VTS EXAMINATION 2016-17 (FINAL)

Class : X   QUESTION PAPER   **10**

Score : 400

Register No : ☐☐☐☐☐☐   **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.

Read the passage. Then answer the questions

In the early 1920's settlers Came to Alaska looking for gold. They travelled by boat to the coastal towns of Seward and Knik, and from there by land into the gold fields. The trail they used to travel inland is known today as the Iditarod Trail, one of the National Historic Trails designated by the congress of the United States. The Iditarod Trail quickly became a major thoroughfare in Alaska as the mail and supplies were carried accross this trail. People also used it to get from place to place, including the priests, ministers and judges who had to travel between villages. In the winter the settlers' only means of travel down this trial was dog sledge.

Once the gold rush ended, many gold seekers went back to where they had come from, and suddenly there was much less travel on the Iditarod Trail. The introduction of the airplane in the late 1920's meant dog teams were no longer the standard mode of transportation and of course with the airplane carrying the mail and supplies, there was less need for land travel in general. The final blow to use of the dog teams was the appearance of snowmobiles.

By the mid 1960's most Alaskans didn't even know the Iditarod Trail existed or that dog teams had played a crucial role in Alaskan's early settlements. Dorothy G. Page, a self made historian recognised how few people knew about the former use of sledge dogs as working animals and about the Iditarod Trails' role in Alaska's colourful history.

To raise awareness about this aspect of Alaskan history , she came up with the idea to have a dog sledge race over the Iditarod Trail. She presented her idea to an enthusiastic musher as dog sledge drivers are known, named Joe Redington Sr. Soon the pages and the Redingtons were working together to promote the idea of the Iditarod race.
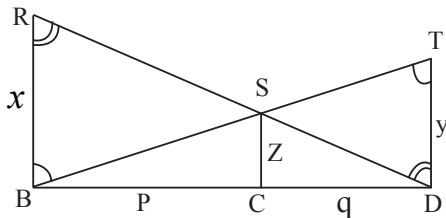
Many people worked to make the first Iditarod Trail sledge dog race a reality in 1967. The Aurora Dog Mushers Club, along with men from the adult camp in Sutton, helped clear years of overgrowth from the first nine miles of the Iditarod Trail. To raise interest in the race a $ 25,000 purse was offered with Joe Redington donating an acre of his land to help raise the funds. The short race approximately 27 miles long was put on a second time in 1969.

After these first two successful races, the goal was to lengthen the race a little further to the ghost town of Iditarod by 1973. However in 1972 the US Army reopend the trail as a winter excercise, and so in 1973, the decision was made to take the race all the way to the city of Nome over 1000 miles. There were many who believed it could not be done and that it was crazy to send a bunch of mushers out into the vast, uninhabited Alaskan wilderness. But the race went! 22 mushers finished that year and to date over 400 people have completed it.

1. It can be inferred that all of the following contributed to the disuse of the Iditarod Trail <u>except</u>

A. More modern forms of transporation   B. Depleted gold mines

C. Highway routes to ghost towns   D. Reduced demand for land travel

2. The phrase 'self-made historian' implies that Dorothy G. Page

A. Was employed by the state to keep its dog sledge history alive

B. Was determined to honour the glories of the gold rush in spite of her questionable credentials

C. Had pursued the study of Alaska's history out of her interest

D. Had personally educated others about Alaska's history

3. According to the passage the initial Iditarod race

A. Was funded through the sale of musher entrance fees

B. Was founded by an advocate for Alaskan history

C. Ended at the ghost town of Iditarod

D. Boasted a total of 400 entrants

4. Because the US Army reopened the Iditarod Trail in 1972 ....

A. More people could compete in the Iditarod race

B. The mushers had to get permission from the US Army to hold the race

C. The trail was cleared all the way to Nome

D. The Iditarod race became a seasonal Army competition

5. Write the direct speech of the following

She enquired me if it rained a lot in London.

A. " Does it rain a lot in London ? "   B. " If it rained a lot in London ? "

C. " Does it rains a lot in London ? "   D. Whether it rained a lot in London ? "

6. Rewrite the sentence starting with the word encircled.
The man showed (us) the house

A. We had been shown the house   B. We were been shown the house

C. We were shown the house   D. We have been showed the house

7. He lamented .... the loss of his property.

A. With   B. In

C. On   D. For

8. I enjoy ....out with friends.

A. Hanging   B. Clearing

C. Counting   D. Making

9. Find out the wrongly spelt word.

A. Moustache   B. Hipocrasy

C. Omission   D. Onomatopoeia

10. A pretty kettle of fish means

A. A beautiful kettle of fish

B. A kettle with full of fish

C. A situation that causes you problem

D. A situation that is very difficult from that mentioned

11. On dividing a certain number by 357, the remainder is 39. On dividing the same number by 17, what will be the remainder ?

A. 0   B. 3

C. 5   D. 11

12. The greatest number that will divide 65, 110, 150 leaving remainders 2, 5 and 3 respectively is

A. 7   B. 49

C. 5   D. 21

13. Rabeeh rows down a river 15 km in 3 hours with the stream and returns in $7\frac{1}{2}$ hours. His speed in still water is

   A. 3 km/h   B. 4.5 km/h

   C. 3.5 km/h   D. 2 km/h

14. Simplify $\left(1+\dfrac{1}{x+1}\right)\left(1+\dfrac{1}{x+2}\right)\left(1+\dfrac{1}{x+3}\right)\left(1+\dfrac{1}{x+4}\right)$

   A. $\dfrac{x+5}{x+1}$ B. $\dfrac{x+1}{x+5}$

   C. 1   D. $\dfrac{x+2}{x+4}$

15. If $x+\dfrac{1}{x}=5$, then the value of $x^4+\dfrac{1}{x^4}$ is

   A. 23   B. 527

   C. 125   D. 529

16. In $\triangle ABC$, the side BC is extended upto D such that CD = AC. If $\angle BAD = 109^{\circ}$ and $\angle ACB = 72^{\circ}$, then the value of $\angle ABC$ is

   A. 45° B. 55°

   C. 30° D. 35°

17. The point D and E are taken on the sides AB and AC of $\triangle$ ABC such that AD = ⅓ AC and AB = AC. If the length of BC is 15 cm, then the length DE is

   A. 5 cm   B. 8 cm

   C. 6 cm   D. 4 cm

18. In the adjoining figure, if RB, SC and TD are perpendiculars to BD with the length indicated, then x/y is equal to

   A. p/q B. $\dfrac{p}{p+q}$

   C. $\dfrac{q}{p}$ D. $\dfrac{q}{p+q}$

19. If $\frac{sec\theta + tan\theta}{sec\theta - tan\theta} = \frac{5}{3}$, then $sin\theta$ is

A. $\frac{3}{4}$ B. $\frac{1}{4}$

C. $\frac{1}{8}$ D. $\frac{1}{2}$

20. The mean of 50 numbers is 30. Later it was discovered that the two entries were wrongly entered as 82 and 13 instead of 28 and 31. Then the correct mean is

A. 29.28   B. 31.56

C. 36.12   D. 28

21. The relation between resistance, resistivity, length and area is

A. $R = \frac{\rho A}{l}$ B. $R = \frac{\rho l}{A}$

C. $R = \frac{\rho l}{A^2}$ D. $R = \frac{\rho l^2}{A}$

22. 1 Kwh = ………………………….. J

A. 3.5×10^6 J   B. 3.4×10^5 J

C. 3.6×10^5 J   D. 3.6×10^6 J

23. A wire of given material having length 'l' and area of cross section 'A' has a resistance of 4Ω. What would be the resistance of another wire of the same material having length $\frac{1}{2}$ and area of cross section 2A ?

A. 2 Ω   B. 1 Ω

C. 0.1 Ω   D. 0.2 Ω

24. An electron enters a magnetic field at right angle to it, as shown in figure. The direction of force acting on the electron will be

Magnetic field
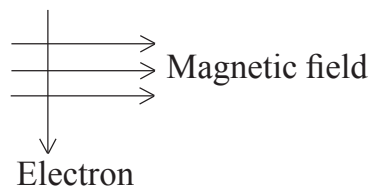
Electron

A. To the right   B. To the left

C. Out of page   D. Into the page

25. Most reactive metal is ……………………..

A. Iron   B. Aluminium

C. Sodium   D. Potassium

26. Which one of the following properties are not generally exhibited by ionic compounds ?

A. Solubility of water   B. Electrical conductivity in solid state

C. High melting and boiling point   D. Electrical conductivity in molten state

27. Metals are refined by using different methods. Which of the following metals are refined by electrolytic refining ?

(i) Ag   (ii) cu   (iii) Na   (iv) Al

A. (i) and (ii)   B. (i) and (iii)

C. (ii) and (iii)   D. (iii) and (iv)

28. If salivary amylase is lacking in the saliva, which of the following events in the mouth cavity will be affected ?

A. Protein breaking down into amino acids

B. Starch breaking down into sugars

C. Fats breaking down into fatty acids and glycerol

D. Absorption of vitamins

29. A doctor advised a person to take an injection of insulin because

A. His blood pressure was low   B. His heart was beating slowly

C. He was suffering from goiter   D. His sugar level in blood was high

30. What disease is caused by A.D.H ?

A. Diabetes   B. Goitre

C. Gigantism   D. Dwarfism

31. Which one of the following countries was known as the 'Sick man of Europe ?

A. Turkey   B. Austria

C. England   D. Spain

32. How many years Germany had fought with Austria, Denmark and France as a part of its unification ?

A. Over seven years   B. Six years

C. Eight years   D. Over ten years

33. What is the correct chronolgical sequence of the following events occured in France ?

1. Fall of Bastille

2. Oath of Tennis Court

3. Rule of Napolean

4. Reign of Terror

A. 1, 4, 3 and 2   B. 2, 3, 4 & 1

C. 2, 1, 4 & 3   D. 4, 3, 1 & 2

34. Which state has made roof top rain water harvesting structures compulsory for all the houses across the state ?

A. Tamil Nadu   B. Assam

C. Meghalaya   D. Mizoram

35. Which one of the following is correctly matched (Crop-largest producer) ?

A. Jute - Kerala   B. Sugarcane - West Bengal

C. Rubber - Uttar Pradesh   D. Tea - Assam

36. Which one of the following air services provides service to Oil and Natural Gas Commission in its off - shore operations?

A. Indian Airlines   B. Air India

C. Pawan Hans Helicopters Ltd.   D. Alliance Air

37. It refers to globalisation which creates opportunities for all and ensures that its benefits are better shared.

A. Privatisation   B. Special Economic Zones (SEZ)

C. WTO   D. Fair globlisation

38. Which one of the following is an example of trade barrier ?

A. Tax on Exports   B. Tax on Imports

C. Free trade   D. Restriction on Export

39. Which of the following statement is not correct.

A. The constitution prohibits discrimination on grounds of religion.

B. The constitution allows the state to interven in the matters of religion.

C. The constitution does not allow the citizen not to follow any religion.

D. The constitution provides to all individuals and communities the freedom to prefer and communicate any religion.

40. Name a system that values men more than women

    A. Patriarchy   B. Matriarchy

    C. Endogamy   D. Exogamy

41. Who among the following was awarded the UNESCO Press Freedom Prize on May 3, 2015 in Latvia ?

    A. Mazen Darwish   B. Hani Zaitani

    C. Freddie Gray   D. Hussein Shire

42. Which is the first country in the world to ban supermarket food waste ?

    A. India   B. England

    C. Australia   D. France

43. Name the place where the 19th National e-Governance conference was recently held

    A. Patna   B. Nagpur

    C. Raipur   D. Shimla

44. Under the current laws, the strength of Lok Sabha is ……………

    A. 546   B. 545

    C. 548   D. 550

45. First Speaker of Independent India

    A. G.V. Mavalankar   B. Thampidurai

    C. Maneksha   D. Vimal Kumar

46. 'RAW' is the intelligence agency of which country ?

    A. America   B. India

    C. Pakistan   D. England

47. Interpol stands for

    A. International Criminal Police Organization

    B. International Political Conference

    C. International Association of Police Organization

    D. None of the above

48. Cryosurgery was developed by

    A. John Snow   B. James Simpson

    C. Linnaeus   D. Henry Swan

49. Who is the present Director General of ILO ?

    A. Guy Ryder   B. Juncker

    C. Jean Claude   D. Yasar Arafath

50. Who is the Union Minister for Foreign Affairs ?

    A. Natwar Singh   B. Suresh Prabhu

    C. Arun Jaitley   D. Sushma Swaraj

51. Who declared "Political freedom is life breath of a nation" ?

    A. Surya Sen   B. Rash Behari Ghosh

    C. Aurobindo Ghosh   D. Bal Gangadhar Tilak

52. Who founded the Swaraj Party ?

    A. Motilal Nehru   B. Subhash Chandra Bose

    C. Lala Lajpat Rai   D. Jawaharlal Nehru

53. Dublin is the Capital of …………..

    A. South Korea   B. Zimbabwe

    C. Iceland   D. Ireland

54. Where is the Brandenburg gate situated ?

    A. London   B. Rome

    C. Berlin   D. Toronto

55. What is the height of Qutb Minar ?

    A. 268 feet   B. 278 feet

    C. 258 feet   D. 288 feet

56. Who clinched the gold in Womens Individual Squash at the South Asian Games in February 2016 ?

    A. Joshna Chinappa   B. Maria Toorpakai

    C. Joshna Toorpakai   D. Maria Chinappi

57. Which city has been confirmed by the continental body as host city of 2017 Asian Athletics (Out door) Championships ?

    A. Tatanagar   B. Jamshedpur

    C. Ranchi   D. Hazaribagh

58. What is the spinning speed of floppy disc ?

A. 150-250 cycles per minute   B. 155 – 250 cycles per minute

C. 160 – 255 cycles per minute   D. 150 – 255 cycles per minute

59. Who is considered the father of mini computer and one of the founder fathers of the modern computer industry worldwide ?

A. Kenneth H. Olsen   B. Douglas Engelbart

C. Charles Babbage   D. None of these

60. The fastest train in India

A. Shatabdi Express   B. Gatimaan

C. Rajdhani Express   D. Duronto Express

61. The first Chief Election Commissioner of India

A. T.N. Seshan   B. S.P. Sinha

C. V.S. Ramadevi   D. Sukumar Sen

62. The Great Wall of China was built by Shing Hwangti as a protection against

A. Persians   B. Mongols

C. Huns   D. Manchurians

63. The words 'Satyameva Jayathe' are adopted from which of the following works ?

A. Vedas   B. Manusmrithi

C. Mundaka Upanishad   D. None of these

64. Under which article of the constitution of India can the president of India be impeached ?

A. Article 17   B. Article 61

C. Article 110   D. Article 68

65. A versatile writer who has won many literary awards, also awarded the Padma Shri in 2007 and his famous novels are 'The Circle of Reason', 'The Shadow Lines' and 'Calcutta Chromosome'. Name the author.

A. Amitav Ghosh   B. Vikram Seth

C. Jhumpa Lahiri   D. Vikas Swarup

66. Who wrote the book 'My Struggle for Existence' ?

A. Kiran Bedi   B. Kuldip Nayar

C. Mamata Banerjee   D. Morarji Desai

67. Who was selected as the Brand Ambassador of UNICEF in October 2014 ?

    A. Sachin Tendulkar   B. Salman Khan

    C. Shahrukh Khan   D. Aamir Khan

68. Who is writing her blog with the pen name 'Gul Makai' ?

    A. Malala Yousefzai   B. Kailash Satyarthi

    C. Anitha Desai   D. Arundhati Roy

69. Swachh Bharath Run was flagged off by

    A. Narendra Modi   B. Rajnath Singh

    C. Pranab Mukherjee   D. Arun Jaitley

70. Steel City of India

    A. Jamshedpur   B. Rourkela

    C. Bokaro   D. Bhilai

71. WRITE:JEVGR::WRONG: ?

    A. JEBAT   B. JECA

    C. JEDAT   D. JEDAD

Direction (Q.Nos.72-75): Read the information given below to answer the questions.

A,B,C,D,E,F,G and H want to have a dinner on a round table and they have worked out the following seating arrangements.

1. A will sit beside C.

2. H will sit beside A.

3. C will sit beside E.

4. F will sit beside H.

5. E will sit beside G.

6. D will sit beside F.

7. G will sit beside B.

8. B will sit beside D.

72. Which of the following is wrong ?

    A. A will be to the immediate right of C.   B. D will be to the immediate left of B.

    C. E will be to the immediate right of A.   D. F will be to the immediate left of D.

73. Which of the following is correct ?

   A. B will be to the immediate left of D   B. H will be to the immediate right of A

   C. C will be to the immediate right of F   D. B will be to the immediate left of H

74. A and F become neighbours,if

   A. B agrees to change her sitting position   B. C agrees to change her sitting position

   C. G agrees to change her sitting position   D. H agrees to change her sitting position

75. During sitting

   A. A will be directly facing C   B. B will be directly facing C

   C. A will be directly facing B   D. B will be directly facing D

76. 71,59,48,38,29,?

   A. 18   B. 21

   C. 20   D. 12

77. A person walks 1mile to west ,turns left and walks 1mile and turns left and walks 1mile and again turns left and walks 1mile . What is the direction he is facing now ?

   A. North   B. South

   C. East   D. West

   Direction (Qn Nos 78-82): In each of the questions below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts and decide which of the given conclusion(s) logically follow(s) from the three given statements.

   A. If only conclusion II follows

   B. If either conclusion I or II follows

   C. If neither conclusion I nor II follows

   D. If both conclusions I and II follow

78. Statements :   All pens are papers

                     Some papers are blades

                     All blades are knives

   Conclusion I   Some knives are papers

             II Some blades are pens

79. Statements :   All fans are televisions

                     Some televisions are channels

                     Some channels are radios

Conclusions I   Some fans are channels

           II   Some radios are televitions

80.   Statements :   Some roots are stems

                     All stems are branches

                     All branches are leaves

Conclusions I   Some leaves are roots

           II   Some branches are stems

81.   Statements :   Some computers are machines

                     Some machines are boards

                     All boards are chalks

Conclusion I   Some chalks are computers

           II   No chalk is computer

82.   Statements: Some locks are keys

                     All keys are metals

                     Some metals are cards

Conclusion I   Some cards are keys

           II   Some metals are locks

83.   If a day before yesturday was Wednesday, then when will Sunday fall ?

A. 3rd day after tomorrow   B. Tomorrow

C. Today   D. A day after tomorrow

84.   What was the day on 31st october 1984?

A. Friday   B. Sunday

C. Wednesday   D. Monday

Direction (Q:Nos 85-89): Each of the following questions below consists of a question and two statements numbered I and II given below it .You have to decide whether the data provided in the statements are sufficient to answer the questions.

Give answers

A. If the data in statement I alone are sufficient to answer the questions, while the data in statement II alone are not sufficient to answer the questions

B. If the data in satatement II alone are sufficent to answer the question, while the data in statement I alone are not sufficient to answer the question.

C. If the data in both the statements I and II together are not sufficient to answer the question

D. If the data in both the statements I and II together are necessary to answer the question

85. How will 'Walk' be writen in certain code ?

    I . In this code 'morning walk is good' is writen as 'na pa ta sa'

    II. In this code 'Wish you good morning' is written as 'la na sa da'

86. What is the code of 'market' ?

    I. 'do not go' is coded as 'ka ma tok'

    II. 'go to market' is coded as 'ma jo la'

87. Which of the following means 'very' in certain code language ?

    I. 'pit jo ha' means 'very good boy' in that code language

    II.' Jo na pa' means 'she is good'in that code language

88. In a code language 'al ed hop' means 'we play chess'

    What is the code of word chess ?

    I. 'id nim hop' means 'we are honest'

    II. 'gob ots al' means 'they play cricket'

89. In certain code language '146' means 'adopt good habits' .What is the code 'habit' in that language ?

    I. '473' means 'like good pictures'

    II. '826'means 'passion become habits'.

Direction (Q: Nos 90-94): Read the following information carefully to answer the question given below

A teachers' training institute has to conduct a refresher course for teachers of 7 different subjects History, Geography, Political Science, Hindi, Sanskrit, Music and English from 12th December to 19th, December.

a) The course should start with Geography

b) 13th December being a Sunday ,should be a holiday.

c) Music should be on the day previous to English.

d) The course should end with History.

e) Political Science should be immediately after the holiday. Sanskrit follows Political Science .

f) There should be a gap of one day between Sanskrit and English and between Music and Hindi.

90. Which subject is followed by music ?

    A. English   B. Geography

    C. Political Science   D. Sanskrit

91. How many days' gap is there between Music and Political Science ?

    A. One   B. Two

    C. Three   D. Four

92. Which subject Preceeds History ?

    A. Sanskrit   B. English

    C. Political Science   D. Hindi

93. Which subject will be on Tuesday ?

    A. History   B. English

    C. Sanskrit   D. None of these

94. Which refresher course will start three days before English subject ?

    A. Geography   B. History

    C. Political science   D. Sanskrit

Direction (Q:Nos 95-98): Each of the questions consists of five figures marked 1,2,3,4,5 named as problem figures and is followed by four answer figures marked A,B,C and D. Select a figure from the answer figures which will continue the series as established by the five problem figures.

Problem Figures

Answer Figures

95.

96.

Problem Figures

97.

1 2 3 4 5

A   B   C   D

Problem Figures

98.
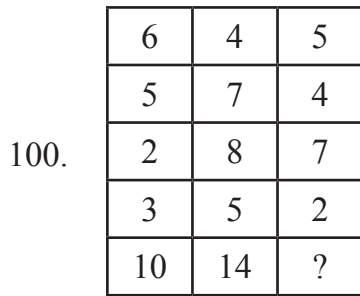

1   2   3   4   5

Answer Figures

A   B   C   D
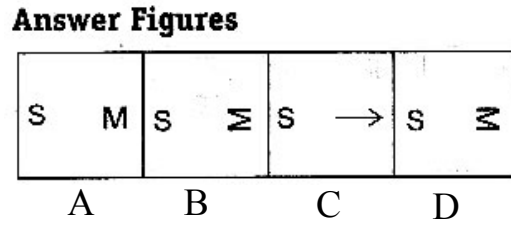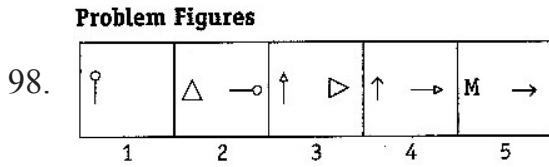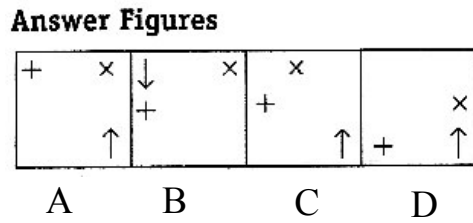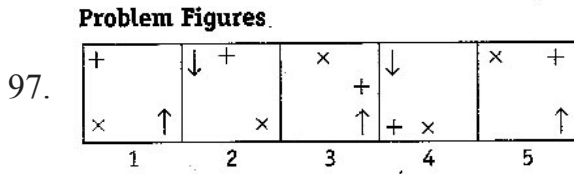
Direction (Q:Nos 99-100): Find the missing character in each of the following questions.

99.

A. 18   B. 15

C. 13   D. 10

100.

6	4	5
5	7	4
2	8	7
3	5	2
10	14	?
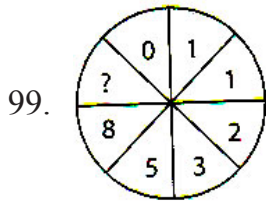
A. 21   B. 18

C. 16   D. 14

Space for rough works