

Booklet No

3rd STATE LEVEL MTGS COMPETITION, 2024

Organised by:

Mission Transformation of Government Schools (MTGS)**QUESTION BOOKLET**
CLASS VIII**(Subjects: MATHEMATICS, SCIENCE, SOCIAL SCIENCE & GENERAL AWARENESS)****INSTRUCTIONS TO THE CANDIDATES**

1. This booklet contains 100 questions and each question carries equal marks.
2. This Question Booklet contains three Sections :
Section A - Mathematics (25 Questions)
Section B – Science (25 Questions)
Section C – Social Science (25 Questions)
Section D – General Awareness (25 Questions)
3. The duration of the exam is two (2) hours.
4. Attempt all the questions as there is **no negative mark** for wrong response.
5. Write your Name, School's Name, Class, Roll No, etc. in the box specified in the OMR ANSWER SHEET.
6. In the OMR Answer Sheet, there are four options marked as A, B, C & D against each question. You will select the response which you want to mark on the OMR Sheet and darken it completely as shown in the OMR Sheet.
7. Each question has one correct answer. Attempting more than one choice for a particular question will be treated as a wrong response even if one of the marked answer happens to be correct.
8. If a question is left blank, there will be no mark for the question.
9. Darken the circle using a black or blue ball point pen.
10. Before submitting the OMR Answer Sheet to the invigilator, the candidate should verify that all the entries are made correctly filled up and it is duly signed by the invigilator.
11. You are permitted to take away with you this Question Booklet.

DO NOT OPEN THIS QUESTION BOOKLET UNTIL YOU ARE TOLD TO DO SO

SECTION A: MATHEMATICS

1. Sum of the digits of a two digit number is 9. When we interchange the digits, it is found that the resulting new number is greater than the original number by 27. What is the two digit number?
a. 18 c. 27
b. 45 d. **36**
2. Find the area of a rhombus whose diagonals are of lengths 10 cm and 8.2 cm.
a. 82 cm^2 c. **41 cm^2**
b. 18.2 cm^2 d. 100 cm^2
3. Which of the following pairs represents a perfect square and its square root?
a. 36 and 5 c. 49 and 7
b. 64 and 8 d. **Both b and c**
4. What is the value of $\sqrt{3025}$?
a. 45 c. 35
b. **55** d. 65
5. Find the value of m for which $5^m \div 5^{-3} = 5^5$.
a. 1 c. **2**
b. 3 d. 4
6. Rani purchased a hair dryer for ₹ 5,400 including 8 % VAT. Find the price before VAT was added.
a. **₹ 5000** c. ₹ 5,500
b. ₹ 6000 d. ₹ 4000
7. Find the factors of $3m^2 + 9m + 6$.
a. $3(m+1)(m-2)$ c. $3(m+2)(m+2)$
b. **$3(m+1)(m+2)$** d. $3m(m+2)$
8. If a man sells an article for ₹1,500, making a profit of 25%, what was the cost price?
a. ₹ 1,000 c. **₹ 1,200**
b. ₹ 1,500 d. ₹ 1,800
9. There are 100 students in a hostel. Food provision for them is for 20 days. How long will these provisions last, if 25 more students join the group?
a. 25 c. 20
b. **16** d. 30
10. Which of the following is not a perfect square?
a. 225 c. 729
b. **2008** d. 676

11. Factorize: $4x^2 - 9y^2$

- a. **$(2x-3y)(2x+3y)$**
b. $(4x-9y)(x+y)$
c. $(2x-y)(2x+3y)$
d. $(2x+y)(2x+3y)$
12. What is the coefficient of x^2 in the expression $5x^2 - 3x + 7$?
a. - 3 c. 4
b. **5** d. 7
13. If the principal amount is ₹ 5000, the rate of interest is 4%, and the time is 3 years, what is the simple interest?
a. ₹ 300 c. **₹ 600**
b. ₹ 450 d. ₹ 1000
14. Which of the following statements is incorrect?
a. All rectangles are not squares
b. The diagonals of a square are perpendicular bisectors of each other.
c. All square are parallelogram.
d. **All squares are rhombus but not rectangles.**
15. Find the height of a cylinder whose radius is 7 cm and the surface area is 968 cm^2 .
a. 12 cm c. 22 cm
b. **15 cm** d. 20 cm
16. Which of the following statements is true?
a. The multiplicative identity of rational numbers is 0.
b. 1 is the additive identity for integers and rational numbers
c. **There are countless rational numbers between any two given rational numbers.**
d. Rational numbers are not closed under operations of addition, subtraction and multiplication.
17. Find the number of sides of a regular polygon each of whose exterior angles measures 45° .
a. 4 c. 6
b. **8** d. 10
18. Which of the following rational numbers is not between 2 and 3?
a. $9/4$ c. $11/5$
b. $14/6$ d. **$16/3$**

19. What will be the total amount after 3 years if ₹6,000 is invested at an interest rate of 10% per annum, compounded annually?

- a. ₹ 7986 c. ₹ 7,200
b. ₹ 5,600 d. ₹ 8,000

20. A machine in a soft drink factory fills 840 bottles in six hours. How many bottles will it fill in eight hours?

- a. 550 c. 740
b. 950 d. 1120

21. Find the value of $(-4)^{-3} \times (5)^{-3} \times (-5)^{-3}$

- a. $(-100)^{-3}$ c. $(100)^{-3}$
b. $(-14)^{-3}$ d. 150

22. Which of the following is a like term to $15x^2y$?

- a. $13x^2y^2$ c. $-4yx^2$
b. $17xy^2$ d. $15x^3y$

23. Arun is twice as old as Thoibi. Five years ago, his age was three times Thoibi's age. Find the present age of Arun.

- a. 10 years c. 15 years
b. 20 years d. 25 years

24. Find the least number which must be added to 1152 so as to get a perfect square.

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

25. A godown is in the form of a cuboid of measures 6 m x 4 m x 30 m. How many cuboidal boxes can be stored in it if the volume of one box is 0.8 m^3 ?

- a. 800 c. 900
b. 1000 d. 500

SECTION B: SCIENCE

26. Which one of the following pairs is not correct?

Disease		Causing Organism
a. TB	-	Bacteria
b. Malaria	-	Protozoa
c. Chicken Pox	-	Virus
d. Polio	-	Bacteria

27. Which of the following is used as a preservative for food?

- a. Common salt c. Sugar
b. Oil and vinegar d. All of these.

28. Which of the following is a property of non-metals?

- a. Malleable and Ductile.
b. Lustrous and Sonorous
c. Soft and Dull
d. Good Conductor of heat and Electricity.

29. We hear pop sound when metals react with sodium hydroxide. What does the pop sound indicate?

- a. Presence of Oxygen
b. Presence of Hydrogen
c. Presence of Carbon dioxide
d. Presence of Copper

30. Identify the Inexhaustible Natural Resources.

- a. Petroleum c. Sunlight
b. Natural Gas d. Coals

31. Which of the following is incorrect statement?

- a. CNG is more polluting fuel than petrol.
b. Kerosene is a fossil fuel.
c. Coke is almost pure form of carbon.
d. Petrol and Diesel are obtained from petroleum.

32. Choose the inflammable substance.

- a. Fire extinguisher c. Wood
b. Alcohol d. Charcoal

33. The lowest temperature at which a substance catches fire is called

- a. Combustible Temperature
b. Inflammable Temperature
c. Ignition Temperature
d. Ideal Temperature

34. Sangai is a/an

- a. Extinct animal
b. Endangered animal
c. Invasive species in Manipur
d. All the above are correct

35. Red Data Book records

- a. The extinct animals
b. Endangered plant & animal species
c. The list of National Parks
d. The list of important wetlands of India

36. Which species is/are conserved in Keibul Lamjao National Park?

- (i) Sangai (ii) Hog Deer
(ii) Lion (iii) Elephant

- a. Only (i) is true
b. Only (ii) is true
c. Both (i) & (ii) are true
d. All of these are true

37. Consider the following statements

- i. The cells having nuclear material without a nuclear membrane are called eukaryotes
- ii. The cells having nuclear material with a nuclear membrane are called prokaryotes

Identify the correct option:

- a. Only i
- b. Only ii
- c. Both i and ii
- d. None of the above.

38. What provides green colour to the leaves of plants?

- a. Haemoglobin
- b. Mitochondria
- c. Chloroplast
- d. Cell wall

39. Read the following statements

- (i) Amoeba is a unicellular organism
- (ii) Cell wall is not present in animals cells
- (iii) Chloroplast are present in animals cells
- (iv) Egg of a hen is a single cell.

Choose the correct statements.

- a. (i) and (ii) are correct
- b. (i) and (iii) are correct
- c. (i), (ii) and (iv) are correct
- d. (ii), (iii) and (iv) are correct

40. Animals which give birth to young ones are called

- a. Reptiles
- b. Viviparous
- c. Oviparous
- d. All the above

41. In a species, only a single parent is involved in reproduction. This type of reproduction is ____

- a. Sexual reproduction
- b. Asexual Reproduction
- c. Vegetative reproduction
- d. None of these

42. A female gamete carries ____ chromosome(s).

- a. One Y
- b. Two X
- c. One X and One Y
- d. One X

43. Puberty in female begins at the age of

- a. 11-13 years
- b. 14-16 years
- c. 16-18 years
- d. 18-21 years

44. Which of the following viruses caused AIDS?

- a. H1N1 Virus
- b. HIV
- c. Zika Virus
- d. Rhinovirus

45. When two forces act in opposite directions, then net force acting on it is the

- a. Sum of two forces
- b. Difference between the two forces
- c. Both (a) & (b)
- d. None of these

46. Force acts on an object may change

- a. Direction
- b. Speed
- c. Shape
- d. All of these

47. Which of the following produces least friction?

- a. Sliding friction
- b. Composite Friction
- c. Rolling friction
- d. Static friction

48. An electric current produces

- a. Heating effect
- b. Magnetic effect
- c. Chemical effect
- d. All of these

49. The process of depositing a layer of any desired metal on another material by means of electricity is called ____

- a. Electroplating
- b. Electron depositing
- c. Electric Plating
- d. None of these

50. The friction caused by fluids is called

- a. Force
- b. Friction
- c. Pressure
- d. Drag

SECTION C: SOCIAL SCIENCE

51. Which type of coal has the highest carbon content?

- a. Anthracite
- b. Lignite
- c. Bituminous
- d. Peat

52. Solar Energy is a/an ____ source of energy.

- a. Conventional
- b. Exhaustible
- c. Non-Conventional
- d. All of these

53. Shifting cultivation is also known as

- a. Slash and burn cultivation?
- b. Commercial grain farming
- c. Intensive subsistence farming
- d. Primitive Subsistence farming

54. Which of the following is known as the "GOLDEN FIBRE" all over the world?

- a. Cotton
- b. Jute
- c. Tea
- d. Coffee

55. Where is Silicon Valley, the world's leading centre of IT industry?

- a. Bangalore
- b. California
- c. England
- d. Osaka

- 56. A company is operated by the government and individuals or group of individuals. This type of industry is known as**
- Private Sector
 - Co-operative Sector
 - Public Sector
 - Joint Sector
- 57. Which was the first European nation to establish direct sea contact with India?**
- England
 - French
 - Portugal
 - Spain
- 58. Which British Governor-General is associated with the implementation of the Doctrine of Lapse?**
- Lord Dalhousie
 - Lord Canning
 - Lord Carnwallis
 - Lord Wellesley
- 59. Where was the first factory of the East India Company established in India?**
- Calcuta
 - Madras
 - Bombay
 - Surat
- 60. When did the Seven Years' Devastation of Manipur occur?**
- 1740 – 1744 AD
 - 1819 – 1826 AD
 - 1761 – 1768
 - 1857 – 1864
- 61. The Treaty of Yandabo was signed after which significant military conflict?**
- First Anglo- Burmese War
 - Second Anglo- Burmese War
 - Anglo Manipur War
 - Second Anglo Maratha War
- 62. Which event is often considered the immediate cause of the Revolt of 1857?**
- The annexation of Awadh
 - The introduction of the greased cartridges
 - Heavy taxation
 - The Doctrine of Lapse
- 63. Recently, the Government of India renamed the Mount Harriet as Mount Manipur? Where is Mount Harriet?**
- Assam
 - Andaman & Nicobar
 - Tripura
 - Arunachal Pradesh
- 64. Who gave the title "RANI" to Gaidinliu?**
- MK Gandhi
 - Lord Mountbetan
 - J Nehru
 - BR Ambedkar
- 65. The real name of Paona Brajabashi was**
- Paonam Chaoba singh
 - Paonam Hera Singh
 - Paonam Chaondra Singh
 - Paonam Naol Singh

- 66. When did the Constitution of India come into force?**
- 26 December, 1947
 - 26 January, 1950
 - 26 December, 1950
 - 26 January, 1949
- 67. Who was the chairman of the Drafting Committee of the Indian Constitution?**
- Dr. Rajendar Prasad
 - J Nehru
 - BR Ambedkar
 - MK Gandhi
- 68. Which one is not a Fundamental Rights?**
- Right to Equality
 - Right to Freedom
 - Right to Freedom of Play
 - Right against Exploitation
- 69. In India, secularism means**
- All religions must be treated equally by the state
 - Only one religion is supported by the state
 - The state promotes atheism
 - Religion is completely banned in public life
- 70. Which of the following is NOT a characteristic of a secular state?**
- Freedom of religion
 - Equal treatment of all religions
 - Preference for one religion over others
 - Separation of religion from government affairs
- 71. Who presides over the meetings of Union Cabinet?**
- President
 - Speaker
 - Prime Minister
 - Vice President
- 72. President is the**
- Head of the Government
 - Head of the State
 - Head of the cabinet
 - All of these are correct
- 73. The Executive consists of**
- The Prime Minister
 - The Council of Ministers
 - Both (a) & (b)
 - None of these
- 74. What does FIR stand for in the context of law enforcement?**
- First Information Record
 - First Information Result
 - First Information Report
 - Final Information Report
- 75. What is the apex court in India?**
- High Court
 - Supreme Court
 - Lok Adalat
 - District Session Judge

SECTION D: GENERAL AWARENESS

76. Which festival is celebrated to mark the New Year in Manipuri month?

- a. Yaoshang
- b. Ningol Chakouba
- c. **Cheiraoba**
- d. Lai Haraoba

77. Which Manipuri festival celebrates the bond between brothers and sisters?

- a. Bihu
- b. Durga Puja
- c. **Ningol Chakouba**
- d. Onam

78. Which sport is associated with Shanglakpam Nilakanta Sharma in the recently concluded Paris Olympics 2024?

- a. **Hockey**
- b. Boxing
- c. Weight Lifting
- d. Football

79. Which of the following is an action plan implemented during Swachhata Pakhwada in schools?

- a. Personal Hygiene Day
- b. Hand wash day
- c. Green School Drive Day
- d. **All of the above.**

80. Which one will come last if arranged in alphabetical order?

- a. Actual
- b. Aadhar
- c. Addiction
- d. **Aeroplane**

81. What is the scientific name of our Sangai?

- a. *Sermatica humea humea*
- b. ***Rucervus eldii eldii***
- c. *Panthera tigris*
- d. *Osteobrama belangiri*

82. Who was the first elected Chief Minister of Manipur?

- a. Rishang Keising
- b. Muhammad Alimuddin
- c. Yangmasho Seija
- d. **Mairenbam Koireng Singh**

83. Who was the first Manipuri to participate in the Olympic games?

- a. Ngangom Dingko Singh
- b. Nilakanta Sharma
- c. Khetrimayum Thoiba
- d. **Pangambam Nilakomol**

84. Which forest is also known as the "Lungs of Imphal valley"?

- a. Khurkhul Forest
- b. **Langol Reserved Forest**
- c. Keibul Lamjao National Park
- d. All the above

85. Which state/countries share border with Manipur?

- (i) Arunachal Pradesh
- (ii) Mizoram
- (iii) Myanmar
- (iv) Nagaland
- (v) Assam
- a. Only (i) & (iii)
- b. Only (ii) & (iv)
- c. Only (ii), (iii) & (iv)
- d. **Only (ii), (iii), (iv) & (v)**

86. Which is the smallest district in area among the others?

- a. Senapati
- b. **Kakching**
- c. Imphal east
- d. Bishnupur

87. When was Yuvaraj Tikendrajit hanged?

- a. 23 April, 1891
- b. **13 August, 1891**
- c. 23 April, 1981
- d. 13 August, 1947

88. "Manipur is the Jewel of India". Who said this statement?

- a. **Jawaharlal Nehru**
- b. MK Gandhi
- c. Sardar Vallabhai Patel
- d. Subash Chandra Bose

89. What is the full form of IPS?

- a. Indian Professional Service
- b. **Indian Police Service**
- c. International Police Service
- d. Indian Physiotherapy Service

90. What is the literacy rate of Manipur as per the census of 2011?

- a. **76%**
- b. 56%
- c. 91%
- d. 62%

91. What is the most important industry of Manipur?

- a. IT Sector
- b. **Cottage Industry**
- c. Cement Industry
- d. Iron & Steel Industry

92. Which one is not located in Manipur?

- a. Bunning Wildlife Sanctuary
- b. Keilam Wildlife Sanctuary
- c. Zeilad Wildlife Sanctuary
- d. **Manas Wildlife Sanctuary**

93. Which one is a wrong pair?

- a. Brave - Coward
- b. Success - Failure
- c. **Clear - Closed**
- d. Sweet - Bitter

94. Which one doesn't belong to the group?

- a. Football
- b. **Piano**
- c. Baseball
- d. Soccer

95. What will come next in the series?

- 15, 14, 12, 9, _____
 a. 6 c. 5
 b. 4 d. 7

96. If 6 is to 36, then 9 is to :

- a. 83 c. 72
 b. 81 d. 121

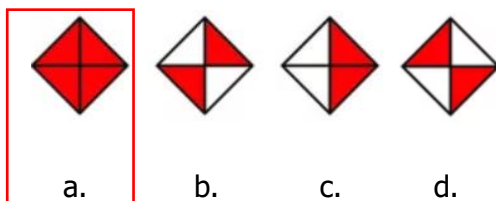
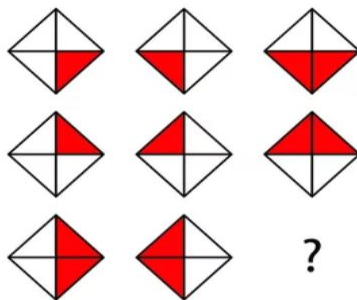
97. If today is Sunday, what day will be 28th days from today?

- a. Saturday c. Sunday
 b. Monday d. Tuesday

98. If,
 $1 + 5 = 6$
 $2 + 6 = 14$
 $3 + 7 = 24$
 $5 + 9 = ?$

- a. 45 c. 50
 b. 52 d. 55

99. What will be the next pattern?



100. The value in the question mark is

 +  +  = 18

 +  +  = 09

 ×  -  = 12

 ×  -  = ??

- a. 12 c. 14
 b. 16 d. 18

No Correct Option