

for Confidential purpose
04/08/2020

South Western Railway
Mysore Division

Examination Name: Examination for selection of post of JE/works in the pay band Rs 9300-43800 GP Rs 4200/ level 06 of pay matrix in civil Engineering Department, Mysuru Division- LDCE quota

Exam Date: 04.08.2020

Name:	Roll No:
Duration: 2 Hrs	Date:
Marks of each question: 2 Marks	Total Marks: 100 Marks
Questions to be attended: 50 nos	Total questions in exam paper: 55 nos

Instructions for candidate

1. All questions are objective type and having four multiple choices.
2. This question paper having total 55 questions from General knowledge, Technical, Rajbhasha.
3. Any 50 questions to be answered. More than 50 answers, each extra answer will be treated as wrong answer.
4. Each questions having 2 marks. Total $50 \times 2 = 100$ marks
5. There is **NEGATIVE MARKING** for each wrong answer. For every wrong answer $1/3^{\text{rd}}$ of each question will be deducted. i.e. $1/3^{\text{rd}}$ of 2 marks will be deducted for every wrong answer.
6. Calculator, mobile or any electronic gadget are not required for this exam paper. Therefore use of all electronic gadgets are prohibited in exam hall.
7. DO NOT write your name or any other personal identity in OMR Answer Sheet.
8. No correction is allowed in OMR answer sheet.
9. This paper is in bilingual (English & Hindi language). For any discrepancy, matter on nglish version will prevail.

Instructions for evaluator:

1. Only 50 answers to be evaluated. More than 50 answers, each extra answer will be treated as wrong answer. Each questions having 2 marks
2. There is negative marking for each wrong answer. For every wrong answer $1/3^{\text{rd}}$ of each question will be deducted. i.e. $1/3^{\text{rd}}$ of 2 marks will be deducted for every wrong answer.

Please answer only 50 questions

1. When was the first passenger train run in India?
A. 1851 B. 1852 C. 1854 D. 1853

2. In year..... the practice of presenting separate railway budget from the general/Union budget started. Further based on Vivek Devroy Committee recommendation, Govt. announce on..... about merger of Railway budget in to union budget of India.
- A. 1920, 2017 B. 1924, 2016
C. 1925, 2019 D. 1930, 2016
3. How much distance was travelled by first train of India?
- A. 33 km B. 36 km C. 34 km D. 46 km
4. In which of the following cities is the National Rail Museum located ?
- A. Mumbai B. New Delhi C. Hyderabad D. Mysore
5. India's first semi high speed train Express which is also known as Train-18, was introduced on feb/2019 between section.
- a. Tejas , Lucknow-New Delhi
b. Vande bharat, New Delhi- Varanashi
c. Hum-safar ,Delhi-Katihar
d. Antyodaya, Chennai tambram-Tirunelveli
6. Shatabdi Express train was started in _____.
- a. 1984 b. 1988 c. 1990 d. 1985
7. Which is the shortest station name in Indian Railways?
- a. Pune b. Bc c. Goa d. lb
8. Diesel locomotives are built in?
- a. Bangalore b. Varanasi c. Perambur d. Hubli
9. Which of the following is the largest railway junction in India?
- a. Delhi b. Bhatinda Jn c. Mathura Jn d. Allahabad Jn
10. Which is the fastest train in India?
- A. Gatimaan Express B. Shatabdi Express
C. Vande Bharat Express D. Tejas Express
11. Which Zone is the largest railway zone in India?
- A. Northern Railway B. Central Railway
C. Eastern Railway D. Western Railway
12. As per latest release from Railway ministry for 2019, which station is the cleanest railway station in Indian Railway?
- A. Mysore B. New Delhi
C. Jodhpur D. Jaipur

13. What is maximum value of work order under any zonal contract which can be sanctioned by Divisional authority ?
 A. 2.5 Lakh B. 5.0 lakhs C. 10.0 lakh D. None of above
14. Elcometer uses for measuring ?
 a. Alcohol % in breath of running staff
 b. Wet thickness of paint layer.
 c. Alcohol % in blood sample of running staff.
 d. Dry thickness of paint layer
15. What should be the minimum residual chlorine in potable water?
 A. 0.1 mg/liter B. 0.2 mg/liter
 C. 0.5 mg /liter D. 2 mg/liter
16. As per IRWM, What is desirable limit of pH value of potable water?
 A. 6.0 to 8.0 B. 6.5 to 8.0 C. 6.5 to 8.5 D. 7.2 to 8.0
17. As per IRWM, What is TDS limit for potable water?
 A. 500- 800 B. 500- 2000 C. 600- 2000 D. 600-800
18. As per latest Railway board instruction, What is the revised minimum plinth area for any staff quarter?
 a. 34 sq m B. 45 sq m C. 54 sq m D. 60 sq m
19. Height of High level platform should be
 A. 750mm to 820 mm B. 760 mm to 840mm
 C. 720 mm to 860 mm D. 750 mm to 850 mm
20. What should be the steepest ruling gradient of road approach of RUB in plain / rolling terrain
 a. 1 in 30 b. 1 in 25
 c. 1 in 20 d. 1 in 35
21. Which one among the following is not a duty of Section Engg/works
 a. Inspection of all structures and their maintenance in a satisfactory and safe condition.
 b. Preparation of plans and estimates, execution and measurement of works.
 c. Sanction of Proposal for inclusion in the works programme and revenue budget.
 d. Verification of stores held by stockholders.
22. As per IR-SOD, what is minimum horizontal clearance of any telegraphic post from the nearest track?
 A. 2.36 m B. 2.135 m C. 2.3 m D. 2.145 m

23. What is desirable vertical clearance of new construction FOB over electrified track?
A. 5.75 m B. 6.20 m C. 5.870 m D. 6.25 m
24. What should be the extra provision of vertical allowance kept in electrified section for construction of over head structure, equipment to cater future increase of ballast cushion, sleepers thickness and deeper rail section?
A. 225mm B. 250mm C. 275 mm D. 300 mm
25. For ensuring quality of concrete, use
A. Single size aggregates B. Two sized aggregates
C. Graded aggregates D. Coarse aggregates
26. The risk of segregation is more for
a. Wetter mix
b. Larger proportion of maximum size of aggregates
c. Coarser grading
d. All of three above
27. Higher water/cement ratio
a. Decrease durability of concrete
b. Increase strength of concrete
c. Decrease workability of concrete
d. all of above
28. Construction joint are not generally provided in concrete
A. Roads B. Retaining wall
C. Lining of canal D. column
29. Nominal cover of concrete on main reinforcement of a column (having x-section size > 200 mm) & foundation should not be less than?
A. 25 mm , 35 mm B. 30 mm , 50 mm
C. 35 mm 40 mm D. 40 mm , 50 mm
30. Maximum spacing, between shear stirrups in any beam reinforcement, should not exceed
a. 300 mm
b. $0.75 d$ (d =effective depth of beam) for vertical stirrups
c. d (d = effective depth of beam) for inclined stirrups at 45 degree.
d. Minumim of All of above.
- 31: The value of detailed estimate of any proposed work should not be more than% age above on abstract value of sanctioned work.
A. 20% B 15% C. 10% D. 25%

32. What should be the desirable thickness of each layer in earth work to get homogeneous compaction of any type of soil ?
 A. 150-250mm B. 400-500 mm
 C. 200-300 mm D. 300-500 mm
33. Which statement is false ?
 a. OMC is required to get MDD
 b. Poorly graded sand and gravel with $C_u > 2.0$ should be use in soil bank.
 c. Moisture content play key role in compaction of in clayey soil.
 d. None of above
34. As per IRWM, what is the per capita water demand for domestic use?
 A. 100 ltr/day B. 200 ltr/day
 C. 250 ltr/day D. 150 ltr/day
35. As per IRWM, what is the per passenger water demand at station platform?
 A. 10 ltr/day B. 15 ltr/day
 C. 20 ltr/day D. 25 ltr/day
36. What should be minimum slope required in valley gutter made up of plain galvanised steel sheet in cover over platform ?
 A. 1 in 100 B. 1 in 50 C. 1 in 120 D. 1 in 140
37. For recording of Brick work, measurement should be accurate to the nearest least count of measuring tape?
 A. 1 mm B. 5 mm C. 10 mm D. None of the above
38. Which one is the false statement?
 a. In measurement for steel fabrication work, the separate weight of welding material should not be paid.
 b. In the measurement of steel fabrication work, the hole made for bolt, rivets should be deducted.
 c. The weight of nut and Bolts in build up steel section to be paid separately.
 d. None of the above.
39. Measurement of Steel fabrication work should be done to the nearest least count of measuring tape
 A. 1 mm B. 2 mm C. 5 mm D. None of the above
40. Weight of rivets to be paid @ %age of weight of riveted steel structure
 A. 1% B. 2% C. 3% D. 1.5%
41. Full form of QAP:
 A. Quality assurance plan

- B. QUALITY APPROVE PROCEDURE
 - C. QUICK ACTION PLAN
 - D. QUALITY ACTION PLAN
42. FULL FORM OF WPS
- A. WELDING PROCEDURE SCHEDULE
 - B. WORK PROGRESS SCHEDULE
 - C. WORK PROCEDURE SPECIFICATION
 - D. WELDING PROCEDURE SPECIFICATION
43. What is the width of broad gauge railway line in india
- A. 1760 mm
 - B. 1670 mm
 - C. 1676 mm
 - D. 1673 mm
44. Full form of IR- USS
- A. Indian Railway Union Standard Schedule
 - B. Indian Railway Unified standard specification
 - C. Indian Railway universal standard schedule
 - D. Indian Railway universal standard specification
45. Full form of IR-USSOR
- A. INDIAN RAILWAY UNION STANDARD SCHEDULE OF RATES
 - B. INDIAN RAILWAY UNIVERSAL STANDARD SPECIFICATION OF RATE
 - C. INDIAN RAILWAY UNIFIED SCHEDULE STANDARD OF RATE
 - D. INDIAN RAILWAY UNIFIED STANDARD SCHEDULES OF RATE
46. What is the recommended slope ratio for soil water pipe
- A. 1:12
 - B. 1:20
 - C. 1:30
 - D. 1:40
47. Arch bridge having span 6 m, and rise 3 m, danger level will be-
- A. 3 m below from crown.
 - B. 2 m below from crown.
 - C. 2 m above from springing level.
 - D. None of above.
48. For designing any railway bridge, danger level shall be kept at :
- a) the level which provides adequate vertical clearances;
 - b) the level of water which is likely to cause an unduly large afflux, say more than 0.5 m, which may cause large scour endangering the bridge; and
 - c) the water level which if exceeded may cause excessive scour endangering the bridge.
 - d) All of above
49. What is the schedule frequency of interior distempering for station building ?
- A. Once in 6 months
 - B. Once in 2 year
 - C. Once a year
 - D. None of the above

50. The marking of highest flood level (year in figures of 100mm deep) line should be painted as
- 50mm bright white line over 100 mm broad red line centrally for length of 600mm on up stream side of bridge.
 - 50mm bright white line over 100 mm broad red line centrally for length of 600mm on Down stream side of bridge.
 - 50mm bright red line over 100 mm broad white line centrally for length of 600mm on up stream side of bridge
 - 50mm bright red line over 100 mm broad white line centrally for length of 600mm on down stream side of bridge
51. Which part of the Constitution contains provisions regarding Official Language?
- Part XVII
 - Part XVI
 - Part XIX
 - None of above.
52. Who is the Chairman of the Zonal Official Language Implementation Committee?
- General Manager/SWR/UBL
 - CPO/SWR
 - AGM/SWR
 - PCPO/SWR
53. As per Rajbhasha Act 1976 sub rule -02, How many groups of Indian states are classified for use of Hindi Rajbhasha?
- Four
 - Three
 - Five
 - Two
54. As per Rajbhasha Act 1976 sub rule -02 regarding use of Rajbhasha, Karnataka state fall under which classification of state group?
- A
 - B
 - C
 - None of above
55. As per Rule 11 (2) of Official Language Rules 1976, Format and title of registers used in the office of the Central Government should be written in following language
- Hindi, English
 - English, Kannada
 - English, Sanskrit
 - None of above

End of Paper