the human body does the Alzheimer's disease affect
   a) Stomach
   b) Brain
   c) Legs
   d) Ear

84) Which of the following is India's indigenous COVID-19 vaccine by Bharat Biotech developed in collaboration with the Indian Council of Medical Research (ICMR) - National Institute of Virology (NIV)
   a) Sputnik V
   b) Covishield
   c) Covaxin
   d) ComVac

85) Prime Minister Narendra Modi launched 'Swachha Bharat Mission' officially on
   a) Independence Day
   b) Republic Day
   c) Gandhi Jayanti
   d) Environment Day

86) 'Kyoto Protocol' is related to
   a) Air pollution
   b) Green House gases
   c) Climate change
   d) Water pollution

87) Which stock exchange was the first in Asia
   a) Bombay Stock Exchange
   b) National Stock Exchange
   c) Shanghai Stock Exchange
   d) Tokyo Stock Exchange

88) _____ is the co-founder and former executive chairman of Alibaba Group, a multinational technology conglomerate.
   a) Liu Chuanzhi
   b) Jack Ma
   c) Carl Persson
   d) Lawrence Ellison

89) Jeff Bezos founded the e-commerce solution _____ in 1994 in his garage in Seattle.
   a) Flipkart
   b) Limeroad
   c) Snapdeal
   d) Amazon

90) Which are the BRIC countries?
   a) Brazil, Russia, India and Canada
   b) Britain, Russia, India and China
   c) Brazil, Russia, India and China
   d) Britain, Russia, India and Canada

91) A B De Villiers is associated with the game of –
   a) Badminton
   b) Football
   c) Hockey
   d) Cricket

92) Name the media company that purchased the legendary studio of 21st Century Fox –
   a) Viacom
   b) Time Warner
   c) Sony
   d) Disney

93) 'Wings of Fire' is the auto-biography of –
   a) K. Natwar Singh
   b) A.P.J. Abdul Kalam
   c) L.K.Advani
   d) Sachin Tendulkar

94) Which state is to the north of Goa
   a) Kerela
   b) Andhra Pradesh
   c) Maharashtra
   d) Tamil Nadu

95) _____ is an American politician who is the vice president-elect
of the United States.
   a) Mike Pence
   b) Kamala Harris
   c) Hillary Clinton
   d) Susan Rice

96) Who was the 1st Prime Minister of India?
   a) Pandit Jawaharlal Nehru
   b) Lal Bahadur Shastri
   c) Gulzar Lal Nanda
   d) None of the Above

97) Processing of a data file to reduce its size for storage on disk is termed as
_____
   a) Amplification
   b) Reduction
   c) Compression
   d) Rarefaction

98) In a 14" TV or computer monitor, the dimension of 14" stands for
   a) The length of the screen
   b) The breadth of the screen
   c) The diagonal of the screen
   d) The maximum length of the screen

99) The term 'Butterfly Stroke' is referred to in which sport?
   a) Tennis
   b) Volleybal
   c) Wrestling
   d) Swimming

100) Who among the following famous music composers was deaf?
   a) Beethovan.
   b) Bach J.S.
   c) Richard Strauss
   d) Johannes Brahms

_____

ROUGH WORKSHEET

ROUGH WORKSHEET