

MTS EXAMINATION 2012

QUESTION PAPER

Class : IX

9

Register No :

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Marks : 100

Time : 2 hrs

General Instructions

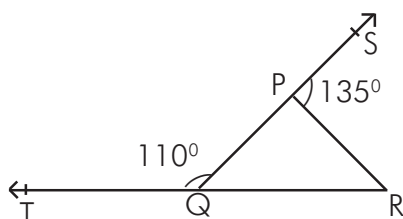
1. Candidates are supplied with an OMR Answer Sheet.
2. Answer the questions in the OMR Sheet by shading the appropriate bubble.
3. Shade the bubbles with black ball pen.
4. Each question carries one mark.
5. Use the space provided in the last page for rough work.

Read the passage and answer the questions from 1 to 4.

Many men and women are so money minded that they do not undertake any serious work that does not pay. They believe that it is foolish to exert themselves for study and brain work, which cannot be converted into cash. "Hard work only for money and then plenty of play and pleasure", this seems to be their rule of life. They value intellect only as the key to material prosperity and regard personal, mental development as a foolish fact. This miserable materialistic psychology is deep rooted in all classes of society.

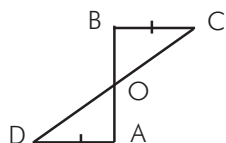
1. According to the passage, money minded people value
A. intellect B. material benefits C. mental pleasure D. hard work
2. Which of the following is true, in the context of the passage?
A. People from all walks of life exhibit materialism
B. Children do not show materialism
C. No one is materialistic
D. Only the rich are not materialistic
3. People give importance to
A. personal mental development B. materialistic psychology
C. material prosperity D. rule of their life
4. Pick out a word that is most nearly the same in meaning to the word key in the passage.
A. approach B. attitude C. answer D. access
5. Choose the passive form of the following sentence from among the options.
Who taught you Maths?
A. Maths was taught by whom? B. By whom were you taught Maths?
C. Who was Maths being taught? D. Who was Maths having taught?
6. Choose the correct option to fill in the blanks.
Rani drink tea without sugar, as there was no sugar at home.
A. had to B. should C. can D. must
7. When I reached home last night, my mother to bed.
A. went B. was going C. had already gone D. gone
8. The study of the origin and history of words is
A. entomology B. phonology C. phonetics D. etymology
9. Fill in with the correct options.
The main aim of Rural Development Programme is the of poverty.
A. abolition B. alleviation C. amalgamation D. accentuation

10. Whatever happens, he will *stick to his guns*. The italicized phrase means
 A. remain faithful to the cause B. be violent
 C. remain indifferent D. be confused
11. What is meant by Black Blizzards?
 A. Devastating earthquakes B. High rising Sea Waves
 C. Terrifying dust storms D. Ferocious floods
12. Which one of the following is not a pastoral community of Afirca?
 A. The Bedouins B. The Berbers C. The Maasai D. Dhangars
13. Which Forest Act divided Indian forests into three categories-reserved, protected and village forests?
 A. The 1660 Forest Act B. The 1878 Forest Act
 C. The 1760 Forest Act D. The 1881 Forest Act
14. Which area of India is the home of 'Royal Bengal Tiger'?
 A. Sundarban Delta B. Western Ghats C. Ganga Delta D. Ambala
15. Which city is located on the water divide between the Indus & Ganga river system?
 A. Amritsar B. Panipat C. Ambala D. Jayadishpur
16. Which one of the following describes the drainage patterns resembling the branches of a tree?
 A. radial B. centrifuged C. trellis D. dendritic
17. What is the accepted average calories required of a person per day in urban area?
 A. 2300 calories B. 2100 calories C. 2200 calories D. 3000 calories
18. Who led the movement called 'Nyaya Yudh'?
 A. Chaudhary Devi Lal B. Gulzari Lal Nanda
 C. V P Singh D. A B Vajpayee
19. Who was the president of Chile before a military coup established dictatorship there?
 A. Angusto Pinchet B. General Musharaff
 C. Salvader Allende D. General Jeruzelski
20. If $x-2$ is a factor of the polynomial $x^2-3x+5a$, then find the value of 'a'
 A. $-\frac{5}{2}$ B. $\frac{5}{2}$ C. $-\frac{2}{5}$ D. $\frac{2}{5}$
21. Which one of the following options is true?
 $y=3x+5$ has
 A. a unique solution B. infinitely many solutions
 C. finite solutions D. only two solutions
22. Equation of x-axis in one variable is
 A. $y=0$ B. $x=a$ C. $y=a$ D. $x=0$
23. In the figure, sides QP and RQ of $\triangle PQR$ are produced to points S and T respectively. If $\angle SPR = 135^\circ$ and $\angle PQT = 110^\circ$, find $\angle PRQ$



- A. 55° B. 68°
 C. 65° D. 75°

24. AD and BC are equal perpendiculars to a line segment AB. Then $\triangle OAD \cong \triangle OBC$ by



- A. SAS
B. RHS
C. SSS
D. AAS

25. In which quadrant does the point (1,-2) lie?

- A. I
B. IV
C. III
D. II

26. Each angle of a square is

- A. 90°
B. 60°
C. 30°
D. 45°

27. If the edges of a cuboid are l, b and h respectively, then the total surface area of the cuboid is

- A. lbh
B. hlb
C. $2(lb+bh+hl)$
D. none of these

28. The range of the following frequency distribution is

2.7, 2.7, 2.8, 2.1, 2.4, 3.2, 2.1, 3.1, 2.8, 3.2

- A. 2.1
B. 1.6
C. 5.3
D. 1.1

29. The sum of all the probabilities of all the possible outcomes of a trial is

- A. 0
B. 1
C. -1
D. 2

30. $\frac{3\sqrt{12}}{6\sqrt{27}}$ is equal to

- A. $\frac{1}{3}$
B. $\sqrt{2}$
C. $\frac{1}{\sqrt{3}}$
D. $\sqrt{6}$

31. The things which are double of the same thing are

- A. unequal
B. some times equal and sometimes unequal
C. equal
D. none of these

32. Distance - time graph of a body at rest is

- A. Parallel to time axis
B. Perpendicular to both axis
C. Inclined to time axis
D. Parallel to distance axis

33. Newton's first law of motion defines

- A. inertia
B. both inertia and force
C. force
D. momentum

34. If the velocity of a body is doubled, its kinetic energy becomes

- A. four times
B. double
C. half
D. one fourth

35. One kwh equals

- A. $3.6 \times 10^4 \text{J}$
B. $3.6 \times 10^5 \text{J}$
C. $3.6 \times 10^6 \text{J}$
D. $3.6 \times 10^7 \text{J}$

36. In order to determine the melting point of ice, we should prefer

- A. mixture of ice and salt
B. ice made from tap water
C. dry crushed ice mixed with salt
D. ice made from distilled water

37. Which of the following is the most stable?

- A. colloidal solution
B. true solution
C. suspension
D. heterogenous mixture

38. The formula of Sodium Oxide is

- A. Na_2O
B. NaSO_4
C. NaHSO_4
D. None of these

39. Which of the following is living Xylem element
 A. Xylem tracheids B. Xylem vessels
 C. Xylem parenchyma D. Xylem fibers
40. Which group of plants is called vascular cryptogames?
 A. bryophytes B. thallophytes C. angiosperms D. pteridophytes
41. The Nobel Prize winner for Medicine in 2011 is
 A. Daniel Schachtman B. Bruce A Beutler
 C. Tomas Tranströmer D. Tawakkul Karman
42. The current Chief of Indian Navy is
 A. Nirmalkumar Varma B. Arun Prakash
 C. Sushil Kumar D. Madhvendra Singh
43. The winner of Best Director who bagged National Film Award of 2011 is
 A. Joshiy B. Karan Johar C. Vetrimaran D. Kamal
44. The eminent Malayalam Novelist who died in October, 2011 is
 A. Vaikom Mohamed Basheer B. N P Mohamed
 C. O V Vijayan D. Kakkanadan
45. Who is the Indian Cabinet Minister for Commerce and Industry?
 A. Beni Prasad Varma B. Anand Sharma
 C. G K Vasan D. Mukul Wasnik
46. Who is the Chief Minister of Bihar?
 A. Nithish Kumar B. Tarun Gogoi C. Raman Singh D. Arjun Munda
47. IRDP stands for
 A. All India Rural Development Programme B. Indian Rural Development Policy
 C. Integrated Rural Development Programme D. None of these
48. The full form of CBI is
 A. Central Bureau of Intelligence B. Chief Bureau of Investigation
 C. Chief Bureau of Intelligence D. Central Bureau of Investigation
49. India is a secular state because.....
 A. it is a socialist country B. it treats all religions alike
 C. there is no religion for the people D. religious beliefs and practices are discouraged
50. The President of India can dissolve the Lok Sabha on the
 A. advice of the Prime Minister B. advice of the Chief Justice
 C. recommendation of the Lok Sabha D. recommendation of the Rajya Sabha
51. Renowned activist and classical dancer who received Padma Bhushan in 2010 is
 A. Begum Aizaz Rasul B. Shekhar Gupta
 C. Mallika Sarabai D. Khalid Hameed
52. The current Prime Minister of Italy is
 A. Silvio Berlusconi B. Hugo Chavez
 C. Omar Al Basheer D. Mario Monti
53. Who is the founder of Forward Block formed in 1939?
 A. Rabindranath Tagore B. Subhash Chandra Bose
 C. Bhagat Singh D. Raj Guru

54. Who is known as the Heroine of 'Quit India Movement'?
- | | |
|-------------------------|-------------------|
| A. Aruna Asaf Ali | B. Sarojini Naidu |
| C. Vijayalakshmi Pandit | D. Kamala Nehru |
55. Ottawa is the capital of
- | | | | |
|-----------|-----------|-----------|---------|
| A. Brazil | B. Mexico | C. Canada | D. Peru |
|-----------|-----------|-----------|---------|
56. Humayun's Tomb is situated at.....
- | | | | |
|---------|-----------|----------|----------|
| A. Agra | B. Meerut | C. Patna | D. Delhi |
|---------|-----------|----------|----------|
57.in Greece is considered to be UNESCO's World Heritage Centre
- | | |
|--------------------------|----------------------------------|
| A. Maya site of Copan | B. Archeological site of Olympia |
| C. Lorentz National Park | D. Petra |
58. Gold Medalist in men's 75kg Boxing in the Asian Games 2010 is
- | | |
|-------------------|-------------------|
| A. Vijender Singh | B. Joseph Abraham |
| C. Pankaj Advani | D. Takhur |
59. 'Ashes' is associated with
- | | | | |
|-----------|---------|------------|---------|
| A. Hockey | B. Golf | C. Cricket | D. Polo |
|-----------|---------|------------|---------|
60. Locomotive was invented by
- | | | | |
|-------------|-------------|----------------|-----------------------|
| A. G Claude | B. Z Jansen | C. Samuel Colt | D. Richard Trevithick |
|-------------|-------------|----------------|-----------------------|
61. Periscope is commonly used to
- | | |
|----------------------------------|-----------------------------------|
| A. measure the level of humidity | B. view an object above sea level |
| C. measure electric current | D. view two dimensional picture |
62. Battle of Waterloo took place in
- | | | | |
|---------|---------|---------|---------|
| A. 1815 | B. 1915 | C. 1715 | D. 1615 |
|---------|---------|---------|---------|
63.launched by the former USSR in 1957 is the first man made Satellite.
- | | | | |
|---------------|--------------|--------------|-----------|
| A. Explorer I | B. Pioneer I | C. Sputnik I | D. Luna I |
|---------------|--------------|--------------|-----------|
64. Old name of Combodia is
- | | | | |
|--------------|---------------|----------|--------------|
| A. Abyssinia | B. Gold Coast | C. Congo | D. Kampuchea |
|--------------|---------------|----------|--------------|
65. Head quarters of International Court of Justice is at
- | | | | |
|---------------|----------|-----------|-------------|
| A. Copenhagen | B. Hague | C. Geneva | D. New York |
|---------------|----------|-----------|-------------|
66. Which of the following UN organisation is concerned with the welfare of children across the world?
- | | | | |
|-----------|-----------|--------|--------|
| A. UNICEF | B. UNESCO | C. WHO | D. FAO |
|-----------|-----------|--------|--------|
67. The largest overbridge in India is situated at
- | | | | |
|-----------|--------------|-----------|----------|
| A. Mumbai | B. Bengaluru | C. Kanpur | D. Patna |
|-----------|--------------|-----------|----------|
68. The top silver producing country in the world is
- | | | | |
|------------|-----------|--------------|---------|
| A. Bolivia | B. Poland | C. Australia | D. Peru |
|------------|-----------|--------------|---------|
69. Who became the first acting Prime Minister of India?
- | | |
|------------------------|---------------------|
| A. Lal Bahadur Shastri | B. Gunsarilal Nanda |
| C. Charan Singh | D. Morarji Desai |
70. Who was the first Chairman of SAARC ?
- | | |
|----------------------------|-------------------|
| A. H M Ershad | B. Rajiv Gandhi |
| C. Fathimath Dhiyana Saeed | D. Benazir Bhutto |
71. World's largest train station, in terms of platform capacity, is
- | | |
|---------------------------------------|-----------------------------|
| A. Shinjuku Station in Tokyo | B. Ikeburo Station in Tokyo |
| C. Grand Central Terminal in New York | D. Atocha Station in Spain |

72. The 'Spice Garden' of India is
 A. Goa B. Tamilnadu C. Punjab D. Kerala
73. Who is known as Gurudev?
 A. Gandhiji B. Rabindranath Tagore
 C. Rajinder Singh D. Walter Scott
74. A book authored by O V Vijayan is
 A. Dharmapuranam B. Nalukettu
 C. Mathilukal D. Nritham
75. "Paradise Lost" is a book written by
 A. R K Narayanan B. David Loshak C. John Milton D. M J Akbar
76. Brick : Building :: Letter :
 A. Phrase B. Word C. Ink D. Alphabet
77. Accommodation : Rent :: Travel :
 A. Ticket B. Fare C. Pass D. Charges
78. DNA : Genes ::
 A. RNA : Amino Acids B. Fusion : Tissues
 C. Mitochondria : Cells D. Ovule : Hormones
79. 'Rhythm' is related to 'Music' in the same way as 'Design' is related to
 A. Symmetry B. Architect C. Building D. Beauty
80. Hamlet is to Socretes as Cross is to
 A. Saddam Hussian B. Joan F Arc C. Stalin D. Jesus Christ
81. Computer : UPS ; Monitor :
 A. ATM : Cash Card : Currency B. Music System : Player : Speaker
 C. Metro : Bridge : Passengers D. Car : Battery : Driver
82. OJT : NIS :: MHR :
 A. LGQ B. VWX C. DIN D. DTY
83. CIRCLE is related to RICELC in the same way as SQUARE is related to
 A. QSUERA B. QUESERA C. UQSERA D. UQSAER
84. 96 : 24 :: 120 :?
 A. 36 B. 40 C. 24 D. 30
85. 1 : 9 :: 9 :?
 A. 81 B. 51 C. 83 D. 45
86. If 7645321 denotes READING, what will 762567 mean?
 A. RENDER B. READER C. DURING D. DEARER
87. In a certain code PAPER is written as SCTGW. How will MOTHER be written in that code?
 A. ORVLGW B. PQVJGT C. PQXJTT D. PQXKJV
88. A and B started from a fixed place. A moves 3 kms to the north and turns right and then walks 4 kms. B moves towards west and walks 5 kms and then turns to right and walks 3 kms. How far is A from B?
 A. 3 km B. 6 km C. 10 km D. 9 km
89. Deepu is Anil's brother. Deepu is son of Chandra. Bhim is Chandra's father. How is Anil related to Bhim?
 A. nephew B. grandson C. son D. mother

90. "A is the brother of B. B is the brother of C. D is the father of A". Based on these statements which of the following may not be true?

- A. C and A are brothers
B. B is D's son
C. D is the father of C
D. B is A's brother

91. Z, S, W, O, T, K, Q, G,,

- A. N, C
B. N, D
C. O, D
D. O, C

92. 19, 2, 38, 3, 114, 4,

- A. 228
B. 256
C. 352
D. 456

93. $\frac{2}{\sqrt{5}}, \frac{3}{5}, \frac{4}{5\sqrt{5}}, \frac{5}{2}, \dots$

- A. $\frac{6}{5}$
B. $\frac{6}{25\sqrt{5}}$
C. $\frac{6}{\sqrt{5}}$
D. $\frac{6}{25}$

94. Arrange the following letters in the right order to make a meaningful word.

E O M I B L

1 2 3 4 5 6

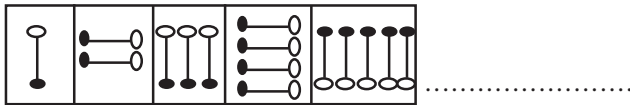
- A. 325461
B. 325164
C. 315264
D. 352146

95. Rearrange the following words as they appear in the dictionary and then choose the correct sequence.

1. foray
2. famine
3. feminine
4. fiction
5. flower

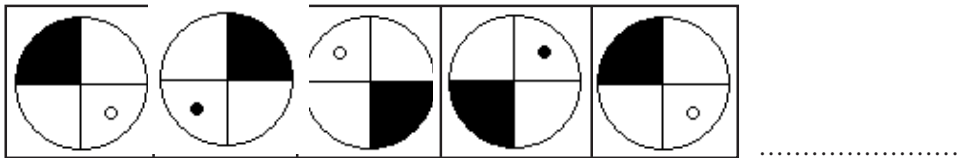
- A. 2, 3, 1, 5, 4
B. 2, 3, 1, 4, 5
C. 2, 3, 4, 5, 1
D. 2, 3, 5, 1, 4

96.



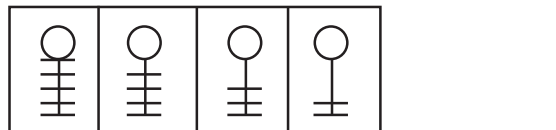
- A. B. C. D.

97.



- A. B. C. D.

98.



- A. B. C. D.

99.



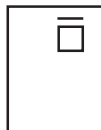
A.



B.



C.



D.



100. 11, 10,, 100, 1001, 1000, 10001

A. 11

B. 110

C. 111

D. 101

MTS EXAMINATION 2013

QUESTION PAPER

9

Class: IX

Register No:

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Marks : 100

Time : 2 hrs.

General Instructions:

1. Candidates will be supplied with separate Question Paper and Answer (OMR) Sheet.
2. Answer the questions in the OMR Sheet by shading the appropriate bubble.
3. Shade the bubbles with black ball pen.
4. Each Question carries one mark. $\frac{1}{4}$ mark will be deducted for each wrong answer.
5. Use the space provided on the last page for rough work.

Read the passage given below carefully

The conquest of happiness has meant different facts to different generations. Our forefathers took pride in scholarship a spirit of sacrifice and solicitude for the welfare of others. Gone are those days. Today we live only for ourselves. We are jealous of the advancement of our neighbours. We end up tense and unhappy.

The term 'happy' has a variety of meanings. It stands for the lucky, fortunate, content, glad or apt. Happiness lies within the individual. No amount of external wealth may be helpful in making him happy.

Our forefathers had life styles, very much different from those we have today. Their life was based mainly on the concept of 'Simple living and high thinking' People were satisfied with whatever they obtained after working hard. Excessive material wealth did not mean much for them. They derived mental satisfaction and enrichment which they aimed at.

The structural framework of our forefathers' families was different from those of ours. They lived in a cohesive joint family structure where they were happier than we. They cared for one another. The siblings grew up with their cousins. The bond of love which they shared cannot be easily found in the nuclear family of the day. The family provided an emotional cushioning effect against tension and stress.

On the basis of your reading of the passage choose the right option.

1. Who had a great desire for the goodness of others?
A. our ancestors B. old people C. aged people D. forefathers
2. Happiness is a complex thing but it is
A. a state of philosophy B. a stage of good health
C. a state of psychology D. a state of mind
3. The word 'siblings' means
A. forefathers B. girls & boys C. brothers and sisters D. off springs
4. Iwhen I heard a thud and a scream.
A. had read B. was reading C. were reading D. read
5. 'The Solitary Reaper' is a narrative poem set to music. This form of verse is called a
A. ballad B. soliloquy C. monologue D. sonnet
6. The majority of the news about violence.
A. are B. is C. has D. have

7. Equations of motion can be used for a body having
 - A. Uniform motion
 - B. Non uniform motion
 - C. Uniform acceleration
 - D. Non uniform acceleration
8. The work done by a weight of 1kg mass when it moves through 1m is
 - A. 10J
 - B. - 10 J
 - C. 0.1J
 - D. - 0.1J
9. The first model of an atom was given by
 - A. Neils Bohr
 - B. E. Goldstein
 - C. Ruther ford
 - D. J. J. Thomson
10. Ribosomes are the sites of
 - A. Photosynthesis
 - B. Respiration
 - C. Protein Synthesis
 - D. Absorption
11. Simplified value of $(16)^{-\frac{1}{4}} \times \sqrt[4]{16}$ is
 - A. 16
 - B. 4
 - C. 1
 - D. 0
12. The sum of $2\sqrt{2} + 5\sqrt{3}$ and $\sqrt{2} - 3\sqrt{3}$ is
 - A. $5\sqrt{2} + 2\sqrt{3}$
 - B. $3\sqrt{2} + 2\sqrt{3}$
 - C. $\sqrt{2} + 3\sqrt{2}$
 - D. $5\sqrt{3} + 3\sqrt{2}$
13. If $\frac{x}{y} = \frac{2}{3}$ then $\frac{4x + 2y}{5x - 2y} = \dots\dots\dots$
 - A. $\frac{7}{2}$
 - B. $\frac{3}{2}$
 - C. $\frac{5}{2}$
 - D. $\frac{9}{2}$
14. If $P(x) = x^2 - 2\sqrt{2}x + 1$ then $P(2\sqrt{2})$ is
 - A. 0
 - B. 1
 - C. $4\sqrt{2}$
 - D. $8\sqrt{2} + 1$
15. If 2 interior angles on the same side of a transversal intersecting two parallel lines are in the ratio 3: 2 then the greatest of the two angles is
 - A. 36°
 - B. 72°
 - C. 108°
 - D. 180°
16. If the circumference of a circle is 20π cm, its diameter is
 - A. 9cm
 - B. 18cm
 - C. 10cm
 - D. 20cm
17. In which year Napoleon Bonaparte came to power?
 - A. in 1804
 - B. in 1806
 - C. in 1704
 - D. in 1708
18. The wind blowing in summer during the day over the north and north western plains of India is
 - A. Kaal Baisakhi
 - B. Loo
 - C. Monsoon
 - D. Trade wind
19. Voters list is also known as
 - A. Electoral Roll
 - B. Election Manifesto
 - C. Ticket
 - D. Nomination form
20. Transport is an economic activity that comes under
 - A. Agricultural Sector
 - B. Primary Sector
 - C. Tertiary Sector
 - D. Secondary Sector

Find the missing terms from the options given.

21. 2, 5, 10, 17, 26, ?, 50
 - A. 30
 - B. 37
 - C. 40
 - D. 44
22. 7, 15, 32, ?, 138, 281
 - A. 65
 - B. 70
 - C. 67
 - D. 100

Find out the missing letters from the alternatives to get a proper series.

23. a _ _ b _ a _ ba _ ab
 - A. aaaaa
 - B. ababa
 - C. babba
 - D. bbaba
24. ab _ _ aba _ aba _
 - A. abab
 - B. abbb
 - C. baba
 - D. abba

25. ADBC:WZXY
E HFG: ?
A. SVTU B. STUV C. TUSV D. STVU
26. ?: ALKLO:: WOULD : TLRIA
A. DONOR B. CONES C. BARGE D. BLOCK
27. If DELHI is coded as 73541 and CULCUTTA as 82589662, how can CALICUT be coded?
A. 5279431 B. 8251896 C. 5978942 D. 8551896
28. Which of the given word cannot be formed using the letters of the word FALLACIOUS
A. FILLS B. FAILS C. FALLS D. FILES
29. A number, when 15 subtracted from it reduces to its 80 percent. What is the 40 per cent of that number?
A. 60 B. 45 C. 30 D. 90

Answer the questions 30 & 31, after reading the passage given below:

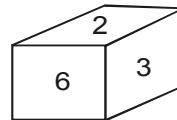
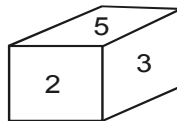
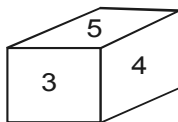
Four ladies A, B, C, D and four gentlemen E, F, G, H are sitting in a circle round a table facing each other.

1. No two ladies or two gentlemen are sitting side by side.
2. C who is sitting between G and E, is facing D
3. F is between D and A and is facing G
4. H is to the right of B

30. Who is sitting to the left of A?
A. E B. F C. G D. H
31. Who is facing E?
A. F B. B C. G D. H
32. Find out the missing number.

8	128	2
4	1	64
?	2	256

- A. 14 B. 15 C. 16 D. 17
33. Different views of a cube are given below. Understand thoroughly and answer the question.
Which number is opposite to 5?



- A. 2 B. 3 C. 4 D. 6
34. Mouth: Teeth:Chew. Find a similar relationship from the alternatives given below.
A. Feet: Dance: Toe B. Eyes: Lashes: See
C. Head: Brain:Think D. Skin: Sweet:Touch
35. Two statement and four inferences are given below. Select the most appropriate inference.
Statements: 1. All books sold in that book shop are of high standard.
2. Some of 'Pratheeksha' books are sold in that book shop.
Inferences: 1. All books of high standard are published by 'Pratheeksha'
2. Some of the 'Pratheeksha' books are of high standard.
3. None of the 'Pratheeksha' books is of high standard.
4. Some of the 'Pratheeksha' books of high standard are sold in that shop.

The appropriate inferences are:-

- A. 1 & 2 only B. 2 & 4 only C. 1 & 3 only D. 1 & 4 only
36. Today is Thursday. The day after 59 days will be a
A. Sunday B. Monday C. Tuesday D. Wednesday
37. $\frac{1}{6}$ of 92% of $1\frac{1}{23}$ of 650 = 85+?
A. 19 B. 18 C. 21 D. 28
38. My office is to the east of the bus stand, while my residence is to the south of the bus stand. The market is to the north of my office. If the distance of the market from my office is the same as the distance from my residence to the busstand, then which direction is the market with respect to the busstand?
A. South-west B. North-east C. East D. North
39. Which number will come next to the given series?
2, 4, 12, 48, 240,
A. 960 B. 1020 C. 1440 D. 1500
40. If > denotes +, < denotes -, + denotes +
& denotes x, - denotes =, x denotes > and
= denotes <, then choose the correct statement.
A. $13 > 7 < 6 + 2 = 3 \wedge 4$ B. $28 + 4 \wedge 2 = 6 \wedge 6 + 2$ C. $9 > 5 > 4 - 18 + 9 > 16$ D. $9 < 3 < 2 > 1 \times 8 \wedge 2$

Questions 41 and 42. Which of the following diagrams represent the correct relationship between the group of words given below



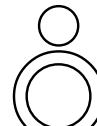
a



b



c



d

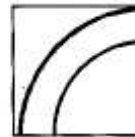
41. Judge- Thief - Criminal A. a B. .b C. c D. d
42. Shah Jahan - Mughals- Babar A. a B. .b C. c D. d
43. Pointing to a man in a photograph a woman said,
"His brother's father is the only son of my grand father." How is the woman related to the man in the photograph?
A. Mother B. Aunt C. Sister D. Daughter
44. Select the missing part of the figure from options given below.



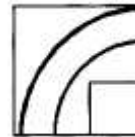
A.



B.

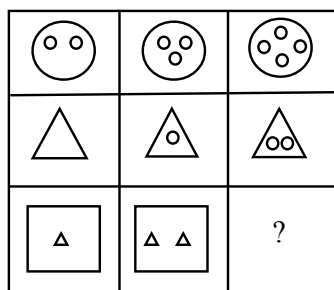


C.



D.

45. The figure given below consists of a square of 9 cells in three rows and three columns. The design in each row follows same rule. Choose the correct answer from among the given alternative to suit the blank cell.



- A.
- B.
- C.
- D.

46. Select the correct answer from the given alternatives to suit the blank box.

—	×
^	+

+	∟
×	∨

 \wedge

×	^
+	△

?	
---	--

∨	+
□	×

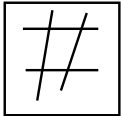
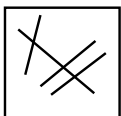
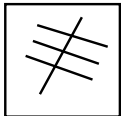
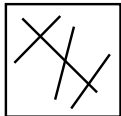
^	+
×	□

×	□
+	∨

+	□
^	×

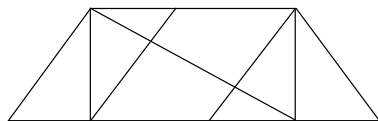
A. B. C. D.

Questions 47 and 48. Get the odd one out

47.    

A. B. C. D.

48. 64, 125, 216, 343, 484, 512
A. 125 B. 216 C. 343 D. 484
49. If 10% of x=20% of 'y', then x:y is equal to
A. 1:2 B. 2:1 C. 5:1 D. 10::1
50. 'Writing' is related to 'Pen' in the same way as
A. 'Singing' is related to 'Music' B. 'Stitching is related to 'Needle'
C. 'Dancing' is related to 'Exercise' D. 'Paper' is related to 'Book'
51. You wish to plant some trees so that each one of them is equidistant from every other tree.
What is the largest number you could plant?
A. 2 B. 3 C. 4 D. 5
52. The following figure has triangles.



- A. 8 B. 10 C. 12 D. 14
53. Who designed the new unique symbol for Indian rupee?
A. M.F. Hussain B. D. Udaya Kumar C. F.N.Souza D. Ramkumar
54. Who is the Chairman of National Commission for Minorities?
A. Syeda Bilgrami Imam B. Spalzes Angmo
C. Harvendra Singh Hanspal D. Wajahat Habibullah
55. Who is the issuing authority of Aadhaar, a 12 digit individual identification number?
A. Government of Kerala B. Unique Identification Authority
C. Census Commissioner D. Planning Commission
56. Who is the Srilankan novelist who won the Commonwealth Book Prize in 2012?
A. Tissa Abeysekara. B. Gunadesa Amarasekara
C. Sehan Karuna Thilaka D. Romesh Guneseekara
57. The body authorized for the accreditation of colleges and universities in India.
A. NAAC B. ISO C. AGMARK D. ISBN
58. Who is the Chairman of the Press Council of India?
A. Montek Singh Ahluwalia B. Markandey Katju
C. J.R.Mudholkar D. Raiinder Sachar

59. Who is the director of the South Asian Community Centre for Education and Research (SACCER) at Nagercoil and the leader of People's Movement Against Nuclear Energy at Koodamkulam.
- A. Kulandei Francis
C. V.Gopala Swami
- B. S.P.Udayakumar
D. R.K.Selvamani
60. Which is the multilingual social network service launched in February 2004 having one billion users in 2012?
- A. Face book
B. Twitter
C. Orkut
D. Google+
61. The increase of which atmospheric gas is mainly causing the Global warming?
- A. Oxygen
B. Carbon dioxide
C. Carbon monoxide
D. Nitrogen
62. Poisoning by is suspected to be the cause for the death of Yassir Arafat.
- A. Dioxin
B. Cadmium
C. Beryllium
D. Polonium
63. What is the portfolio assigned to Shahi Tharoor?
- A. External Affairs
C. Home Affairs
- B. Human Resource Development
D. Agriculture
64. After graduating in law from Madras Law college, he took an MBA from Harvard Business School jumped into politics and later served as Finance Minister of India. He also served as the Home Affairs Minister. Who is he?
- A. P.Chidambaram
B. Pallam Raju
C. Ashwani Kumar
D. Manmohan Singh
65. Which finance minister of Kerala has to his credit the maximum number of budgets presented in the assembly?
- A. Shivakumar
C. K.M.Mani
- B. Thiruvanchoor Radhakrishnan
D. K.P.Mohanan
66. What is the portfolio held by A.P. Anil Kumar in Kerala Ministry?
- A. Civil Supplies
B. Tourism
C. Education
D. Transport
67. DMRC is being widely discussed by the media in Kerala. What is the expansion of DMRC?
- A. Delhi Metro Rail Corporation
C. Delhi Metro Research Centre
- B. Delhi Media Research Centre
D. Delhi Media Research Corporation
68. NDA is one of the famous institutes in India. The expansion of NDA is
- A. National Development Academy
C. National Dairy Academy
- B. National Drug Academy
D. National Defence Academy
69. The expansion of CFL a kind of electronic lighting is
- A. Combined Flurascent Lamp
C. Compact Flurascent Lamp
- B. Connected Flurascent Lamp
D. Collective Flurascent Lamp
70. Who discovered the PH scale?
- A. Samuel Fox
C. James Watt
- B. Soransen
D. Alexander Fleming
71. Who discovered the Mobile phone?
- A. Martin Kooper
C. Ruther Ford
- B. James Chadwick
D. Louis Watermann
72. Radio: Marconi; Radium:.....
- A. John Walker
B. J.J.Thompson
C. Madame Curie
D. Rontgen
73. This greatest Indian film Director won special Oscar Award in 1992 for the film Pather Panchali. Who is he?
- A. Bhupendra Kumar Hazarika
C. Darmendra
- B. Satyajit Ray
D. Amithabh Bachan

74. Name the Sarvodaya leader, popularly known as Loknayak who is instrumental for the formation of Janata Party.
 A. Morarji Desai B. V.P.Singh
 C. Jayaprakash Narayan D. Charan Singh
75. Who is the Vietnamese revolutionary leader and the first president of North Vietnam?
 A. Hirhito B. Ho Chi Minh
 C. Suharto D. Mahatir Mohammed
76. The Bhoodan movement was started by
 A. Gandhiji B. Jagajivan Ram
 C. Vinoba Bhave D. Vidyasagar
77. Who was known as 'Iron Man of India'?
 A. Govinda Vallabha Pant B. Lala Lajpat Rai
 C. Subhash Chandra Bose D. Sardar Vallabhai Patel
78. Which is the capital of Indonesia?
 A. Jakarta B. Tehran C. Tripoli D. Rabat
79. In which city of the USA is the Statue of Liberty located ?



- A. Mayami B. Washington DC C. Los Angeles D. New York
80. Name the city which is located on the banks of river Thames.
 A. Algiers B. London C. Paris D. Moscow
81. Leaning Tower of Pisa is the land mark?
 A. France B. Spain C. Italy D. Portugal
82. Which monument is related to United Kingdom?
 A. Stonehenge B. Brighton Pavilion C. Blarney Castle D. The Alcazar
83. In which state is the Taj Mahal situated?
 A. Bihar B. Haryana C. Uttar Pradesh D. Delhi
84. Who got the best foot baller award for last 50 years UEFA jubilee award?
 A. Zinadin Zidan B. Ronaldo C. Theory Henry D. Pele
85. Which tennis player got 4 Grand Slam and Olympic Gold(Golden Slam) in a year?
 A. Maria Sharapova B. Steffi Graff
 C. Martina Navratilova D. Sereena Williams
86. Which Indian cricketer scored the highest runs in one test innings?
 A. Mohindar Amarnath B. Sachin Tendulkar
 C. Sunil Gavaskar D. Virendra Sehwag
87. Which is the smallest bird ?
 A. Barbet B. Humming Bird C. Rainbow bee-eater D. King Fisher
88. Which is the largest island in the world?
 A. Maldives B. Srilanka C. Greenland D. Philipines

89. The Keyboard used in computer is generally called.....
 A. AZERTY B. QWERTY
 C. Dworak Simplified Keyboard D. Non QWERTY
90. The language of the web is
 A. HTML B. Java C. Foxpro D. C++
91. The following is not a pointing device
 A. Track ball B. Track stick C. Touchpad D. Keyboard
92. After the collapse of the Indus civilization, Aryans travelled North West to India and reigned. Which of the following statement is not related to Aryans?
 A. Established the city system and Great Bath
 B. Formed the basis of Hinduism
 C. Recorded the Vedas
 D. Introduced a caste system
93. In which Battle an Imperial French Army under the command of Emperor Napoleon was defeated by the army of Seventh Coalition?
 A. Battle of Saranda B. Battle of Waterloo
 C. Battle of Remaen D. Battle of Elaia-Kalames
94. The National Flag of India was adopted in its present form during a meeting of the Constitution Assembly held on
 A. 9 December 1946 B. 22 July 1947
 C. 14 August 1947 D. 28 November 1949
95. Which one among the following is not a novel written by the famous Russian novelist Foyodor Dostoyevsky?
 A. War and Peace B. Crime and Punishment
 C. The Idiot D. The Brothers Karamazov
96. Who is author of 'A Long Walk to Freedom'?
 A. Kenneth Kaunda B. Nelson Mandela C. M.K.Gandhi D. Maulana Azad
97. This organization publishes Red List compiling information from a network of conservation organizations to rate which species are most endangered. Name the organization?
 A. Global Environment Facility
 B. United Nations Environment Programme
 C. The International Union of Conservation of Nature
 D. World Wide Fund for Nature
98. Who is the first Indian cosmonaut to go into the space, aboard Soyuz T 11?
 A. Kalpana Chaula B. Sunitha Williams
 C. Rakesh Sharma D. Vikram Sarabhai
99. The largest canal in the world?
 A. Suez Canal B. Panama Canal C. Nan Madol D. Bangkok klongs
100. Which country is known as the "Island of Pearls" ?
 A. Maldives B. Laccadives C. Baharain D. Qatar

Space for rough work

Register No :

Score : 400

Time : 2 hrs

General Instructions

1. Candidates are supplied with an OMR Answer Sheet.
2. Answer the questions in the OMR Sheet by shading the appropriate bubble.
3. Shade the bubbles with black ball point pen.
4. Each question carries four marks. One mark will be deducted for each wrong answer.
5. Use the space provided in the last page for rough work.

Fill in the blanks suitably using the correct options A, B, C or D

1. He says : "The earth is round". Turn in to indirect speech
 A. He said that the earth was round B. He says that the earth is round
 C. He said that the earth is round D. He says that the earth was round
2. Choose the correct sentence.
 A. I am working since morning B. I have been working since morning
 C. I have been working from the morning D. I was working since morning
3. I love you more than
 A. he B. him C. them D. us
4. Shefor more than an hour
 A. was speaking B. spoke C. had been speaking D. has been speaking
5. Which is the most humble request?
 A. Could you lend me some money? B. Could you possibly lend me some money?
 C. Do you mind lending me some money? D. Would you lend me some money?
6. This is the boyhas stolen my pen.
 A. whom B. who C. that D. when

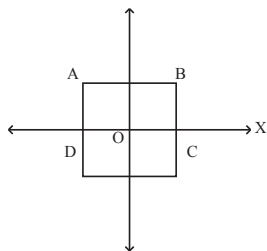
Read the passage and answer the questions 7-10

Charles John Huffam Dickens was an English writer and social critic. He created some of the world's most memorable fictional characters and is generally regarded as the greatest novelist of the Victorian period. During his life, his works enjoyed unprecedented fame, and by the twentieth century his literary genius was broadly acknowledged by critics and scholars. His novels and short stories continue to be widely popular.

In *Oliver Twist*, Dickens mixes grim realism and merciless satire as a way to describe the effects of industrialism on 19th-century England and to criticise the harsh new Poor Laws. Oliver, an innocent child, is trapped in a world where his only options seem to be the workhouse, Fagin's gang, a prison, or an early grave. From this unpromising industrial/institutional setting, however, a fairy tale also emerges. In the midst of corruption and degradation, the essentially passive Oliver remains pure-hearted; he steers away from evil when those around him give in to it and in proper fairy-tale fashion, he eventually receives his reward – leaving for a peaceful life in the country, surrounded by kind friends. On the way to this happy conclusion, Dickens explores the kind of life an orphan, outcast boy could expect to lead in 1830s London.

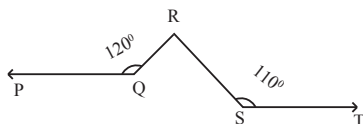
7. The events in the story of 'Oliver Twist' belongs to which period?
 A. 18th century B. 19th century C. 20th century D. 17th century
8. Who was Oliver Twist?
 A. industrialist B. author C. socialist D. orphan
9. Which among the following were not Oliver's options in his life?
 A. grave B. school C. prison D. workhouse
10. Suggest the word in the passage which means the opposite of 'accepted'
 A. outcast B. satire C. passive D. unprecedented

11. In Figure ABCD is a rectangle of length $2a$ and breadth $2b$. AB is parallel to x-axis. The meeting point of the diagonals is taken as the origin O. Then the co-ordinates of the vertex C is



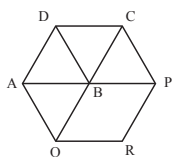
- A. (a, b)
B. $(-a, b)$
C. $(a, -b)$
D. $(-a, -b)$

12. In Figure $PQ \parallel ST$, $\angle PQR = 120^\circ$ and $\angle RST = 110^\circ$ then $\angle QRS$ is equal to



- A. 50°
B. 120°
C. 110°
D. 70°

13. In Figure, ABCD and PBQR are parallelograms. Also $CP \parallel AQ$. Area of $\triangle ADB$ is 30 cm^2 . Then the area of PBQR is equal to



- A. 30 cm^2
B. 60 cm^2
C. 150 cm^2
D. 120 cm^2

14. $\frac{1}{\sqrt{9}-\sqrt{8}}$ is equal to

- A. $\frac{1}{2}(3-2\sqrt{2})$
B. $\frac{1}{3+2\sqrt{2}}$
C. $3-2\sqrt{2}$
D. $3+2\sqrt{2}$

15. $\sqrt[4]{\sqrt[3]{2^2}}$ Equals.

- A. $2^{-1/6}$
B. 2^{24}
C. $2^{1/6}$
D. 2^{-6}

16. Which of the following is equal to x ?

- A. $x^{\frac{12}{7}} - x^{\frac{5}{7}}$
B. $\sqrt[12]{(x^4)^{1/3}}$
C. $(\sqrt{x^3})^{2/3}$
D. $x^{\frac{12}{7}} \times x^{\frac{7}{12}}$

17. Degree of the zero polynomial is

- A. 0
B. 1
C. Any natural number
D. Not defined

18. The coefficient of x in the expansion of $(x+3)^3$ is equal to

- A. 1
B. 27
C. 9
D. 18

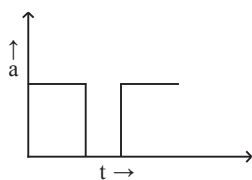
19. If $\frac{x}{y} + \frac{y}{x} = -1$ ($x, y \neq 0$) then the value of $x^3 - y^3$ is

- A. 1
B. -1
C. 0
D. $\frac{1}{2}$

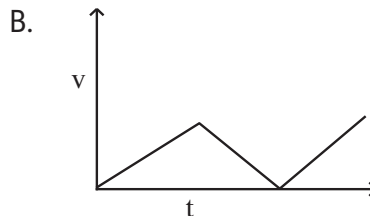
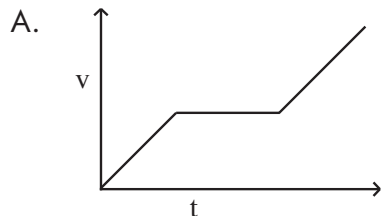
20. One of the factors of $(25x^2 - 1) + (1 + 5x)^2$ is

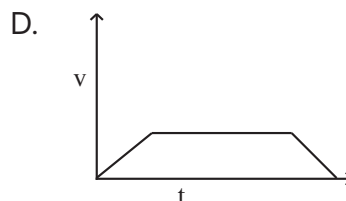
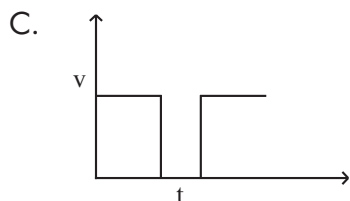
- A. $10x$
B. $5 + x$
C. $5x - 1$
D. $5 - x$

21. The acceleration time graph for a body is shown below



Which of the following figure would show the velocity - time graph for the same body?





22. A stone drops from the edge of the roof. It passes a window 2m high in 0.15. How far is the roof above the top of the window?
 A. 19.41 m B. 29.81 m C. 19.5 m/s D. 16.25 m
23. If the momentum of a body is doubled the KE is
 A. halved B. unchanged C. doubled D. increased by four times
24. What is the nature of the ocean waves in deep water?
 A. Transverse B. Longitudinal
 C. Both transverse and Longitudinal D. None of these
25. A few substances are arranged in the increasing order of force of attraction between their particles. Which one of the following represents a correct arrangement?
 A. Water, air, wind B. Air, sugar, oil
 C. Oxygen, water, sugar D. Salt, juice, air
26. Which of the following sets of phenomenon would increase on raising the temperature?
 A. Evaporation, diffusion, expansion of gases
 B. Evaporation, compression of gas, solubility
 C. Evaporation, diffusion, compression of gas
 D. Evaporation, solubility, diffusion, compression of gases.
27. Deepak was asked to prepare two sample of suspension by his teacher. When he went near the lab shelf he found the following substances:
 i. Fine sand ii. Common salt iii. Starch powder iv. Alum
 v. Egg albumin vi. Clay
 To make a suspension Deepak should select:
 A. (i) and (ii) B. (i) and (vi) C. (ii) and (iii) D. (iv) and (v)
28. Choose the correct answer for the following.
 A cell will swell up if:
 A. The concentration of water molecule in the cell is higher than the concentration of water molecules in surrounding medium
 B. The concentration of water molecules in surrounding medium is higher than water molecules concentration in the cell
 C. The concentration of water molecules is same in the cell in the surrounding medium
 D. Concentration of water molecules does not matter.
29. Which one is correct among the following sets regarding the type of tissue
 A. Skin – Epithelial tissue Bark of tree- Cork
 Bone – Skeletal tissue Vascular bundle- complex permanent tissue
 B. Skin – Cork Bark of tree- Epithelial tissue
 Bone – Skeletal tissue Vascular bundle- complex permanent tissue
 C. Skin – Epithelial tissue Bark of tree- Cork
 Bone – complex permanent tissue Vascular bundle- Skeletal tissue
 D. Skin – Epithelial tissue Bark of tree- Cork
 Bone – Skeletal tissue Vascular bundle- Cuboidal epithelial tissue
30. Poultry fowl are susceptible to:
 A. Viruses B. Bacteria C. Fungi D. All of the above
31. Which of the following led to a chain of events leading to the French Revolution in 1789?
 A. People's protest against church politics B. People's protest against the high price of bread
 C. People's protest against the lack of employment. D. People's protest against the rising price of house.

32. Which of the following theories was proposed by Montesquieu?
 A. Social Contract Theory B. Theory of Division of Powers
 C. Theory of Popular Sovereignty D. Theory of Democracy
33. Consider the following statements.
 i. The Tropic of Capricorn divides India into almost two equal parts.
 ii. $82^{\circ} 30'W$ has been selected as the standard Meridian of India (IST)
 iii. India shares its land boundaries with Maldives.
 Which of the above statements are correct?
 A. i & ii only B. i & iii only C. ii & iii only D. None of the above.
34. Which of the following statements refers to the Communist Society?
 A. Society where industries are owned by the capitalists, who invests capital in the profit of Industries.
 B. A society where workers have no share in the profit of industries.
 C. A society where all property is socially controlled
 D. A society where workers are dominated by the capitalists.
35. Which of the following is not a part of Nazi Ideology?
 A. Poles are a desirable section of society.
 B. Jews were the inferior and undesirable section of society.
 C. Germans are the descendent of pure Aryan race
 D. Society should be ruled by Nordic Aryans.
36. Which one of the following water bodies separate Sri Lanka from India?
 A. Palk Strait and Gulf of Khambat B. Palk Strait and Gulf of Mannar
 C. Gulf of Mannar and 10° Channel D. 10° Channel and Gulf of Khambat
37. Which of the following river originates from Amarkantak hills of Madhya Pradesh?
 A. Narmada B. Tapi C. Godavari D. Yamuna
38. List out the important features of democracy:
 i. Leaders are elected by people ii. Censorship on Media
 iii. Freedom to organize and freedom to protest. iv. Limited right to vote.
 A. i, ii & iii B. ii, iii & iv C. i & iii only D. i, iii & iv
39. is a form of government in which rulers are elected by the people.
 A. Republic B. Democracy C. Socialism D. Secular
40. The rural population migrates to urban areas due to:
 A. Rising population in rural areas. B. In search of better employment opportunity
 C. Lack of demand of labour in agriculture. D. All of the above.
41. The States Reorganisation Commission (SRC) was a body constituted by the Central Government of India in 1953 to recommend the reorganization of state boundaries. Recently, the UPA's decision to grant statehood to sparked more and more demands from many parts of the country for the statehood
 A. Vidharbha B. Telengana
 C. Malabar D. Bodoland
42. Iran is a regional power, holds an important position in international energy security and the world economy because of its large reserves of petroleum and natural gas. It has the largest proven natural gas reserves in the world, and the fourth largest proven petroleum reserves. Who has sworn in as the President of Iran succeeding Ahmed Najad?
 A. Ayathullah Khamnae B. Ayathulla Khumaini
 C. Muhammed Al Baradi D. Hassan Rouhani
43. What is the name given to India's Mission to Mars in November, 2013
 A. Mars Polar Lander B. Mars Climate Orbiter
 C. Mars Science Laboratory D. Mars Orbiter Mission
44. Who is known as the father of Indian Press?
 A. James A. Hickey B. Mahathma Gandhi
 C. C. Raja Gopalachari D. Gutten Berg

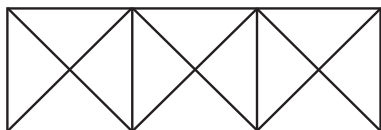
45.is an Indian civil engineer. served as the managing director of Delhi Metro, also popularly known as the "Metro Man". He is now chosen for prestigious Lokmanya Tilak Award 2013.
A. Varghese Kurian B. Norman Borlogue C. E. Sreedharan D. M.S Swaminathan
46. NHRC is a body set up to investigate, promote or protect human rights. What is the full form of 'NHRC'?
A. National Human Rights Co-ordination B. National Human Resource Co-ordination
C. Native Human Rights Commission D. National Human Rights Commission
47. We see the 'www' in the address of websites. www stands for.....
A. Wireless World Wide B. Wireless World Web
C. World Wide Web D. World Wireless Web
48. Who invented 'Steam Engine'?
A. Marconi B. James Watt C. Sholes D. John Napier
49. The Tashkent Declaration of 10 January 1966 was a peace agreement between India and Pakistan after the Indo-Pakistani War of 1965. Who was the Indian Prime minister signed in the Tashkent Agreement with Ayub Khan?
A. Morarji Desai B. Lal Bahadur Shastri C. Jawaharlal Nehru D. Indira Gandhi
50. Who is known as 'Shaheed-I- Azam' (the greatest martyr) in the freedom struggle of India?
A. Subhash Chandra Bose B. S.N Banerjee C. Bhagat Singh D. Lala Hardayal
51. China is the world's most populous country, with a population of over 1.35 billion. Who is the current President of China?
A. Li Kequiang B. Xi Jinping C. Hu Jintao D. Zhang Dejiang
52. The Name- Indian National Congress was given by.....
A. A. O. Hume B. W.Wedderburn C. Dadabhai Naoroji D. S. N Banerjee
53. The Arab Muslim countries remain in news these days. Consider the following statements in this regard:
(i) In 2011, a revolution resulted in the overthrow of autocratic President Zine El Abidine Ben Ali in Tunisia. Annahda a party lead by Rashidul Ganushi won 90 seats out of 217 in the first free election held in the country
(ii) Tunis is the capital city of Tunisia
Choose the correct answer:
A. Only i is correct B. Only ii is correct C. Both are correct D. Both an incorrect
54. The famous Khajurao Group of Temples situated in
A. Bihar B. Maharashtra C. Rajasthan D. Madhya Pradesh
55. The statue 'Christ the Redeemer' is in
A. Brazil B. Russia C. Italy D. Vatican City
56. National Sports Day in India is celebrated on August 29. Birth day of an Indian sports man who won gold medals for India in year 1928, 1932 and 1936. Whose birthday is observed as national sports day in India?
A. Kapil Dev B. Dhyan Chand C. Viswanathan Anand D. Sachin Tendulkar
57. Who is appointed as the new coach of Indian Men's Hockey Team?
A. M.K Kaushik B. Michael Nobbs C. Dhan Raj Pillai D. Preetham Sing
58. Facebook was founded in February 2004 bywith his college room-mates and fellow Harvard University students.
A. Ralph Baer B. Vinton Cerf C. Symus Cruy D. Mark Zuckerberg
59. Where is the first technopark in India?
A. Hyderabad B. New Delhi C. Thiruvananthapuram D. Bangalore
60. Which is the smallest republic in the world?
A. Vatican B. Naury C. Italy D. Australia
61. Which is the largest plateau in India?
A. Telungana B. Karnataka C. Deccan D. Meghalaya

62.was an English newspaper published from Kolkata. It was the first major newspaper in India, started in 1780.
A. Bengal gazette B. Sambad Kaumudi C. Rajya Samachar D. The Pioneer
63. Lord Dalhousie introduced the first telegraph line in 1853 between
A. Kolkata and Mumbai B. Kolkata and Agra
C. Kolkata and Chennai D. Mumbai and Thane
64. The amendment brought about the most widespread changes to the Constitution until then, and is often called a "mini-Constitution". Which Constitutional Amendment is known as 'Mini Constitution'?
A. 24 B. 38 C. 42 D. 59
65. 'Malgudi Days' is written by
A. Mulk Raj Anand B. R.K Narayan C. Kushwant Sing D. Jumpa Lahiri
66. 'Between the lines' is written by a famous columnist. What is his name?
A. Aravind Adiga B. Shobha De C. Salman Rushdie D. Kuldip Nayar
67. The head quarters of Food and Agricultural Organisation (FAO) is
A. Geneva B. Rome C. Vienna D. Brussels
68. Who is the chairperson of National Commission for Women?
A. Jayanthi Natrajan B. Sonia Gandhi C. Mamatha Sharma D. Vrinda Karat
69. The World Bank is an international financial institution that provides loans to developing countries for capital programs. Who is the current president of the World Bank?
A. Jim Yong Kong B. Raguram Rajan C. Yukiya Amano D. Amartya Sen
70. Which state is known as 'Tea Garden of India'?
A. Sikkim B. Goa C. Assam D. Kerala
- Choose the correct relationship.
71. Pyramid : Egypt
A. Tajmahal : India B. Burjkhaleefa : UAE C. Ship: Sea D. Everest : Nepal
72. 2, 7, 12, 23,, 47
A. 28 B. 34 C. 31 D. 38
73. Find the missing term in the following series 240,, 120, 40, 10, 2
A. 480 B. 240 C. 220 D. 120
74. A and B can do a piece of work in 10 days. B and C can do it in 12 days. C and A in 15 days. In how many days will C finish it alone?
A. 24 B. 30 C. 40 D. 60
75. The weight of Mr. Roy and Mrs. Roy are in the ratio 7:8 and their total weight, combined is 120 kg. After taking a dieting course Mr. Roy reduces by 6 kg and the ratio between their weights changes to 5:6. So Mrs. Roy has reduced by
A. 2 kg B. 4 kg C. 3 kg D. 5 kg
76. On a seven member panel sitting in a row, Ann is in between Danish and Ferin, Kevin is in between Ferin and Gokul. Gokul is in between Kevin and Eldo and Danish is in between Bekar and Ann. Find the person sitting in the middle?
A. Ferin B. Danish C. Bekar D. Ann
77. Rishi rides his cycle 9 km towards north. From there he turns back and moves 5 km towards south. Then he moves 2 km towards east. How far is Rishi from the starting point?
A. 6 km B. $2\sqrt{5}$ km C. 4 km D. 2 km
78. Sajjan will marry Sony only, if she wears his ring.
a. Sajjan married Sony b. Sony wore Sajjan's ring
c. Sajjan couldn't marry Sony d. Sony didn't wear Sajjan's ring
A. ba B. bc C. dc D. cd
79. In a certain code, 256 means 'you are good', 637 means 'we are bad' and 358 means 'good and bad'. Which of the following represents 'and' in that code?
A. 2 B. 8 C. 5 D. 3

80. 99, ..., 899, 1599
 A. 999 B. 199 C. 299 D. 399
81. When you reverse the digits of the number 13, the number increases by 18. How many other two – digit numbers increase by 18 when their digits are reversed?
 A. 5 B. 6 C. 7 D. 8
82. Three years back the average age of a family with 5 members was 17 years. After five years the average age of the family remains the same even after the birth of a child. What is the age of the child now?
 A. 2 Years B. 3 Years C. 4 Years D. 5 Years
83. You can not clear the IIT exam unless you are hard working
 a. You are hard working b. You can clear the IIT exam
 c. You are not hard working d. You can not clear the IIT exam
 A. bd B. ac C. cd D. ad
84. The length of the shadow of a 2 m long post is 75 cms. Then what is the height of the tree having 15 m long shadow?
 A. 20m B. 25m C. 40m D. 45m
85. A tap can fill the tank in 40 minutes. 80 minutes will take to empty the tank through the outlet. If both the tap and outlet are opened, the tank will be filled in..... minutes.
 A. 40 B. 60 C. 80 D. 90
86. A train travelling at a speed of 90 km/h, crosses a pole in 10 seconds. The length of the train is
 A. 250 m B. 150 m C. 900 m D. 100 m
87. There are 4 bells in a company. They will ring every 4, 6, 10 and 12 minutes respectively. All the bells will ring together at 6:00 am. When will they ring together again ?
 A. 6:40 am B. 7:00 am C. 8:00 am D. 8:40 am
88. What is the length of the longest stick that can be stored in a box having 12 cm length, 4 cm breadth and 3 cm height ?
 A. 12 cm B. 13 cm C. 16 cm D. 19 cm

Read the following and answer Questions 89 to 92. There are five friends – Midhun, Subhash, Sajjan, Selman and Akshay. Midhun is shorter than Subhash, but taller than Akshay. Sajjan is the tallest. Salman is a little shorter than Subhash and little taller than Midhun

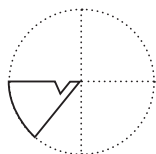
89. Who is the shortest ?
 A. Salman B. Akshay C. Subhas D. Mithun
90. If they stand in the order of height who will be in the middle ?
 A. Salman B. Akshay C. Subhash D. Midhun
91. Who is taller than Salman but shorter than Sajjan ?
 A. Salman B. Akshay C. Subhash D. Mindhun
92. Who is the second tallest ?
 A. Salman B. Akshay C. Subhash D. Mindhun
93. How many triangle are there in the figure?



- A. 28 B. 24 C. 23 D. 25

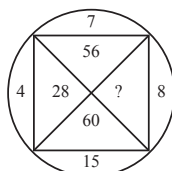
94. If ROSE is encoded as 6821, CHAIR is encoded as 73456 and PREACH is encoded as 961473, what will be the code for SEARCH
 A. 246173 B. 214673 C. 214763 D. 216473
95. B is the daughter of the wife of A's mother's only Son. What is the relation between B and A
 A. Father and daughter B. Mother and daughter
 C. Niece and aunt D. Daughter in law and mother-in-law

96. A piece of paper is folded and punched as shown. How will it appear when unfolded?



- A. B. C. D.

97. Insert the missing number



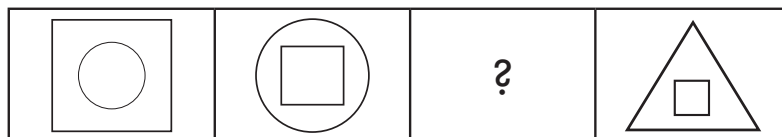
- A. 120 B. 145 C. 33 D. 18

98. How many 9 are there in the following number series which are immediately preceded by 3 and followed by 6?

39693939396363956956939639

- A. Nil B. 3 C. 2 D. 4

99.



- A. B. C. D.

100. Fill the blanks with appropriate letters:

A. acaa

B. aaca

ab-ca-aba-ac-cab

C. acba

D. acbc

Space for rough works

MTS EXAMINATION 2014

Class : IX

MODEL QUESTION PAPER

9

Register No :

Score : 100

Time : 2 hrs

General Instructions

1. Candidates are supplied with an OMR Answer Sheet.
2. Answer the questions in the OMR Sheet by shading the appropriate bubble.
3. Shade the bubbles with black ball pen.
4. Each question carries one mark.
5. Use the space provided in the last page for rough work.

Fill in the blanks suitably using the correct options A, B, C or D

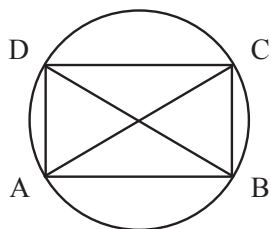
1. The poet and philosopherhonoured
A. was B. were C. are D. have
2. The company clerks areto change
A. advice B. advise C. adverse D. averse
3. He is taller than
A. me B. her C. I D. them
4. Heas a printer for more than forty years.
A. is working B. has been working
C. was working D. had been working
5. Which is the most humble request?
A. Could you possibly pass me some salt? B. Would you please pass me some salt?
C. Do you think you could pass me some salt? D. Do you mind passing me some salt?
6. There is no plot of land hereis fertile.
A. but B. what C. which D. whom

Read the following passage and answer the questions 7 to 10

Chetan Bhagat is an Indian author, columnist, and speaker. Bhagat is the author of bestselling novels, *Five Point Someone* (2004), *One Night @ the Call Center* (2005), *The 3 Mistakes of My Life* (2008), *2 States* (2009), *Revolution 2020* (2011), and *What Young India Wants* (2012). All the books have remained bestsellers since their release and three have inspired Bollywood films (including the hit film *3 Idiots* that criticizes the educational system in professional colleges). In 2008, *The New York Times* called Bhagat "the biggest selling English language novelist in India's history". Bhagat, an alumnus of Indian Institute of Technology (IIT) Delhi and Indian Institute of Management Ahmedabad, is seen more as a youth icon than as an author. *Time* magazine named him as one of the 100 Most Influential People in the World. Bhagat writes op-ed columns for popular English and Hindi newspapers, including the *The Times of India* and *Dainik Bhaskar*, focusing on youth, career and issues based on national development. Bhagat voices his opinion frequently at leading events. He quit his investment banking career in 2009, to focus on writing.

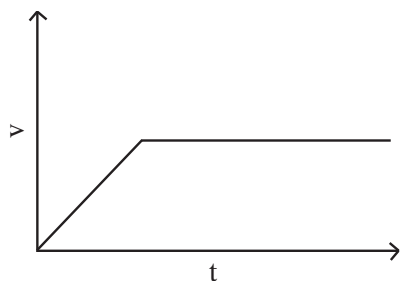
7. What does the bollywood film 3idiots inspired by Chetan Bhagat's book criticize?
A. life of youth B. development of nation
C. Education system of professional colleges D. illiteracy in India
8. What was Bhagat working as before he focused on writing?
A. columnist B. Investment Banking C. IIT,Delhi D. IIM,Ahmedabad
9. He was a student of
A. Dainik Bhaskar B. IIT, Delhi C. Call center D. Investment Banking

10. Find a word which means the opposite of 'fundamental change' from the passage
 A. influential B. inspired C. revolution D. frequent
11. $0.272727\ldots = p/q$ then $p/q = ?$
 A. $3/11$ B. $4/15$ C. $2/7$ D. none of these
12. Remainder when $x^3 + 3x^2 + 3x + 1$ is divided by $5 + 2x$?
 A. 1 B. $-5/2$ C. $-27/8$ D. $27/8$
13. The angles of a quadrilateral are in the ratio 3:5:9:13. Then the difference between largest and smallest angle will be
 A. 36° B. 120°
 C. 108° D. 156°
14. In the figure, ABCD is a cyclic quadrilateral whose diagonals intersect at P. If $\angle DBC = 70^\circ$ and $\angle BAC = 30^\circ$ then $\angle BCD = ?$

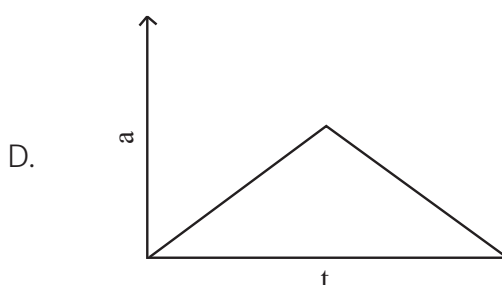
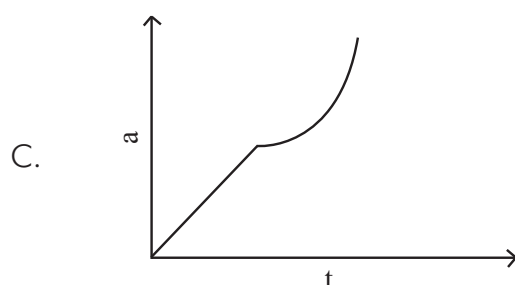
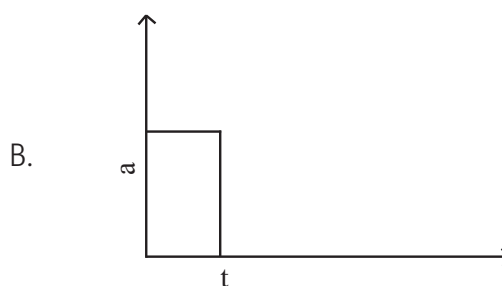
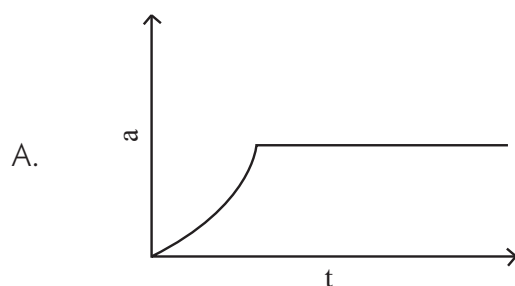


- A. 30° B. 70°
 C. 100° D. 80°

15. The angle between internal and external bisectors of an angle is
 A. 90° B. 180° C. 270° D. 360°
16. The sum of two numbers is 25 and their difference is 13. What is the product of two numbers ?
 A. 156 B. 144 C. 154 D. 114
17. If $a+b+c=0$ then $\frac{a^2}{bc} + \frac{b^2}{ca} + \frac{c^2}{ab} = \dots\dots\dots$
 A. 1 B. 2 C. 3 D. 4
18. $\frac{2^{n+4} - 2(2^n)}{2(2^{n+3})} = \dots\dots\dots$
 A. $2^{n+1} - \frac{1}{8}$ B. -2^{n+1} C. $1 - 2^n$ D. $\frac{7}{8}$
19. The linear equation $y = 2x + 3$ cuts the y-axis at
 A. (0,3) B. (0,2) C. $(\frac{3}{2}, 0)$ D. $(\frac{2}{3}, 0)$
20. The cartesian system is named in honour of the mathematician
 A. Leibnitz B. Euclid
 C. Laplace D. Rene Descartes
21. Velocity - time graph for motion is shown below



Which of the following would represent the acceleration - time graph?



22. A boy on a cliff 49 m high drops a stone. One second later he throws a second stone after the first. They both hit the ground at the same time. With what speed did he throw the second stone.

- A. -10.1 m/s B. 20.1 m/s C. -8.1 m/s D. -12.2 m/s

23. 2 particles of masses 1 g and 4 g. have equal kinetic energies. What is the ratio between their momenta?

- A. 1:4 B. 1:8 C. 1:2 D. 1:6

24. Factors on which the speed of sound in a gas depends

- (i). pressure (ii). density
(iii). temperature (iv). nature of material

- A. i, ii, B. ii, iii, iv C. i, iii D. i, iv

25. Which of the following are chemical changes?

- a. Burning of paper b. Decaying of wood
c. Digesting of food d. Freezing of water
A. a, b & c are chemical changes B. a, c & d are chemical changes
C. b, c & d are chemical changes D. a, b & d are chemical changes

26. Which of the following are homogeneous in nature?

- A. Air B. Ice C. Muddy water D. Chalk in water

27. In which of the following conditions, the distance between the molecules of hydrogen gas would increase?

- I. Increasing pressure of hydrogen contained in the closed container.
II. Some hydrogen gas leaking out of the container
III. Increasing the volume of the container of hydrogen gas
IV. Adding more hydrogen gas to the container without increasing the volume of container
A. I and III B. I and IV
C. II and III D. None of these

28. Which is correct among the following, regarding the features of Cardiac Muscle?

- i. Cardiac muscles are involuntary
ii. Cardiac muscle cells are cylindrical, branched and uninucleate.
iii. Cardiac muscle show rhythmic contraction and relaxation.
A. All the three statements are correct B. Only (i) is correct
C. Only (iii) is correct D. Both (ii) and (iii) are correct

29. If the tip of sugarcane plant is removed from the field, even then it keeps on growing in length. It is due to the presence of:
- A. Cambium B. Apical meristem C. Lateral meristem D. Intercalary meristem
30. Which one of the following nutrients is not available in fertilizers?
- A. Nitrogen B. Phosphorus C. Iron D. Potassium
31. The greatest achievements of National Assembly convened in France in 1789 was:
- A. Issuing of Declaration of Rights. B. Passing of laws checking the power of monarch.
C. Establishment of a new judiciary. D. Establishment of a new legislature
32. In France Guillotine referred to a system of.....
- A. Beheading a person B. Awarding a person
C. Taxing a person D. Threatening a person
33. Consider the following statements about the Geology of India:
- The peninsular Plateau constitutes one of the ancient landmasses on the earth's surface.
 - It was supposed to be one of the most stable land blocks.
 - The Himalayas and the Northern Plains are the most recent land forms.
- Which of the above statements are correct?
- A. I & II only B. I & III only C. II & III only D. All of the above
34. The name of St. Petersburg was changed to Petrograd after 1914 because:
- A. Russians disliked the earlier name.
B. Anti- German sentiments during war made the Russians change the name
C. Russian monk Rasputin advised the Tsar to change the name.
D. Russians wanted a shorter and simpler name.
35. Why did Nazism become a mass movement during the period of Great Depression in 1929?
- A. Since people were jobless they had enough time to work for the Nazi Party.
B. Nazism taught people to cope with financial problems
C. Nazi propaganda stirred hopes of better future when people were threatened with destitution due to economic depression.
D. Depression made German people anti-government.
36. Mawsynram is located in which one of the following hills?
- A. Garo Hills B. Jaintia Hills C. Khasi Hills D. Shillong Hills
37. Which one of the following is the largest river of the Peninsular India?
- A. Godavari B. Narmada C. Krishna D. Mahanadi
38. Select the demerits of democracy:
- Instability because leaders keep changing.
 - Delayed decision because it involves deliberations and negotiations.
 - Absence of corruption.
 - Absence of political competition
- A. I, II & IV B. II, III & IV C. IV only D. I & II only
39. The constituent Assembly of India adopted the constitution on.....
- A. 6 December, 1946 B. 26 November, 1949
C. 26 January, 1950 D. 1 November, 1956
40. Which of the following statements is not true about small- scale manufacturing in villages?
- A. Farmers engage in it to supplement their income.
B. Farmers take help of their family member.
C. The production is done mostly at home.
D. Farmers produce articles for their own use.
41. Which is the longest railway tunnel (11.215 km long) in India located in Jammu Kashmir, commissioned on 26 June 2013 by the Prime Minister Dr. Manmohan Singh. The rail tunnel

- reduces the distance between Quazigund and Banihal by 17 km?
- A. Pirpanjal railway tunnel B. Kharbud Tunnel
C. Jawahar Tunnel D. Karakkoram Tunnel
42. The World Economic Forum was founded in 1971 by Klaus Schwab, a German-born business professor at the University of Geneva. First named the "European Management Forum", it changed its name to the World Economic Forum in 1987. Where is the World Economic Forum meeting held?
- A. New York- USA B. London- Britain C. Davos- Switzerland D. Canberra- Australia
43. Where was India's first women only post office inaugurated on women's day?
- A. Kozhikode B. Chennai C. Delhi D. Mumbai
44. Who is the first woman IPS officer of India?
- A. Anna Malhotra B. Kiran Bedi C. Anupama D. Aysha Rani
45. The first Keralite appeared on Indian Stamp is a famous social reformer. Who is that?
- A. Kumaranasan B. K. Kelappan
C. Sree Nayayana Guru D. Muhammed Abdu Rahman Sahib
46. We are experienced of VPP service with post offices. What is the full form of VPP?
- A. Value Payable Post B. Very Popular Post
C. View Payable Post D. Value Possess Post
47. The full form of LPG is.....
- A. Local Petroleum Gas B. Long Living Petroleum Gas
C. Liquefied Popular Gas D. Liquefied Petroleum Gas
48. Who invented the 'Lift'?
- A. Pitman B. Galileo C. Elisha G-Otis D. W. C. Rontgen
49. Who was the first and last Governor General of India during 1948 – 1950?
- A. Rajendra Prasad B. C. Rajagopalachari
C. Sardar K. M Panikkar D. Jayaprakash Narayan
50. China is the world's most populous country, with a population of over 1.35 billion. Who is the premier of China?
- A. Xi Jinping B. Li Keqiang C. Zhang Dejiang D. Hu Jintao
51. From the foundation on 28 December 1885, until the time of independence of India on 15 August 1947, the Indian National Congress was the largest and most prominent Indian public organization. Who was the congress president when India became free?
- A. Jawaharlal Nehru B. J. B kripalani
C. Sardar Patel D. Mahatma Gandhi
52. Mahatma Gandhi was referred to as 'father of nation' first by.....
- A. Jawaharlal Nehru B. Sarojini Naidu
C. Subhash Chandra Bose D. Moulana Abul kalam Azad
53. The capital of Philippines is.....
- A. Manila B. Seol C. Bangkok D. Tashkent
54. The Ajanta Caves, a Buddhist cave monument situated in the Aurangabad district of
- A. Maharashtra B. Bihar C. Rajasthan D. Madhya Pradesh
55. The St. Peter's Basilica church is located in
- A. Moscow B. New York C. Vatican D. London
56. Who is first Indian woman to win an Olympics Medal?
- A. P. T Usha B. Kamaljith Sandhu C. Karnam Malleswari D. Shaini Wilson
57. Who is known as 'Lady Bubka'?
- A. Yelena Esin Bayeva B. Sarena Williams
C. Sania Mirza D. Tejaswini Sawant

58. Who is considered as the father of super computer?
 A. Vinson Cerf B. Alan Turing C. John Vincent D. Symar Cray
59. Cyber Crime can be defined as
 A. A crime committed online B. Stealing of a computer
 C. Organizing theft in a computer shop D. none of these
60. Which is the largest river in South India?
 A. Godavari B. Kaveri C. Chaliyar D. Periyar
61. Which is the smallest union territory in India?
 A. Delhi B. Puduchery C. Lakshadweep D. Goa
62. A viceroy became famous in India due to the partition of Bengal?
 A. Lord Curzon B. Lord Morley C. Lord Irwin D. Lord Mayo
63. The second battle of Panipat was between
 A. Shahjahan and Jahangir B. Akbar and Ranapratab
 C. Humayun and Shershah D. Birbal and Babur
64. Part XV of the Constitution deals with
 A. Elections B. Tribal Areas C. Tribunal D. Languages
65. 'Death of a city' is a book written by?
 A. Amrita Pritam B. R. K Narayan C. Salman Rushdie D. Thaslima Nasrin
66. 'My Truth' is the book written by
 A. Jawaharlal Nehru B. Morarji Desai C. Indira Gandhi D. Rajiv Gandhi
67. The head quarters of World Health Organization?
 A. London B. Geneva C. Vienna D. New York
68. Who is the Director of Intelligence Bureau?
 A. Ranjith Sinha B. P. Vijayan C. Kaushik Basu D. Asif Ibrahim
69. Who is the Managing Director of International Monetary Fund (IMF)?
 A. Christine Lagarde B. Jim Yong Kim C. Ban Ki Moon D. Vijay L. Kelkar
70. Which state known as 'Sugar Bowl of India'?
 A. Kerala B. Gujarat C. Uttar Pradesh D. West Bengal

Observe the relation between first pair of words/ numbers/ Letters and choose the correct word/ number / letter for the second pair

71. Microphone : Loud :: Micro scope :
 A. Increase B. Investigate C. Examine D. Magnify
72. NOPQ : PMRO :: ABCD :
 A. CZEB B. CDEF C. YZAB D. CDAB
73. Which one of the following set is correct instead of stars?
 $6*4*9*15$
 A. x, =, - B. =, x, - C. x, -, = D. -, x, =

Complete the series (Q. No. 74-76)

74. 11, 13, 17,, 23
 A. 18 B. 19 C. 20 D. 21
75. 124, 60, 28, 12, 4,
 A. 3 B. 2 C. 1 D. 0
76. MNO, NLP,, PHR, QFS
 A. NOP B. OPQ C. OJQ D. PON
77. a - - ab - ab - bc
 A. Bbcab B. bccab C. bcabc D. bccca
78. $6(4-2) - 3 + 1 \times 2 = ?$
 A. 11 B. 16 C. 6 D. 0

79. If $x:y=2:1$, then $(5x^2-13xy+6y^2)$ is equal to
 A. $\frac{3}{4}$ B. $\frac{4}{3}$ C. 0 D. $\frac{55}{4}$
80. 200% of a number is 80. Then 80% of the number is
 A. 200 B. 40 C. 32 D. 20
81. In an election having two candidates, the winner elected with a majority of 8% votes than the other. Then what is the percentage of votes polled to the winner ?
 A. 42 B. 46 C. 54 D. 58
82. A has 25% more salary than B. Then B's salary is.....% less than that of A
 A. 20% B. 25% C. 15% D. 18%
83. Inspiration : Poetry
 A. Music : Notes B. Brush : Painting C. Mind : thought D. Dirt : Disease
84. Take the odd one out
 A. 12-96 B. 13-117 C. 15-120 D. 16-128
85. The number of heads in a farm containing cows and chicken is 60. How many cows are there in the farm, if there are 150 legs ?
 A. 12 B. 15 C. 20 D. 22
86. Amal starts from Mananchira square, Calicut, drives his car towards West 6km and turning to his right he drives 4km, then again turns the car to his right and moves 6km. How far is he from the starting point?
 A. 6kms B. 16kms C. 4kms D. 8kms
87. Five years back the average age of a couple was 22 years. Now they have a 3 years old child. What is the average age of the family ?
 A. 30 B. 27 C. 24 D. 19
88. A man can row 40 kms in 8 hours against the stream and 36km in 6 hours along with the stream. What is his speed in a stationary water ?
 A. 5.5 B. 5.75 C. 6.5 D. 6.75
89. In a class the number of girls is three times that of boys. The rank of Rajeev is 10th from the top. There are 6 girls in the rank list before Rajeev. How many boys will be there in the rank list behind Rajeev ?
 A. 4 B. 5 C. 6 D. 7
90. You can see kathakali only in kerala
 a. I didn't see kathakali b. I saw kathakali in Arts festival
 c. I went to Kerala d. I didn't go to Kerala
 A. cd B. cb C. ca D. ad
91. 3 tailor can stitch 168 shirts in 14 days. How many shirts can be stitched by 8 tailor in 5 days ?
 A. 135 B. 150 C. 160 D. 175
92. Whenever Bush makes an entry, the viewers boo
 a. Bush made an entry b. The viewers didn't boo
 c. Bush didn't make an entry d. The viewers booed
 A. ad B. ac C. bc D. cd
93. A man walks 10 km towards north. From there he walks 6 km towards south. Then he walks 3 km towards east. How far is he from the starting point ?
 A. 19 km B. 9 km C. 7 km D. 5 km
94. A and B can do a piece of work in 10 days. B and C can do it in 12 days. C and A in 15 days. In how many days will C finish it alone?
 A. 24 B. 30
 C. 40 D. 60

95. Scale : Fish

A. lady : dress

B. skin : man

C. tree : leaves

D. bird : feather

96. Fly : Walk

A. sit : sleep

B. sky : earth

C. roast : bake

D. pilot : caption

97. 2 12 ?
 50 300 550
 10 60 110
 124 744 1364

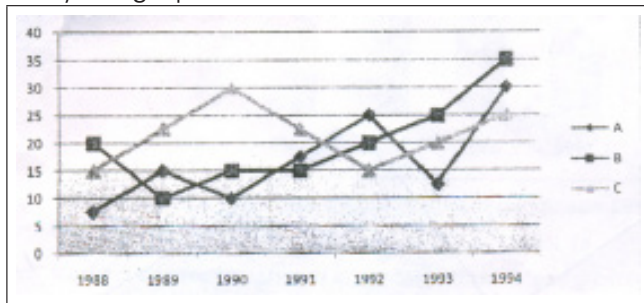
A. 22

B. 33

C. 44

D. 55

Study the graph



Production of 3 types of vehicles by a company (in thousands) is given

98. The number of A type vehicles produced in 1990 was, what percent of the number of C type vehicles produced in 1992?

A. 33.33

B. 40

C. 50

D. 66.66

99. In how many years was the production of A type vehicles less than its average production over the given years?

A. 2

B. 4

C. 3

D. 1

100. What was the average number of B type vehicles produced by the company over the years?

A. 20,000

B. 25,000

C. 15,000

D. 30,000

Space for rough works