

MIZORAM PUBLIC SERVICE COMMISSION

TECHNICAL COMPETITIVE EXAMINATIONS FOR JUNIOR GRADE OF MIZORAM ENGINEERING SERVICE (M.E.S.) UNDER PUBLIC WORKS DEPARTMENT, GOVERNMENT OF MIZORAM, MARCH, 2020

GENERAL STUDIES

Time Allowed : 3 hours

FM : 200

All questions carry equal mark of 2 each.

Attempt all questions.

1. The weight of the body is:

- (a) Maximum at the equator
(b) Minimum at the equator
(c) Maximum at the poles
(d) Minimum at the poles

2. Match the following statements:

- | | |
|---------------------|----------------------|
| A. Force | 1. $\frac{1}{2}mv^2$ |
| B. Kinetic Energy | 2. $F \times t$ |
| C. Potential Energy | 3. $m \times a$ |
| D. Impulse | 4. Mgh |

Codes :

	A	B	C	D
(a)	3	4	1	2
(b)	3	1	4	2
(c)	2	4	1	3
(d)	1	2	3	4

3. Gasoline is obtained from crude petroleum by:

- (a) Fractional distillation
(b) Fractional crystallization
(c) Sublimation
(d) Evaporation

4. The gas used in the artificial ripening of fruits is:

- (a) Methane
(b) Acetylene
(c) Ethane
(d) Butane

5. The slag obtained in the blast furnace consists of:

- (a) Calcium phosphate
(b) Calcium silicate
(c) Ammonium silicate
(d) Ammonium phosphate

6. The study of hair and its diseases is known as:

- (a) Penology
(b) Trichology
(c) Physiognomy
(d) Pomology

7. To an astronaut in space, the sky appears to be:

- (a) Red
(b) White
(c) Dark
(d) Blue

8. A substance used in the fire extinguisher under the trade name of Pyrene is:
- (a) Carbon dioxide (b) Chloroform
(c) Carbon tetrachloride (d) Bleaching powder

9. Match the following statements:

- | | |
|------------------|---------------------------|
| A. Analgin | 1. Vitamin B ₂ |
| B. Riboflavin | 2. Vitamin C |
| C. Penicilin | 3. Analgesic |
| D. Ascorbic Acid | 4. Antibiotic |

Codes :

	A	B	C	D
(a)	3	2	4	1
(b)	3	1	4	2
(c)	2	3	1	4
(d)	2	1	4	3

10. Which among the following diseases are not bacterial?
- (a) Cholera and Diphtheria (b) Malaria and trichomonas
(c) Tetanus and typhoid (d) Tuberculosis and leprosy
11. The pigment which is responsible for blood clotting is:
- (a) Fibrinogen (b) Haemoglobin
(c) Glucose (d) Blood Cells
12. Which act separated Burma from India?
- (a) Charter Act of 1858 (b) Indian Councils Act 1861
(c) Government of India Act 1935 (d) Indian Independence Act 1947
13. In which battle was the English finally defeat the French in India?
- (a) Wandiwash (b) St. Thome
(c) Jinji (d) Arcot
14. Who was the Mughal emperor who granted the Diwani of Bengal, Bihar and Orissa to the East India Company?
- (a) Shah Alam II (b) Farrukhsiyar
(c) Muhammad Shah (d) Shah Alam I
15. During the course of which of the following movements Mahatma Gandhi gave the slogan 'Do or Die'?
- (a) Dandi March (b) Khilafat Movement
(c) Non Co-operation Movement (d) Quit India Movement
16. From where did Subhash Chandra Bose inaugurate the Government of Free India?
- (a) Singapore (b) Tokyo
(c) Berlin (d) Rangoon
17. The Cripps Mission visited India in the year:
- (a) 1940 (b) 1941
(c) 1942 (d) 1945
18. The Khilafat movement was organised to protest against the injustice done to:
- (a) Turkey (b) Egypt
(c) Arabia (d) Persia

19. Demarcation line between India and China is:
- (a) Radcliff Line (b) Mc Mahon Line
(c) Durand Line (d) 49th Parallel
20. The atmospheric layer that reflects radio waves to earth is called:
- (a) The Ionosphere (b) The Stratosphere
(c) The Mesosphere (d) The Thermosphere
21. When the earth reaches its perihelion, it is:
- (a) Nearest to the Moon (b) Nearest to the Sun
(c) Nearest to Pluto (d) Farthest from the Sun
22. The Sea of Tranquility is found in:
- (a) Earth (b) Mars
(c) Moon (d) Saturn
23. The salinity of the sea water is:
- (a) 1.5% (b) 2.5%
(c) 3.5% (d) 4.5%
24. Southernmost tip of the territory of India is:
- (a) Kanniyakumari (b) Rameshwaram
(c) Indira Point (d) Kavaratti
25. Contours are connecting places having:
- (a) Equal heights (b) Equal barometric pressure
(c) Equal temperature (d) Equal amount of rainfall
26. Sunderbans are located in the delta region of:
- (a) Cauvery (b) Mahanadi
(c) Ganges (d) Godavari
27. The seasonal migration of pastoral tribes moving with their herds of animals and making optimum use of pastures is called:
- (a) Hibernation (b) Transhumance
(c) Immigration (d) Aestivation
28. The concept of welfare state finds elaboration in the:
- (a) Directive Principles of State Policy (b) Preamble
(c) Fundamental Rights (d) Fundamental Duties
29. The Comptroller and Auditor General report is examined by:
- (a) Public Accounts Committee (b) Estimates Committee
(c) Speaker of the Lok Sabha (d) Chairman of the Rajya Sabha
30. Sales Tax was introduced in India by:
- (a) C. Ragagopalachari (b) C. D. Deshmuk
(c) John Mathai (d) R.K. Shanmukham Chetty
31. Duration of President's Rule in a state in the first instance is:
- (a) Three months (b) Six months
(c) Eight months (d) Twelve months

32. When a State legislature is dissolved, the law making power vests with the:
- (a) Governor (b) President
(c) Chief Justice of India (d) Union Parliament
33. Abide by the Constitution and respect its ideal and institutions, the National Flag and the National Anthem is the:
- (a) Fundamental Duty (b) Fundamental Right
(c) Directive Principles of State Policy (d) Ordinary Right
34. Which among the following countries do not have a Constitution in the formal sense?
- (a) United States (b) Ireland
(c) United Kingdom (d) Russia
35. The power of the Supreme Court of India to decide disputes between the Centre and the States falls under its:
- (a) Original jurisdiction (b) Advisory jurisdiction
(c) Appellate jurisdiction (d) Constitutional jurisdiction
36. In which state was the electronic voting machine first experimented?
- (a) Haryana (b) Maharashtra
(c) Kerala (d) Goa
37. Among the following, the most powerful Upper House is:
- (a) Rajya Sabha in India (b) Senate in USA
(c) House of Lords in United Kingdom (d) Council of States in Switzerland
38. Among the criteria to become a national party, recognition in how many states are required?
- (a) Two (b) Three
(c) Four (d) Five
39. The term 'Tirthankaras' is associated with:
- (a) Hinduism (b) Jainism
(c) Zoroastrianism (d) Buddhism
40. The first state in India which has passed a resolution demanding rollback of CAA is?
- (a) Assam (b) Meghalaya
(c) Delhi (d) Kerala
41. Which politician in India was recently honoured by Bill-Melinda Gates Foundation with the 'Global Goalkeeper Award'?
- (a) Sonia Gandhi (b) Amit Shah
(c) Narendra Modi (d) Mamata Bannerjee
42. In India Martyr's Day is observed on:
- (a) January 15 (b) January 30
(c) February 7 (d) February 14
43. The term 'De-notified Tribes' refers to:
- (a) Aborigines (b) Nomadic tribes
(c) Tribes practising shifting cultivation (d) Tribes earlier classified as criminal tribes
44. 'Vayam Raksham' meaning 'We protect' is the motto of the:
- (a) Indian Army (b) Indian Navy
(c) Indian Airforce (d) Indian Coast Guard

45. Who was the first woman Chief Minister of an Indian State?
(a) Padmaja Naidu (b) Sucheta Kripalani
(c) Dr. Sushila Nayyar (d) Anna Chandy
46. Which among the following is the function of the Finance Commission:
(a) Allocation of the shares of net proceeds of taxes
(b) Looking into the financial relations between the Centre and the States
(c) Laying down principles governing grants-in-aid
(d) Any other matter referred to it by the President
47. 'Ad Valorem' refers to:
(a) Taxes in proportion to the estimated value of the goods
(b) Taxes in proportion to the quantity of goods
(c) Taxes levied at the time of selling and purchasing
(d) Taxes levied for advertising
48. Parallel economy refers to:
(a) Traditional economy (b) Black money
(c) Agriculture based economy (d) Socialist economy
49. Fiscal Deficit is:
(a) Government expenditure minus borrowings
(b) Government expenditure minus revenue receipts
(c) Same as budget deficit
(d) Budget deficit minus borrowings and other liabilities
50. The Contingency Fund of India has been placed at the disposal of:
(a) President (b) Finance Commission
(c) Prime Minister (d) Finance Minister
51. Dronacharya Awards are given to:
(a) Best performer in Archery (b) Outstanding coaches in sports
(c) Outstanding athletes (d) Outstanding invention in science
52. 'Regatta' is the term associated with:
(a) Golf (b) Rowing
(c) Bridge (d) Horse-racing
53. The recent trend in Information Technology that makes use of internet and is being changing the way several things are connected is termed as –
(a) Internet of Things (b) Network of Things
(c) Internet of Mobiles (d) Network of Mobiles
54. The instrument used for measuring air humidity is –
(a) Hydrometer (b) Hygrometer
(c) Barometer (d) Lactometer
55. When pressure is increased, then the melting point of ice –
(a) Increases (b) Decreases
(c) Remains unchanged (d) Depends on the impurities in the ice

56. A and B are two heavy steel blocks. If B is placed on the top of A, the weight increases by 60%. How much would be the reduction of weight with respect to the total weight of A and B, if B is removed from the top of A?
- (a) 60% (b) 45.5%
(c) 40% (d) 37.5%
57. The first nuclear test conducted by India under the code name of 'Smiling Buddha' was in the year –
- (a) 1973 (b) 1974
(c) 1975 (d) 1976
58. QR code stands for –
- (a) Quick Read code (b) Quick Response code
(c) Quick Revert code (d) Quick Raise code
59. In a conference, out of a total 100 participants, 70 are Indians. If 60 of the total participants are vegetarian, then which of the following statements is/are correct?
- i) At least 30 Indian participants are vegetarian.
ii) At least 10 Indian participants are non-vegetarian.
- Select the correct answer using the codes given below:
- (a) i) only (b) ii) only
(c) Both i) & ii) (d) Neither i) nor ii)
60. The point within the Earth surface where earthquakes originate is -
- (a) comma (b) origin
(c) epicenter (d) focus
61. The government of India initiated instant transfer of money across accounts through virtual payment account and was developed by NPCI. It is called –
- (a) Net Banking (b) IMPS
(c) NEFT (d) UPI
62. In which situation Spring tides can occur :
- (a) the moon, sun and the earth are at right angles with the earth at the apex
(b) the moon is farthest from the earth
(c) the sun is closest to the earth
(d) the moon, the sun and the earth are in the same line
63. What happens when a ship crosses International Date Line from west to east?
- (a) It gains one day (b) It loses one day
(c) It loses 10 hrs (d) It gains half a day
64. What is the time difference between 1 degree of longitudes?
- (a) 5 minutes (b) 5 minutes 20 seconds
(c) 4 minutes (d) 4 minutes 20 seconds
65. Two bulbs marked 100 watt and 200 watt are joined in series to 230V power supply. Which one of the bulb would be brighter?
- (a) 100 watt (b) 200 watt
(c) Both would be equally bright (d) It can not be determined
66. Coastal Andhra Pradesh and Odisha often face natural disasters due to –
- (a) Cyclones (b) Earthquakes
(c) Landslides (d) Tornadoes

67. Which of the following CMs recently launched an employment-oriented mobile app, 'Rojgar Sangi'?
- (a) Nitish Kumar (b) Bhupesh Baghel
(c) Pramod Sawant (d) Manohar Lal
68. What is the last date announced by the Aviation Ministry for voluntarily registering drones?
- (a) 31st December, 2019 (b) 31st January, 2020
(c) 29th February, 2020 (d) 31st March, 2020
69. Where has the National Informatics Center (NIC) set up a Center of Excellence (CoE) in Blockchain Technology?
- (a) Bengaluru (b) Chennai
(c) Hyderabad (d) Delhi
70. Recently, Oleksiy Honcharuk gave his resignation. He was the Prime Minister of which of the following countries?
- (a) Syria (b) Egypt
(c) Ukraine (d) Poland
71. Which vitamin is called retinol?
- (a) Vitamin A (b) Vitamin C
(c) Vitamin D (d) Vitamin E
72. Who became the fastest Indian spinner to claim 100 wickets in ODI during the second match against Australia in Rajkot in January 2020?
- (a) Mohammed Shami (b) Kuldeep Yadav
(c) Ravichandran Ashwin (d) Umesh Yadav
73. $6 : 24 :: 5 : ?$
- (a) 23 (b) 22
(c) 26 (d) 20
74. The territory of Porus who offered strong resistance to Alexander was situated between the rivers of
- (a) Sutlej and Beas (b) Jhelum and Chenab
(c) Ravi and Chenab (d) Ganga and Yamuna
75. Incidence of a tax means:
- (a) A chance factor for taxation
(b) A rare kind of taxation
(c) Final resting point of the money burden of a tax
(d) Taxes on emergency circumstances
76. The ultimate ownership of land during the post-Gupta period lay with
- (a) the cultivator (b) the village community
(c) the king (d) the joint family
77. The central banking functions in India are performed by the
- i) Central Bank of India
ii) Reserve Bank of India
iii) State Bank of India
iv) Punjab National Bank
- (a) i) only (b) ii) only
(c) i) and ii) (d) ii) and iii)

78. Which of the following best describes 'Subsidy'?
- (a) Payment by government for purchase of goods and services
 - (b) Payment made by business enterprises to factors of production
 - (c) Payment made by companies to shareholders
 - (d) Payment made by the government to business enterprises, without buying any goods and services
79. Development expenditure of the Central government does not include -
- (a) Defence expenditure
 - (b) Expenditure on economic services
 - (c) Expenditure on social and community services
 - (d) Grant to states
80. Depreciation means –
- (a) Closure of a plant due to lock out
 - (b) Reduction of GDP over time
 - (c) Loss of equipment value over time due to wear and tear
 - (d) Reduction of claimable amount in insurance
81. If the cash reserve ratio is lowered by the RBI, its impact on credit creation will be to –
- (a) increase it
 - (b) decrease it
 - (c) no impact
 - (d) none of these
82. The banks are required to maintain a certain ratio between their cash in the hand and totals assets. This is called
- (a) Statutory Bank Ratio (SBR)
 - (b) Statutory Liquid Ratio (SLR)
 - (c) Central Bank Reserve (CBR)
 - (d) Central Liquid Reserve (CLR)
83. Most modern TV's draw power even if turned off. For what purpose is power mainly used?
- (a) Sound
 - (b) Remote control
 - (c) Color balance
 - (d) High voltage
84. The purpose of choke in tube light is –
- (a) To decrease the current
 - (b) To increase the current
 - (c) To decrease the voltage momentarily
 - (d) To increase the voltage momentarily
85. Who is largely responsible for breaking the German Enigma codes, created a test that provided a foundation for artificial intelligence?
- (a) Alan Turing
 - (b) Jeff Bezos
 - (c) George Boole
 - (d) Charles Babbage
86. A device that is responsible for changing the voltage is –
- (a) Transformer
 - (b) Encoder
 - (c) Decoder
 - (d) Translator
87. In which year was the "@" chosen for its use in e-mail addresses?
- (a) 1976
 - (b) 1972
 - (c) 1980
 - (d) 1984
88. Which of the following is considered as the beginning of modern day internet?
- (a) ARPANET
 - (b) NSANET
 - (c) INTRANET
 - (d) LANET
89. What is the FIFA ranking of Indian men's football team by the end of 2019?
- (a) 102
 - (b) 106
 - (c) 108
 - (d) 109

90. Who won the Australian Open 2020 men's singles title?
(a) Rafael Nadal (b) Novak Djokovic
(c) Roger Federer (d) Stefanos Tsitsipas
91. The most Olympic gold medals won by a male athlete is 23, and is achieved by –
(a) Michael Phelps (b) Ian Thorpe
(c) Usain Bolt (d) Asafa Powell
92. The I-League champion (India) in 2018-19 season was –
(a) Aizawl FC (b) Mohun Bagan FC
(c) East Bengal FC (d) Chennai City FC
93. The serving President of FIFA is –
(a) Gianni Infantino (b) Sepp Blatter
(c) Issa Hayatou (d) Michel Platini
94. Which of the following is not associated with the UNO?
(a) ILO (b) WHO
(c) ASEAN (d) UNESCO
95. Amnesty International is an organization associated with which of the following fields?
(a) Protection of Cruelty to animals (b) Environment protection
(c) Protection of human rights (d) Protection of historic monuments
96. Headquarters of the World Health Organization is located at
(a) Geneva (b) Washington DC
(c) New York (d) Rome
97. The only zone in the country that produces gold which is also rich in iron is
(a) North-eastern zone (b) North-western zone
(c) Southern zone (d) None of the above
98. Which of the following atomic power station in India is built completely indigenous?
(a) Kalpakkam (b) Narora
(c) Rawat Bhata (d) Tarapore
99. The oldest oil refinery in India is at –
(a) Digboi, Assam (b) Haldia, near Kolkata
(c) Koyali, near Baroda (d) Noonmati, Assam
100. Plants absorb dissolved nitrates from soil and convert them into –
(a) free nitrogen (b) urea
(c) ammonia (d) proteins