MIZORAM PUBLIC SERVICE COMMISSION

TECHNICAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO
JUNIOR GRADE OF MIZORAM ENGINEERING SERVICE
UNDER PUBLIC HEALTH ENGINEERING DEPARTMENT, 2014

GENERAL STUDIES

Time Allowed : 3 hours Full Marks : 100

All questions carry equal marks of 1 each.

Attempt all questions.

1. Public Health Engineering Department of Mizoram was:
   (a) Established as a purely new Department
   (b) Separated from PWD
   (c) A part of Health Department
   (d) Under UD&PA before

2. The first among Mizos to have passed Engineering Degree:
   (a) Durra Chawngthu
   (b) Lalrengpuia Sailo
   (c) K.Thangzualla
   (d) Robula

3. A two wheeler often slips on an oily road because:
   (a) friction between tyres and road surface decreases
   (b) inertia of the two wheeler tyres increases
   (c) friction between tyres and road surface increases
   (d) inertia of two wheeler tyre decreases

4. Name of a controversial Minister of Delhi Gov’t. who allegedly barged into a house where some African women were living in January 2014 is:
   (a) Manish Sisodia
   (b) Somnath Barti
   (c) Rakhi Birla
   (d) Prashan Bhushan

5. A constitutional body of India headed by an Engineer is:
   (a) Election Commission
   (b) Finance Commission
   (c) Comptroller & Auditor General
   (d) Union Public Service Commission

6. The only Chief Minister in India who continuously ruled for more than five terms:
   (a) Manik Sarkar of Tripura
   (b) Gegong Apang of Arunachal
   (c) Jyoti Basu of West Bengal
   (d) Narendra Modi of Gujarat

7. Which one of the following is the fastest growing sector in India?
   (a) Service sector
   (b) Highway sector
   (c) Agriculture sector
   (d) Manufacturing sector

8. Who among these leaders was at one time Prime Minister for 13 days?
   (a) Atal Bihari Vajpayee
   (b) Chandra Sekhar
   (c) Morarji Desai
   (d) Viswanath Pratap Singh
9. Email was invented by:
   (a) Arthur Wynne      (b) Charles Strite
   (c) Tim Berners-Lee   (d) Ray Tomlinson

10. Select the correct statement in respect of central budget:
    (a) Plan expenditure is higher than non-plan expenditure
    (b) Non-plan expenditure is normally higher than plan expenditure
    (c) Plan expenditure is always equal to plan expenditure
    (d) Most salaries of employees are paid from plan fund

11. Five year Plans are finally approved by the:
    (a) President of India   (b) Union Council of Ministers
    (c) National Development Council (d) Planning Commission

12. Who is Chairman of Planning Commission?
    (a) President           (b) Finance Minister
    (c) Prime Minister       (d) Speaker of Lok Sabha

13. In Mizoram, National Highway connecting Aizawl and Lunglei is:
    (a) NH-150               (b) NH-154
    (c) NH-54                (d) NH-36

14. Which of the following groups constitutes the largest minority group in India?
    (a) Sikh                 (b) Muslim
    (c) Buddhism             (d) Christianity

15. The Governor General of India during Sepoy Mutiny was:
    (a) Lord Canning         (b) Lord Lytton
    (c) Lord Dalhousie       (d) Lord Hastings

16. What does NLCPR stand for?
    (a) National Liability Clearance Permanent Remittance
    (b) Non-Lapsable Central Payment of Resources
    (c) Non-Lapsable Central Pool of Resources
    (d) None of these

17. The first Indian scholar who treated Mathematics as a distinct subject was:
    (a) Dr. Amartya Sen      (b) Aryabhatta
    (c) Chandra Gupta        (d) Gautam Roy

18. The first 5-Year Plan in India was launched in the year:
    (a) 1951                 (b) 1950
    (c) 1947                 (d) 1954

19. The smallest District (area-wise) of Mizoram is:
    (a) Saiha District       (b) Serchhip District
    (c) Kolasib District     (d) Mamit District
20. Who designed the new symbol of Indian Rupee?
   (a) Udaya Kumar Dharmalingam  (b) Subramaniam Mehta
   (c) Vijaya Reddy      (d) Srikant Bandhyopadhyay

21. PMGSY was launched on December 25, 2000, which is the birthday of:
   (a) Manmohan Singh  (b) Atal Bihari Vajpayee
   (c) Rajiv Gandhi  (d) Subash Chandra Bose

22. Penicillin was invented by:
   (a) Dr. Christian Bernard  (b) Alexander Flemming
   (c) Alfred Nobel  (d) Dr. George Hume

23. The National Rural Employment Guarantee Scheme aims at providing:
   (a) 100 days of employment to one family
   (b) 100 days of employment to any able working person
   (c) 100 days of employment to all working members of a family
   (d) 100 days of employment to all unemployed members

24. Oil was first discovered in India in the year 1867 at:
   (a) Kalol in Gujarat  (b) Duliajan in Assam
   (c) Bankura in West Bengal  (d) Digboi in Assam

25. The primary and immediate cause of Sepoy Mutiny 1857 was:
   (a) Introduction of English in the Army
   (b) Adoption of General Service Enlistment Act
   (c) Use of greased cartridge
   (d) Stoppage of soldiers’ privilege of postage free letters

26. Gandhiji evolved ‘non-cooperation and ‘satyagraha’ in:
   (a) South Africa  (b) India
   (c) England  (d) U.S.A

27. The first and the only politician from north-east elected as Speaker of Lok Sabha:
   (a) Prof. G.G.Swel  (b) Purno Agitok Sangma
   (c) Williamson Sangma  (d) Hiteshwar Saikia

28. Choose the first and the only Central Minister from Mizoram:
   (a) A.Thanglura  (b) Dr. C.Silvera
   (c) H.T.Sangliana  (d) Lalbuapia

29. The number of seats in the Legislative Assembly of NCT of Delhi is:
   (a) 40  (b) 70
   (c) 60  (d) 90

30. Another name for Myopia is:
   (a) Long-sightedness  (b) Short-sightedness
   (c) Blindness  (d) Presbyopia
31. The length of the side of a square field whose area is equal to the sum of the area of two rectangular fields with dimensions 40m×20m and 25m×17m is:
   (a) 30m  (b) 35m
   (c) 32m  (d) 37m

32. The value of x in the series 9, 81, x, 6561 is:
   (a) 729  (b) 162
   (c) 90   (d) 60

33. The lightest gas is:
   (a) Xenon  (b) Helium
   (c) Hydrogen (d) Radon

34. Who is the author of the famous novel ‘The Da Vinci Code’?
   (a) Dan Brown  (b) Victor Hugo
   (c) D.B.C. Pierre (d) Aldour Huxley

35. Who first detected the radio waves?
   (a) J.C. Maxell  (b) G. Marconi
   (c) Rutherford  (d) Heinrich Hertz

36. Which country has the lengthiest Constitution?
   (a) U.S.A.  (b) U.K.
   (c) Canada  (d) India

37. Name the person who treated zero as a number and showed its mathematical operation:
   (a) Pythagoras  (b) Plato
   (c) Aryabhatta  (d) Brahmagupta

38. Which is the longest river of India?
   (a) Yamuna  (b) Godavari
   (c) Brahmaputra  (d) Ganges

39. Karl Marx wrote:
   (a) Emma  (b) Good Earth
   (c) Das Kapital  (d) Divine Comedy

40. Who became the first Indian to swim across the English Channel?
   (a) Aarti Gupta  (b) Avinash Sarang
   (c) Mihir Sen  (d) Nisha Miller

41. Sri Lanka is separated from India by:
   (a) Bay of Bengal  (b) The Arabian Sea
   (c) The Indian Ocean  (d) Palk Strait and the Gulf of Mannar

42. How many states are there in India at present?
   (a) 28  (b) 26
   (c) 25  (d) 27
43. Which planet has the highest number of satellites?
   (a) Neptune    (b) Mars
   (c) Venus      (d) Jupiter

44. Oscar awards are associated with:
   (a) Films      (b) Science
   (c) Sports     (d) Literature

45. One nautical mile is equal to:
   (a) 1.6 km    (b) 2 km
   (c) 4.1 km    (d) 12 km

46. Who is called the Father of Economics?
   (a) Karl Marx  (b) David Ricardo
   (c) J.K. Galbraith (d) Adam Smith

Directions (Questions 47–50): Each of the following sentences has a blank space and four words are given after the sentence. Select whichever word you consider most appropriate for the blank space and indicate your choice on the answer sheet.

47. The completion of the building has been held ________ owing to the workers’ strike.
   (a) off        (b) up
   (c) on         (d) over

48. Anand was the sort of person who always looked on the ________ side of life
   (a) clear      (b) bright
   (c) broad      (d) illuminated

49. Rainfall in the desert is not only low but extremely______
   (a) intense    (b) erratic
   (c) meager     (d) undesirable

50. He is very ________; he believes anything.
   (a) fallible   (b) gullible
   (c) sensible   (d) credible

Directions (Questions 51–53): Each item in this section consists of a word in capital letters followed by four words. Select the word that is most opposite in meaning to the word in capital letters.

51. PROSPERITY
   (a) Adversity  (b) Sickness
   (c) Hardship   (d) Failure

52. CONCEIT
   (a) Humility   (b) Pride
   (c) Determination  (d) Arrogance

53. IMPARTIAL
   (a) Hostile   (b) Biased
   (c) Dislike   (d) Worried
Directions (Questions 54–57): Each item in this section consists of a word in capital letters followed by four words. Select the word that is most similar in meaning to the word in capital letters.

54. ARDENT
   (a) Eager
   (b) Devoted
   (c) Zealous
   (d) Sincere

55. REMOTE
   (a) Automatic
   (b) Distant
   (c) Savage
   (d) Mean

56. GRACIOUS
   (a) Pretty
   (b) Clever
   (c) Pleasant
   (d) Present

57. KIN
   (a) Exult
   (b) Twist
   (c) Friend
   (d) Relative

Directions (Questions 58–63): Look at the underlined part of each sentence. Below each sentence, three possible substitutions for the underlined part are given. If one of them (a), (b) or (c) is better than the underlined part, indicate your response on the Answer sheet against the corresponding letter (a), (b) or (c). If none of the substitutions improves the sentence, indicate (d) as your response on the Answer sheet. Thus a “No improvement” response will be signified by the letter (d).

58. The workers are hell bent at getting what is due to them.
   (a) hell bent on getting
   (b) hell bent for getting
   (c) hell bent upon getting
   (d) no improvement

59. If the room had been brighter, I would have been able to read for a while before bed time.
   (a) If the room was brighter
   (b) If the room are brighter
   (c) Had the room been brighter
   (d) No improvement

60. His powerful desire brought about his downfall.
   (a) His intense desire
   (b) His desire for power
   (c) His fatal desire
   (d) No improvement

61. He sent a word to me that he would be coming late.
   (a) sent word
   (b) had sent a word
   (c) sent words
   (d) no improvement

62. If he had time he will call you.
   (a) would have
   (b) would have had
   (c) has
   (d) no improvement

63. Will you lend me few rupees in this hour of need?
   (a) lend me any rupees
   (b) borrow me a few rupees
   (c) lend me a few rupees
   (d) no improvement
The first murder ever committed in the United States occurred in September 1630, shortly after the Pilgrims arrived in Massachusetts. John Billington was the father of two sons, one of the first to settle in the new Plymouth Colony near what is today Boston, and one of the people who signed the Mayflower Compact—and he was also the colony’s first murderer. Billington, in fact, was the first person to commit any crime in the colony, as far as we know today. He was also the first to be executed by the state in the New World. Billington’s crime was to shoot a man named John Newcomen, for reasons which are lost to history. But Billington’s problems had not begun on the soil of North America. He and his sons had nearly caused a mutiny aboard the Mayflower during the arduous trip across the ocean. One of his sons, in fact, fired his gun aboard the Mayflower—near an open keg of gunpowder! The flash from the gun could easily have ignited the powder, which would probably have sunk the ship. Once in Plymouth Colony, Billington’s behaviour did not improve. He refused to serve any form of military duty under the leadership of Miles Standish, a duty that was seen by the colonists as part of every man’s responsibilities in the New World. He was later implicated in a plot to overthrow the entire leadership of Plymouth Colony, but a lack of evidence prompted the town’s leaders to let him go free.

In the end, Billington’s rebellious and angry nature caught up with him. He was found guilty of the murder of John Newcomen, and died in disgrace on the gallows.

64. Based on the information in the passage, which of the following best describes John Billington?
(a) quiet and shy
(b) angry and rebellious
(c) clever and amusing
(d) bold and patriotic

65. Which of the following is NOT true of John Billington, according to the passage?
(a) He had two sons
(b) He served in the military under Miles Standish
(c) He tried to lead a mutiny
(d) He attempted to overthrow the government

66. Why didn’t the leaders of Plymouth Colony punish Billington for rebelling against their authority?
(a) He was not guilty
(b) Billington was Miles Standish’s nephew
(c) He had two sons who needed him
(d) They didn’t have enough evidence

67. A good title for this passage would be
(a) A History of Plymouth Colony
(b) The Injustices of Miles Standish
(c) America’s First Murderer
(d) Early American Legal Battles

68. Consider the following statements:
1. All artists are whimsical.
2. Some artists are drug addicts.
3. Frustrated people are prone to become drug addicts.
From the above three statements it may be concluded that
(a) Artists are frustrated
(b) Some drug addicts are whimsical
(c) All frustrated people are drug addicts
(d) Whimsical people are generally frustrated
69. Mr. Kumar drives to work at an average speed of 48 km per hour. The time taken to cover the first 60% of the distance is 10 minutes more than the time taken to cover the remaining distance. How far is his office?
   (a) 30 km  
   (b) 40 km  
   (c) 45 km  
   (d) 48 km

70. Gita is prettier than Sita but not as pretty as Rita. Then,
   (a) Sita is not as pretty as Gita  
   (b) Sita is prettier than Rita.  
   (c) Rita is not as pretty as Gita  
   (d) Gita is prettier than Rita.

71. Four political parties W, X, Y and Z decided to set up a joint candidate for the coming parliamentary elections. The formula agreed by them was the acceptance of a candidate by most of the parties. Four aspiring candidates A, B, C and D approached the parties for their tickets.
   A was acceptable to W but not to Z.
   B was acceptable to Y but not to X.
   C was acceptable to W and Y
   D was acceptable to W and X

When candidate B was preferred by W and Z, candidate C was preferred by X and Z, and candidate A was acceptable to X but not to Y, who got the ticket?
   (a) A  
   (b) B  
   (c) C  
   (d) D

72. In the below figure, circle P represents hardworking people, circle Q represents intelligent people, circle R represents truthful people and circle S represents honest people.

Which region represents the people who are intelligent, honest and truthful but not hardworking?
   (a) 6  
   (b) 7  
   (c) 8  
   (d) 9

73. Six squares are coloured, front and back, red (R), blue (B), yellow (Y), green (G), white (W) and orange (O) and are hinged together as shown in the figure given below. If they are folded to form a cube, what would be the face opposite the white face?

   (a) R  
   (b) G  
   (c) B  
   (d) O
74. Three views of a cube following a particular motion are given below:

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<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>K</td>
</tr>
<tr>
<td>H</td>
<td>M</td>
<td>P</td>
</tr>
</tbody>
</table>
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What is the letter opposite to A?
(a) H  (b) P  
(c) B  (d) M

75. Two glasses of equal volume are respectively half and three-fourths filled with milk. They are then filled to the brim by adding water. Their contents are then poured into another vessel. What will be the ratio of milk to water in this vessel?
(a) 1 : 3  (b) 2 : 3  
(c) 3 : 2  (d) 5 : 3

76. Examine the following statements:
1. None but the rich can afford air travel.
2. Some of those who travel by air become sick.

Which one of the following conclusions can be drawn from the above statements?
(a) All rich persons travel by air  (b) Those who travel by air become sick  
(c) All the rich persons become sick  (d) All those who travel by air are rich

77. Match List-I with List-II and select the correct pair:

<table>
<thead>
<tr>
<th>List-I (State)</th>
<th>List-II (CM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Arunachal Pradesh</td>
<td>Neiphiu Rio</td>
</tr>
<tr>
<td>(b) Assam</td>
<td>Nabam Tuki</td>
</tr>
<tr>
<td>(c) Tripura</td>
<td>Manik Sarkar</td>
</tr>
<tr>
<td>(d) Nagaland</td>
<td>Ibobi Singh</td>
</tr>
</tbody>
</table>

78. The primary product of photosynthesis is
(a) Cellulose  (b) Glucose  
(c) Glycogen  (d) Sucrose

79. Which of the following can help in reducing the carbon footprint?
1. Using fly-ash based cement in building construction
2. Using LED-based electric lamps instead of incandescent lamps

Select the correct answer using the code given below
(a) 1 only  (b) 2 only  
(c) Both 1 and 2  (d) Neither 1 nor 2

80. In recent times, Spirulina, an alga is being popularized because it is a rich source of
(a) Carbohydrate  (b) Folic acid  
(c) Iron  (d) Protein
81. Which of the following is the chief characteristic of mixed farming?
   (a) Cultivation of both cash crops and food crops
   (b) Cultivation of two or more crops in the same field
   (c) Rearing of animals and cultivation of crops together
   (d) None of these

82. If \(-7x + (2x - 5) = 0\), then \(x =\)
   (a) \(-7\)                       (b) \(-5/2\)
   (c) \(-1\)                       (d) \(1\)

83. Despite having large reserves of coal, why does India import millions of tonnes of coal?
   1. It is the policy of India to save its own coal reserves for future, and import it from other countries for the present use.
   2. Most of the power plants in India are coal-based and they are not able to get sufficient supplies of coal from within the country.
   3. Steel companies need large quantity of coking coal which has to be imported.
   Which of the statements given above is/are correct?
   (a) 1 only                       (b) 2 and 3 only
   (c) 1 and 3 only                 (d) 1, 2 and 3

84. Consider the following statements:
   1. The duration of the monsoon decreases from Southern India to Northern India
   2. The amount of annual rainfall in northern plains of India decreases from East to West.
   Which of the statements given above is/are correct?
   (a) 1 only                       (b) 2 only
   (c) Both 1 and 2                 (d) Neither 1 nor 2

85. In 2011 census, Mizoram has population of
   (a) 10, 91,014                   (b) 10, 19,014
   (c) 10, 88,014                   (d) 10, 88,573
The Stone Age was a period of history which began in approximately 2 million B.C. and lasted until 3000 B.C. Its name was derived from the stone tools and weapons that modern scientists found. This period was divided into the Paleolithic, Mesolithic and Neolithic Ages. During the first period (2 million to 8000 B.C.), the first hatchet and use of fire for cooking for heating and cooking were developed. As a result of the Ice Age, which evolved about 1 million years into the Paleolithic Age, people were forced to seek shelter in caves, wear clothing and develop new tools.

During the Mesolithic Age (8000 to 6000 B.C.), people made crude pottery and the first fish hooks, took dogs hunting and developed the bow and arrow, which were used until the fourteenth century A.D.

The Neolithic Age (6000 to 3000 B.C) saw human kind domesticating sheep, goats, pigs and cattle, being less nomadic than in previous eras, establishing permanent settlements and creating governments.

86. In line 2, the word “derived” is closest in meaning to
   (a) Originated  (b) Destroyed  (c) Hallucinated  (d) Discussed

87. The author states that the Stone Age was so named because
   (a) It was very durable like stone  (b) The tools and weapons were made of stone  (c) There was little vegetation  (d) The people lived in stone caves

88. In line 11, “nomadic” is closest in meaning to
   (a) Sedentary  (b) Wandering  (c) Primitive  (d) Inquisitive

89. With what subject is the passage mainly concerned?
   (a) The Neolithic Age  (b) The Paleolithic Age  (c) The Stone Age  (d) The Ice Age

90. In line 11, the word “eras” is closest in meaning to
   (a) families  (b) periods  (c) herds  (d) tools

91. If the volume of cube of side of length 6 is equal to the volume of a rectangle solid with length 12 and width 9, then the height of the rectangular solid is
   (a) 2  (b) 4  (c) 6  (d) 8

92. Consider the following kinds of organisms:
   1. Dragonfly
   2. Bee
   3. Bird

Which of the above is/are pollinating agent?
   (a) 1, 2 and 3 only  (b) 2 and 3 only  (c) 1 and 3 only  (d) None of these
93. If \( r = \frac{4s}{5} \), what is the value of \( \frac{2s}{3r} \)
(a) \( \frac{8}{15} \)  
(b) \( \frac{3}{4} \)  
(c) \( \frac{5}{6} \)  
(d) \( \frac{6}{5} \)

94. Economic liberalization was initiated during the Prime Ministership of:
(a) P.V. Narashimharao  
(b) Dr. Manmohan Singh  
(c) A.B. Vajpayee  
(d) Rajiv Gandhi

**Directions (Question 95–98): Select the word that completes the meaning correctly in each sentence.**

95. After declaring bankruptcy, the company was forced to \( \underline{\text{__________}} \) its assets.
(a) liquefy  
(b) liquidate

96. They were \( \underline{\text{__________}} \) to leave when the guide arrived.
(a) already  
(b) all ready

97. An explanation will \( \underline{\text{__________}} \) each section of the test.
(a) precede  
(b) proceed

98. The essay is very \( \underline{\text{__________}} \) and worthy of an A grade.
(a) imaginary  
(b) imaginative

99. Answer the following on the basis of the passage.

Four men are waiting in Delhi airport for a Mumbai flight. Two are doctors and the other two are businessmen. Two speak Gujarati and two speak Tamil. No two of the same profession speak the same language. Two are Muslim and two are Christians. No two of the same religion are of the same profession nor do they speak the same language. The Tamil speaking doctor is a Christian.

2. The Gujarati-speaking doctor is a Muslim.

Which of the above statements is/are correct conclusion/conclusions?
(a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2

100. Who devised the first calculating machine?
(a) Pascal  
(b) Charles Babage  
(c) Napier  
(d) Henry Greathead