

# MTS EXAMINATION 2015 -16

## QUESTION PAPER

Class : X

10

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.

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

For many years, the continent Africa remained unexplored and unknown. The main reason was the inaccessibility to its interior region due to dense forests, wild life, savage tribals, deserts and barren solid hills. Many people who tried to explore the land could not survive the dangers.

David Livingstone is among those brave few who not only explored part of Africa but also lived among the tribals bringing them near to Social Milieu. While others explored with the idea of expanding their respective empires. Livingstone did so to explore its vast and mysterious hinterland, rivers and lakes. He was primarily a religious man and a medical practitioner who tried to help mankind with it. Livingstone was born in Scotland and was educated to become a doctor and priest. His exploration started at the beginning of the year 1852. He explored an unknown river in Western Luanda. However, he was reduced to a skeleton during four years of travelling. By this time, he had become famous and when he returned to England for convalescing, entire London along with Queen Victoria turned to welcome him. After a few days, he returned to Africa. He discovered the origin of the River Nile in 1866. He again suffered many discomforts. He became too sick and could not even walk. He lost contact with rest of the world that grew anxious to know his whereabouts. Ultimately it was Stanely, the American journalist, who found him after many efforts, but Livingstone had died in a tribal village in 1873. His body was brought to London and buried in Westminster with full honour .

1. Which of the following shows that Livingstone had become very famous ?
  - A. Queen Victoria along with the people of London had come to meet him.
  - B. Queen Victoria arranged for the medical expenses.
  - C. The tribals were grateful to him for his medical expenses.
  - D. He was assigned the task of a priest although he was a medical professional.

2. Why were people not aware to the existence of Africa ?
  - A. It was inaccessible due to oceanic reefs
  - B. Its territory was covered with dense forests
  - C. People outside the continent were chased away
  - D. Explorers were afraid of the risks Involved
3. Synonym of the word “ Exploration” is
  - A. Execution
  - B. Cultivation
  - C. Foundation
  - D. Discovery
4. Antonym of the word “Barren” is
  - A. Uncultivated
  - B. Fertile
  - C. Forest
  - D. Unlevelled
5. Change the voice.

I hate people staring at me.

  - A. I hate being stared at.
  - B. I hate stared by people.
  - C. Staring at me by people is hated by me.
  - D. I hate people being stared at.
6. In which part of the sentence is the error ?

Doing his (a) / in the army (b) / he won many awards (c) / for exemplary service (d)

  - A. (a)
  - B. (b)
  - C. (c)
  - D. (d)
7. Passengers should be .....time for the train.
  - A. by
  - B. on
  - C. about
  - D. in
8. Select the most appropriate phrasal verb to fill in the gap.

He ..... from the competition at the last moment.

  - A. dropped off
  - B. dropped out
  - C. fell off
  - D. fell out
9. Choose the alternative which best expresses the meaning of the given idiomatic expressions.

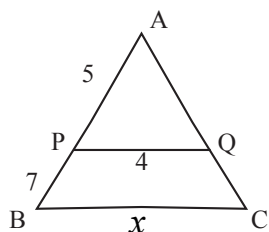
Cut a sorry figure:

  - A. to be defeated
  - B. make a poor show
  - C. to give up an attempt
  - D. keep silence
10. Choose the word opposite in meaning to the underlined one:

His dealings with the public are quite transparent.

  - A. witty
  - B. dishonest
  - C. opaque
  - D. verbose

11. If a rectangular piece of paper of dimensions  $44\text{cm} \times 20\text{cm}$  is rolled to form a hollow cylinder of height 20 cm, then the radius of the cylinder is .....
- A. 40 cm                      B. 44 cm                      C. 14 cm                      D. 7 cm
12. If the corner of a cube is cut off, write the number of corners of the remaining portion.
- A. 3                              B. 8                              C. 10                              D. 11
13. In the following figure,  $PQ \parallel BC$ . Then  $x$  is equal to .....



- A. 8                              B. 9.6                              C. 5.6                              D. 10
14. Find the cube root of 0.000064
- A. 0.08                              B. 0.04                              C. 0.8                              D. 0.4
15.  $(-1)^n + (-1)^{8n} = 0$ , when 'n' is .....
- A. any positive integer                              B. any odd natural number
- C. any even natural number                              D. any negative integer
16. On selling an article for ₹240, a trader loses 4%. In order to gain 6%, he must sell that article for .....
- A. ₹275                              B. ₹260
- C. ₹265                              D. ₹300
17. If  $\tan x = \sin 45^\circ \cos 45^\circ + \cos 60^\circ$ , then the value of  $x$  is .....
- A.  $30^\circ$                               B.  $60^\circ$                               C.  $45^\circ$                               D.  $60^\circ$
18. The median of the observations 26, 28, 31, 31, 33,  $x$ ,  $x+2$ , 37, 39, 41 arranged in ascending order is 34. The value of  $x$  is.....
- A. 33                              B. 33.5                              C. 34                              D. 35
19. If  $4x^2 + y^2 = 40$  and  $xy = 6$ , find the value of  $2x + y$ .
- A.  $\pm 8$                               B.  $\pm \sqrt{10}$                               C.  $\pm \sqrt{20}$                               D.  $\pm \sqrt{2}$
20. If  $\alpha, \beta$  are the zeroes of the polynomial  $x^2 - 4x + 1$ , then  $\frac{1}{\alpha} + \frac{1}{\beta} - \alpha\beta$  is .....
- A. 3                              B. 5                              C. -5                              D. -3
21. How much work is done while moving a charge of 3C across two points having a potential difference of 12V?
- A. 0.25 J                              B. 4 J                              C. 15 J                              D. 36 J
22. An electric bulb is connected to a 220 V generator. The current is 0.62 A. What is the power

of the bulb ?

- A. 136.4 w                      B. 220.62 w    C. 13.64 w    D. 354.83 w

23. Magnetic lines of force .....

- A. cannot intersect at all                                      B. intersect within the magnet  
C. intersect only at north and south poles                      D. None of these

24. In washing machine,

- A. Chemical energy is converted to mechanical energy.  
B. Electrical energy is converted to mechanical energy.  
C. Chemical energy is converted to electrical energy.  
D. Light energy is converted to mechanical energy.

25.  $\text{ZnO} + \text{C} \rightarrow \text{Zn} + \text{CO}$ . In this reaction which is the reducing agent ?

- A. Zn                      B. C                      C. ZnO                      D. CO

26. K  
Na  
Ca  
Mg  
Al  
Zn

In this activity series which metals are used for getting high voltage ?

- A. K, Na                      B. Na, Mg                      C. K, Zn                      D. K, Al

27. Cinnabar (HgS) is heated in air to form .....

- A. Hg                      B. HgO                      C.  $\text{HgS}_2$                       D.  $\text{HgO}_2$

28. Which component is not seen in glomerular filtrate ?

- A. Water                      B. Glucose                      C. Blood                      D. Aminoacids

29. Manu and Babu are brothers. 14 years after birth Manu's fingers and face muscles have an uncontrolled growth. The doctor diagnoses that he is an acromegalic patient. Which hormone variation is related to this disease ?

- A. Increase of Somatotropin                      B. Decrease of Somatotropin  
D. Increase of Thyroxine                      D. Decrease of Thyroxine

30. The urine formed in each kidney enters into a long tube called.....

- A. Ureter                      B. Urinary bladder  
C. Collecting duct                      D. Bowman's Capsule

31. Who was the leader of Vienna Congress ?

- A. Napoleon                      B. Charles II    C. Louis XVI    D. Metternich

32. Name the Sardinian King who led the movement for the unification of Italy.

- A. Joseph Mazzini    B. Garibaldi    C. Victor Emmanuel II                      D. Count Cavour

33. Which was the customs union formed in Germany under the initiative of Prussia in which most of the German states joined in 1834 ?

- A. Zollverein                      B. Red Shirt    C. Carbonari    D. Young Poland

34. The unification of Italy was completed in .....
- A. 1870                      B. 1873                      C. 1875                      D. 1890
35. Which of the following statement (s) is / are correct ?
- i) Unlike gender and religion, caste division is special to India.  
 ii) Caste system is based on the division of labour.  
 iii) Hereditary occupational division was sanctioned by rituals.  
 iv) Caste system was based on exclusion and discrimination against the 'out caste' groups.
- A. (i) only                                      B. (i) and (ii) only  
 C. (i) and (iii) only                              D. All the above
36. Assertion (A): Casteism paves the way for clash between people.  
 Reason (R): Political parties make use of castes for temporary gains.  
 Choose correct option:
- A. Both 'A' and 'R' are correct. 'R' is the explanation for 'A'.  
 B. 'A' is false and 'R' is true.  
 C. Both 'A' and 'B' are wrong.  
 D. 'A' is true and 'R' is false.
37. Who proclaimed the dams as the "Temple of modern India" ?
- A. Mahatma Gandhi                              B. Jawaharlal Nehru  
 C. Vinoba Bhave                              D. Dr. B.R. Ambedkar
38. Which rabi crop requires a cool growing season and bright sunshine at the time of ripening ?
- A. Rice                      B. Maize                      C. Millets                      D. Wheat
39. Which one of the following National Waterways pass through Kerala ?
- A. N W - 1                      B. N W - 2                      C. N W - 3                      D. N W - 4
40. C O R E stands for .....
- A. Centralized Online Real-time Electronic.  
 B. Centre of Rural Employment.  
 C. Central Organisation of Real Employment.  
 D. Central Organisation for Regeneration of Electricity.
41. Telangana became the 29th state of India on:
- A. 1 Jan 2014                      B. 2 June 2014                      C. 7 Dec 2013                      D. 4 July 2014
42. India was declared "Polio free" on
- A. 26 April 2014                      B. 21 March 2014  
 C. 29 November 2014                      D. 11 February 2014
43. Which country was suspended from G-8 membership
- A. Ghana                      B. Germany                      C. France                      D. Russia
44. Who among the lenders joined Gandhiji in the Champaran satyagraha held on April 10, 1917?
- A. Bal Gangadhar Tilak                      B. Subhash Chandra Bose  
 C. Rajendra Prasad                      D. None of these

45. Who among the following presided the historic Lahore session of 1929 of Indian National Congress ?  
 A. Pandit Jawaharlal Nehru                      B. Rajendra Prasad  
 C. Lala Lajapath Rai                              D. Pandit Motilal Nehru
46. What is the full form of UGC  
 A. University grants commission      B. Universal grants commission  
 C. University grants committee      D. Universal grant committee
47. WTO Stands for  
 A. Wide trade organisation              B. World Trade Organisation  
 C. World trade Orientation              D. None of above
48. Who was the last Governor General of British India.  
 A. Rajagopal Achari                      B. Lord wavel  
 C. Lord mount Batten                      D. Lord Linlithgo
49. Who was the founder of the Pakistan National Movement.  
 A. Iqbal              B. Jinnah              C. Agakhan              D. Rahmathali
50. Who is the inventor of Burglar Alarm  
 A. Edwin T. Holmes      B. James Ritty              C. Benjamin Franklin              D. Claude Minie
51. Who called Gandhiji as law breaker during salt satyagrah.  
 A. Lala Lajapath Rai              B. Subhash Chandra Bose  
 C. Sarojini Naidu              D. None of these
52. Who is the 1<sup>st</sup> Foreign Recipient of Bharat Ratna  
 A. Gan Abdul Gafar Khan              B. Bal Gangadhar Tilak  
 C. CR Das              D. Gopal Krishna Gokhale
53. Vienna is the capital of .....  
 A. Australia              B. America              C. Austria              D. Bolivia
54. Shalimar Bagh of Kashmir was built by  
 A. Akbar              B. Jahangir  
 C. Krishna Dev Rayer              D. Ashoka
55. Iquitos is located between which two countries.  
 A. Argentina - Brazil              B. China - Nepal  
 C. India - Pakistan              D. Poland - Germany
56. Which Sri Lankan cricketer was named leading men's cricketer of the world 2015 by Wisden Cricketers Almanac ?  
 A. Kumar Sangakkara              B. Mahela Jayawardene  
 C. Muthayya Muralidharan              D. None of these
57. ICC T-20 World cup winner of 2012 is .....  
 A. West Indies              B. India              C. Australia              D. South Africa
58. Computer to computer exchange of business - documents is done through  
 A. EDI              B. ERP              C. CAM              D. CAD
59. Primary source of cyber law in India is  
 A. IT Act 2000              B. IT Act 2003              C. IT Act 2004              D. IT Act 2006
60. Which is the most arid place in India ?  
 A. Jaisalmer              B. Jaisalmar              C. Thar              D. None of these
61. Which is the northernmost state capital in India ?

- A. Channai    B. Srinagar    C. Imphal    D. Gandhi Nagar
62. In which year , shivaji was entitled as chatrapati shivaji ?  
A. 1656    B. 1672    C. 1674    D. 1679
63. How long ago did the Indus Civilisation begin ?  
A. About 5,000 years ago    B. About 2,000 years ago  
C. About 3,000 years ago    D. About 4,000 years ago
64. Who was the 1st chairman of the constituent Assembly of India ?  
A. Dr. B.R Ambedkar    B. Dr. Rajendraprasad  
C. Dr. B.N Rao    D. Jawahar lal Nehru
65. Whose butobiography is “ ormayude Arakal”  
A. Basheer    B. G. Snkara Kurup    C. Cherukad    D. Thakazhi
66. Who wrote the book “ Pravasi” ?  
A. Kovilan    B. Thakazhi    C. Uroob    D. O.V. Vijayan
67. The head quarters of the International red cross is situated in  
A. Vicnna    B. Hague    C. Paris    D. Geneva
68. Who is known as Desbandhu ?  
A. Raja Gopalachari    B. Rana Prathap    C. Gokale    D. C.R Das
69. Which of the following author is known as cherukachu ?  
A. P. Sachidanandan    B. Govinda Pissaradi  
C. Sethumadhavan    D. P.V Ayyappan
70. Which city is known as windy city ?  
A. Chickago    B. Belgrade    C. London    D. Beljium

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| Space for rough works |
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