

Question Paper Booklet # 2

Written Test: Jr. Technical Superintendent (CL) (JTSCL-2015)

Name: Avash Borah

Time: 2 hours

Registration No.: 1002

Venue: L2, Lecture Halls

Max. Marks: 200

Instructions

Please read all the instructions carefully.

A. General

1. Check your name and registration number printed above.
2. If your name and registration number printed above are not correct, **contact your invigilator** immediately. Do not start your test.
3. Do not break the seal open unless your invigilator announces that you do so (at 10:30 am). After breaking the seal at 10:30 am, please check that you have 80 questions on 13 pages.
4. Blank pages are provided at the end of the Question Paper Booklet for rough work. No additional sheets will be provided for rough work.
5. Blank papers, clipboards, log tables, slide rules, calculators, cameras, cellular phones, pagers, and electronic gadgets are NOT allowed inside the examination hall.
6. You have to be in this examination hall till 12:30 pm. You will be allowed to leave the hall ONLY AFTER your invigilators have collected ALL the Booklets and OMR sheets and tallied them.

B. Filling up the OMR Sheet

7. Use a BLACK ball-point pen to darken the bubbles on the OMR Sheet. The correct way to fill a bubble like ☐ is as in ☒. Please note that the options A, B, etc. are given either vertically or horizontally in the booklet whereas they are printed horizontally on the OMR.
8. The answers you have marked on the OMR sheet will be evaluated to calculate your total marks. The answers you mark on the Question Paper Booklet will be treated as rough work and WILL NOT be evaluated.
9. DO NOT FOLD/TAMPER/MUTILATE THE OMR SHEET IN ANY WAY. DO NOT TAMPER/ALTER

THE FOUR CORNER CIRCLES OR THE BAR CODE ON THE OMR IN ANY WAY. OTHERWISE, YOUR CANDIDATURE MAY BE CANCELLED.

10. At the end of the test, you MUST RETURN BOTH the OMR Sheet and the Question Paper Booklet to your invigilator. You will not be given any extra time to bubble your answers on the OMR.

C. Test Paper Format

11. The question paper consists of 5 sections:
(i) English Comprehension (abbreviated **EC**)
(ii) General Knowledge (**GK**) (iii) Mental Reasoning (**MR**) (iv) Quantitative Aptitude (**QA**) and (v) Computer Skills (**CS**).
12. Each of these five sections contains two parts – Part S and Part M.
13. There are 8 questions in Part S. Each question has exactly ONE CORRECT ANSWER.
14. There are 8 questions in Part M. Each question has ONE OR MORE THAN ONE CORRECT ANSWERS.

D. Marking Scheme

15. For each question in Part S you will be awarded 2 marks – ONLY if you darken ONE bubble corresponding to the correct answer, and, zero marks in all other cases.
16. For each question in Part M you will be awarded 3 marks – ONLY if you darken ALL the bubble(s) corresponding to the correct answer(s), and, zero marks in all other cases.
17. The total marks for this test is 200. There is no negative marking on any question.

1 Section EC

1.1 Part S

Only One Option Correct Type

This part contains 8 multiple choice questions. Each question has 4 choices A, B, C & D of which ONLY ONE is correct.

1. Don't you know that the people in the courtroom must getwhen the judge arrives?

- ☐ A up ☐ B in ☐ C over ☐ D under

2. I am sorry, but you are not supposed tophotos here.

- ☐ A be taking ☐ B will take ☐ C take ☐ D taking

3. He is not good-looking,, he is popular among girls.

- ☐ A although ☐ B even though ☐ C nonetheless ☐ D because

4. Who wrote the line: "a thing of beauty is a joy forever"?

- | | |
|---|--|
| <input type="checkbox"/> A P. B. Shelly | <input type="checkbox"/> C William Shakespeare |
| <input type="checkbox"/> B William Wordsworth | <input type="checkbox"/> D John Keats |

5. Anarchy =

- ☐ A Lawlessness ☐ B Idealism ☐ C Democracy ☐ D Opportunities

6. Peremptory =

- ☐ A Strong ☐ B Unreal ☐ C Bossy ☐ D Central

7. Alleviate =

- ☐ A Inspire ☐ B Contribute ☐ C Earn ☐ D Lessen

8. Panacea =

- ☐ A Cure ☐ B Prediction ☐ C Idea ☐ D Failure

1.2 Part M

One Or More Than One Option Correct Type

This part contains 8 multiple choice questions. Each question has 4 choices A, B, C & D of which ONE OR MORE are correct.

9. Sheplay basketball on Friday.

- ☐ A will ☐ B has been ☐ C has ☐ D is going to

10. Soldiers have been sent to restorein the area.

- ☐ A regulation ☐ B law and order ☐ C peace ☐ D organization

11. It rained hard;, lightning flashed and thunder boomed.

- ☐ A also ☐ B but ☐ C however ☐ D moreover

12. When I arrived at the party, Ravihis dinner.

- ☐ A had finished ☐ B ate ☐ C will be eating ☐ D was having

13. I did not get bored while waiting for the doctor. There weremagazines on the table to read.

- ☐ A a few ☐ B more ☐ C much ☐ D many

14. The child ranto his mother.

- ☐ A quickly ☐ B fastly ☐ C generously ☐ D happily

15. I enjoyas a hobby.

- ☐ A swimming ☐ B to draw ☐ C will draw ☐ D drawing

16. What a relief, police have finally recovered thecomputer !

- ☐ A stolen ☐ B lost ☐ C stole ☐ D steal

2 Section GK

2.1 Part S

Only One Option Correct Type

This part contains 8 multiple choice questions. Each question has 4 choices A, B, C & D of which ONLY ONE is correct.

17. Who was the runners up in the women's singles final in French Open 2015?

- | | |
|--|---|
| <input type="checkbox"/> A Lucie Safarova | <input type="checkbox"/> C Garbine Muguruza |
| <input type="checkbox"/> B Maria Sharapova | <input type="checkbox"/> D Petra Kvitova |

18. "The Accidental Prime Minister" is the biography of which prime minister of India?

☐ A P. V. Narasimha Rao

☐ C Atal Bihari Vajpayee

☐ B Manmohan Singh

☐ D Lal Bahadur Shastri

19. Which one among the following is the oldest paramilitary force in India?

☐ A Assam Rifles

☐ C Central Industrial Security Force

☐ B Central Reserve Police Force

☐ D Indo Tibetan Border Police

20. During which decade did population of India record a negative growth rate?

☐ A 1901-1911

☐ B 1911-1921

☐ C 1921-1931

☐ D 1931-1941

21. What is the capital of Myanmar?

☐ A Bangkok

☐ B Yangon

☐ C Hanoi

☐ D Naypyidaw

22. Which one of the following is the largest state in India in terms of area?

☐ A Madhya Pradesh

☐ B Uttar Pradesh

☐ C Rajasthan

☐ D Karnataka

23. "Radcliff Line" is the boundary between which of the following countries?

☐ A Pakistan and Afghanistan

☐ C India and China

☐ B India and Nepal

☐ D India and Pakistan

24. Where will the summer Olympics in 2020 be held?

☐ A Istanbul

☐ B Rio de Janeiro

☐ C Madrid

☐ D Tokyo

2.2 Part M

One Or More Than One Option Correct Type

This part contains 8 multiple choice questions. Each question has 4 choices A, B, C & D of which ONE OR MORE are correct.

25. Which of the following is/are NOT CORRECT about the Indian Constitution?

☐ A The Directive Principle of State Policy was adopted from the Constitution of Ireland

☐ C The constitution came to an effect on 15 August, 1947

☐ B The term "secular" was not originally included in the preamble and was later added to it

☐ D Dr. Rajendra Prasad was the Chairman of the Constitution Drafting Committee

26. Which of the following is/are NOT CORRECT about the Rajya Sabha?

- | | |
|---|---|
| <p><input type="checkbox"/> A It is the upper house of the parliament</p> <p><input type="checkbox"/> B One-third of its members retire every second year</p> | <p><input type="checkbox"/> C The vice president is the ex-officio chairman of Rajya Sabha</p> <p><input type="checkbox"/> D It is reconstituted every five years</p> |
|---|---|

27. Which of the following is/are correct about India's Mars Mission?

- | | |
|--|--|
| <p><input type="checkbox"/> A The project is carried out by Indian Space Research Organisation</p> <p><input type="checkbox"/> B The spacecraft lifted off from Vikram Sarabhai Space Centre, Thiruvananthapuram</p> | <p><input type="checkbox"/> C With the Mars Orbiter Mission, India has become the second nation/ group of nations to reach Mars after the USA</p> <p><input type="checkbox"/> D India is the first country to successfully get a spacecraft into the Martian orbit on its maiden attempt</p> |
|--|--|

28. Which of the following is/are true about ICC One Day International (ODI) Cricket World Cup?

- | | |
|---|---|
| <p><input type="checkbox"/> A West Indies is the only country to win the World Cup thrice</p> <p><input type="checkbox"/> B A total of 16 teams took part in the 2015 ICC World Cup</p> | <p><input type="checkbox"/> C The first ICC ODI Cricket World Cup was held in 1975</p> <p><input type="checkbox"/> D Sunil Gavaskar scored his maiden ODI century in an ICC World Cup match</p> |
|---|---|

29. Which of the following is/are true about Nobel Prize?

- | | |
|---|--|
| <p><input type="checkbox"/> A The first Nobel prize was awarded in 1901</p> <p><input type="checkbox"/> B The award is given for outstanding performance in six disciplines</p> | <p><input type="checkbox"/> C The peace prize is awarded in Norway</p> <p><input type="checkbox"/> D Sir C. V. Raman was the first Indian to receive the Nobel Prize</p> |
|---|--|

30. Which of the following is/are correct about the North Eastern Council (NEC)?

- | | |
|--|--|
| <p><input type="checkbox"/> A It functions under the Ministry of Home Affairs</p> <p><input type="checkbox"/> B It is the nodal agency for economic and social development of the North Eastern Region</p> | <p><input type="checkbox"/> C It was constituted by an Act of Parliament</p> <p><input type="checkbox"/> D The NEC has its Head Quarters at Shillong</p> |
|--|--|

31. Which among the following is/are true about the Bharat Ratna Award?

- | | |
|--|---|
| <p><input type="checkbox"/> A Dr. B. R. Ambedkar was the first recipient of the Bharat Ratna</p> <p><input type="checkbox"/> B The medallion is in the shape of a betel leaf with the word "Bharat Ratna" inscribed in Devanagari script in it</p> | <p><input type="checkbox"/> C Sachin Tendulkar is the first sports person to receive this award</p> <p><input type="checkbox"/> D The award was instituted on 2nd January, 1954</p> |
|--|---|

32. Where is Namdapha National Park located?

- ☐ A Sikkim ☐ B West Bengal ☐ C Assam ☐ D Arunachal Pradesh

3 Section MR

3.1 Part S

Only One Option Correct Type

This part contains 8 multiple choice questions. Each question has 4 choices A, B, C & D of which ONLY ONE is correct.

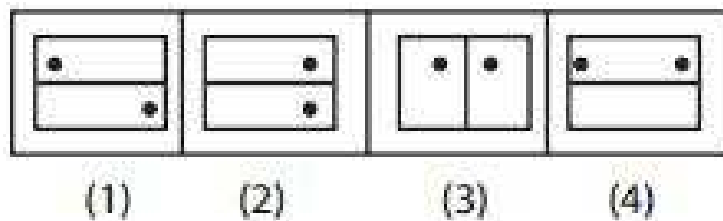
33. Temple is to pray is as is to play.

- ☐ A ground ☐ B victory ☐ C players ☐ D spectators

34. Complete the following series: U T O N I H E

- ☐ A D ☐ B F ☐ C J ☐ D K

35. Consider the following collection of pictures



Choose the picture that is different from the rest.

- ☐ A (1) ☐ B (2) ☐ C (3) ☐ D (4)

36. Assume that the statements I and II below are true:

I. No rich persons are charity-oriented persons.

II. Some sports persons are rich persons.

Consider statements III and IV:

III. Some charity-oriented persons are not sports persons.

IV. Some sports persons are not charity-oriented persons.

Which one of the following is true?

- | | |
|--|--|
| <p><input type="checkbox"/> A III cannot be deduced from I and II</p> <p><input type="checkbox"/> B IV cannot be deduced from I and II</p> | <p><input type="checkbox"/> C Both III and IV can be deduced from I and II</p> <p><input type="checkbox"/> D Neither III nor IV can be deduced from I and II</p> |
|--|--|

37. Complete the series WFB, TED, QDF,

- ☐ A MBH ☐ B MCG ☐ C NBJ ☐ D NCH

38. Exercise is to gymnasium is as eating is to

- ☐ A food ☐ B dieting ☐ C restaurant ☐ D fitness

39. Lizard is to reptile is as is to flower.

- ☐ A seed ☐ B petal ☐ C stem ☐ D jasmine

40. Consider the statement:

X. All doctorate degree holders are academicians.

Which of the following two is/are logically equivalent to the statement X?

Y. All academicians are doctorate degree holders.

Z. No doctorate degree holders are non-academicians.

☐ A Y

☐ B Z

☐ C Both Y and Z

☐ D Neither Y nor Z

3.2 Part M

One Or More Than One Option Correct Type

This part contains 8 multiple choice questions. Each question has 4 choices A, B, C & D of which ONE OR MORE are correct.

41. A bag contains 243 balls of same colour and size. Of these balls, one ball has more weight as compared to the rest. You have a weighing balance. What is the least number of times you need to weigh to find out which ball has more weight?

- ☐ A 5 ☐ B 6 ☐ C 7 ☐ D 8

42. Ram and Shyam went to a stationery shop to buy pencils and erasers. The shop keeper had six pencils of three colours and 12 erasers of white and 12 erasers of brown colour in a box. If Ram and Shyam want to buy one pencil each of same colour and one eraser each of the same colour, what is the minimum number of pencils and erasers the shopkeeper has to take from the box to give both of them the same colour pencil and eraser?

☐ A 13 erasers and 5 pencils

☐ B 4 erasers and 5 pencils

☐ C 2 erasers and 3 pencils

☐ D 3 erasers and 4 pencils

43. If Google is coded as 715157125, how will be Bing coded

- ☐ A 28417 ☐ B 29147 ☐ C 71429 ☐ D 74192

44. If the statement "All patented technologies are marketable technologies" is true, then which of the following can be false?

☐ A No patented technologies are marketable technologies

☐ B Some patented technologies are not marketable technologies

☐ C All marketable technologies are patented technologies

☐ D None of the above

45. If KASHMIR is coded as HCPJJKO, how will GUWAHATI be coded?

- ☐ A DWCTCEQK ☐ B CWTDECOK ☐ C DWTCECQK ☐ D DWTCCEOK

46. If (a) 'bnr lag yog smp' stands for 'Taylor stitches red shirts', (b) 'pyto bnr dmf stands for 'Shirts for sale', and (c) 'msm tdr pyto yog' stands for 'Red is for stop', What code will be for 'Taylor'?

- ☐ A bnr ☐ B smp ☐ C yog ☐ D insufficient data

47. Complete the series AZ, GT, MN,, YB.

- ☐ A KF ☐ B RX ☐ C SH ☐ D TS

48. Fill in the grid so that every row, every column, and each of the four 2×2 boxes (indicated via shading) contains the digits 1 through 4.

4			b
	a	1	
	2		
			3

Which of the following are possible values of a and b respectively?

- ☐ A 3,1 ☐ B 3,2 ☐ C 4,1 ☐ D 4,2

4 Section QA

4.1 Part S

Only One Option Correct Type

This part contains 8 multiple choice questions. Each question has 4 choices A, B, C & D of which ONLY ONE is correct.

49. How many three-digit numbers are there that are divisible by 11?

- ☐ A 71 ☐ B 81 ☐ C 90 ☐ D 91

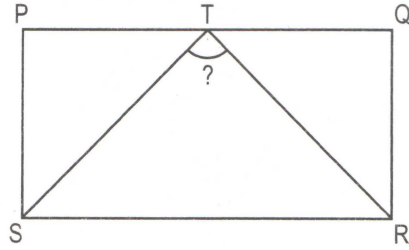
50. A watch which gains 5 seconds in 3 minutes was set right at 7 a.m. On the same day, when the watch shows the time as 4 : 15 p.m., the true time is

- ☐ A 3 p.m. ☐ B 3 : 30 p.m. ☐ C 3 : 45 p.m. ☐ D 4 p.m.

51. In a class of 100 students, 50 students passed in Mathematics and 70 passed in English, 5 students failed in both Mathematics and English. How many students passed in both the subjects?

- ☐ A 25 ☐ B 35 ☐ C 40 ☐ D 50

52. $PQRS$ is a rectangle with $PQ = 2 PS$. T is a mid point of PQ . What is the measure of $\angle STR$?



- ☐ A 45° ☐ B 60° ☐ C 90° ☐ D 120°

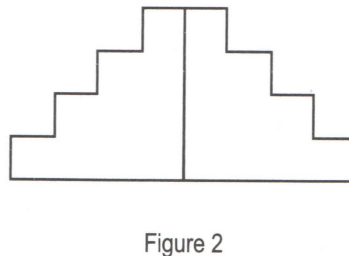
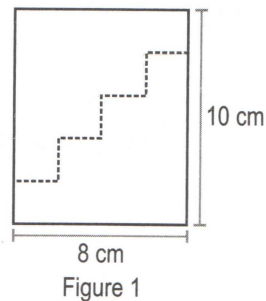
53. Find the ratio in which rice at Rs.7.20 per kg be mixed with rice at Rs.5.70 per kg to produce a mixture worth Rs.6.30 per kg.

- ☐ A 2 : 3 ☐ B 3 : 4 ☐ C 4 : 3 ☐ D 3 : 2

54. The average weight of 9 children is 40 kg. When the weight of an adult is included the average is increased to 43 kg. What is the weight (in kg) of the adult?

- ☐ A 43 ☐ B 53 ☐ C 60 ☐ D 70

55. A rectangular sheet of paper of length 10 cm and breadth 8 cm is cut into two identical pieces along the dotted lines as shown below (Figure 1). The two pieces are then joined to form a new shape (Figure 2).



If the height and width of each step in new shape are **equal**, what is the perimeter (in cm) of the new shape in Figure 2?

- ☐ A 36 ☐ B 48 ☐ C 52 ☐ D 56

56. A container contains 100 litres of milk. From this container 10 litres of milk was removed and replaced by water. This process was repeated further two times. How much milk (in litres) is now in the container?

- ☐ A 70 ☐ B 72.9 ☐ C 83.4 ☐ D 85

4.2 Part M

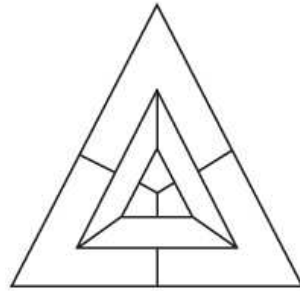
One Or More Than One Option Correct Type

This part contains 8 multiple choice questions. Each question has 4 choices A, B, C & D of which ONE OR MORE are correct.

57. Rajesh put all his story books in a bookshelf. Each book has either 48 pages or 50 pages. Which of the following **cannot** be the total number of pages of **all** the books in bookshelf?

☐ A 452 ☐ B 534 ☐ C 624 ☐ D 1096

58. What is the minimum number of colours required to fill the spaces in the following diagram without the adjacent sides having the same colour?

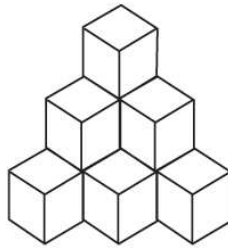


☐ A 3 ☐ B 4 ☐ C 6 ☐ D 9

59. The intervals containing any of the roots of the equation $x^3 + 5x^2 - 14x = 0$ are

☐ A $[-100, -5]$ ☐ B $[-3, 3]$ ☐ C $(3, 5)$ ☐ D $(5, 10]$

60. The figure below is built using identical boxes which happen to be cubes. How many additional boxes can be used to complete the following object into a cube?



☐ A 10 ☐ B 17 ☐ C 21 ☐ D 54

61. P is an even number and Q is an odd number. Which of the following statements is always true?

☐ A $P \times Q + P$ is an even number

☐ C $P - Q - 1$ is an odd number

☐ B $P + Q + 1$ is an even number

☐ D $P \times P - 1$ is an odd number

62. You are given with the arithmetic progression (A.P.) whose first term is 23 and tenth term is 86. Then, the numbers belonging to the A.P. are

☐ A 44 ☐ B 93 ☐ C 162 ☐ D 198

63. If $x = \frac{\sqrt{3}+1}{\sqrt{3}-1}$ and $x = \frac{\sqrt{3}-1}{\sqrt{3}+1}$ then the number representing the algebraic expression $x^2 + y^2$ is a

☐ A natural number

☐ B rational number

☐ C irrational number

☐ D purely imaginary complex number

64. The points (x, y) satisfying all the constraints $2x + y \leq 100$, $x + y \leq 80$, $0 \leq x \leq 60$, $y \geq 0$ are

☐ A (10, 85)

☐ B (20, 60)

☐ C (30, 55)

☐ D (40, 20)

5 Section CS

5.1 Part S

Only One Option Correct Type

This part contains 8 multiple choice questions. Each question has 4 choices A, B, C & D of which ONLY ONE is correct.

65. In MS Word, the shortcut sequence Ctrl + N is used to

☐ A open an existing document

☐ B open a new document

☐ C close a document

☐ D save a document

66. is the process of combining a list of names and addresses with a standard document.

☐ A Form letters

☐ B Mail merge

☐ C Document formatting

☐ D Database management

67. Which one of the following networks is built on the top of another network?

☐ A prime network

☐ B chief network

☐ C prior network

☐ D overlay network

68. From which menu of the MS Word program can you include a picture, text box or a chart into a file?

☐ A Insert

☐ B Edit

☐ C View

☐ D File

69. What is the size of IPv6 addresses?

☐ A 32 bits

☐ B 64 bits

☐ C 128 bits

☐ D 265 bits

70. The MS PowerPoint view that displays only text (title and bullets) is

☐ A notes page view

☐ B outline view

☐ C slide show view

☐ D slide sorter view

71. In MS Excel, the NOW() function returns the

- ☐ A the current time
☐ B the current date

- ☐ C current day of the week
☐ D current date and time

72. Telnet is a/anlayer protocol

- ☐ A transport ☐ B application ☐ C network ☐ D hardware

5.2 Part M

One Or More Than One Option Correct Type

This part contains 8 multiple choice questions. Each question has 4 choices A, B, C & D of which ONE OR MORE are correct.

73. Which of the following protocols is/are used for EMAIL service?

- ☐ A ICMP ☐ B SMIP ☐ C SMTP ☐ D IMAP

74. Which of the following is/are NOT internet browsers?

- ☐ A Android ☐ B Netscape Navigator ☐ C Drupal ☐ D Opera

75. The MS Word application can be closed by

- ☐ A choosing File→Close ☐ C pressing Alt+F4
☐ B pressing Ctrl + W ☐ D choosing File→Exit

76. Which of the following is/are valid versions of MS Office?

- ☐ A Office Windows ☐ B Office 2007 ☐ C Office Vista ☐ D Office XP

77. In MS Excel, which of the following formulae give/gives the sum of the numbers in the cells A1 and A2?

- ☐ A =SUM(A1 : A2) ☐ B =add(A1 : A2) ☐ C A1 + A2 ☐ D =A1 + A2

78. Which of the following protocols is/are NOT application-layer protocols?

- ☐ A HTTP ☐ B UDP ☐ C FTP ☐ D ICMP

79. Which of the following protocols is/are NOT transport-layer protocols?

- ☐ A DCCP ☐ B ICMP ☐ C TCP ☐ D DNS

80. Which of the following functions return a value of 8 in an MS Excel spreadsheet ?

☐ A ROUND(8.4999, 1)

☐ C ROUNDDOWN(8.4999, 0)

☐ B ROUNDUP(8.4999, 0)

☐ D ROUND(8.4999, 0)

❖❖❖ Paper Ends ❖❖❖

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK