

## South Western Railway Mysore Division

**Examination Name: Examination for selection of post of JE/works in the pay band Rs 9300-34800 GP Rs 4200/ level 06 of pay matrix in civil Engineering Department, Mysuru Division-PRQ quota.**

**Exam Date: 24.02.2021**

<b>Name:</b>	<b>Roll No:</b>
<b>Duration: 2 Hrs</b>	<b>Date:</b>
<b>Marks of each question: 1 Marks</b>	<b>Total Marks: 100 Marks</b>
<b>Questions to be attended: 100 nos</b>	<b>Total questions in exam paper: 110</b>

**Instructions for candidate:-**

1. All questions are objective type and having four multiple choices.
2. This question paper having total 110 questions from General knowledge, Technical and Rajbhasha.
3. There is **NO** negative marking.
4. Any 100 questions to be answered. In case of more than 100 questions are answered, only the 1<sup>st</sup> 100 answers will be evaluated.
5. Each question is having 1 mark. Total  $100 \times 1 = 100$  marks.
6. Questions to be answered in the OMR sheet using either blue ink pen or black ink pen till all the questions are answered. Instructions regarding the marking in the OMR sheet are indicated in the OMR sheet.
7. Calculator, mobile or any electronic gadgets are not required for this exam paper. Therefore uses of all electronic gadgets are prohibited in exam hall.
8. **DO NOT** write your name or any other personal identity in OMR Answer Sheet.
9. No correction of any type like cutting, overwriting, Erasing of ticked answer in multiple choices and ticking another & modifying the answers in any way etc. is allowed. In case any corrections are made, such answers shall not be evaluated at all.
10. This paper is in bilingual (English & Hindi language). For any discrepancy, matter on English version will prevail.

**Instructions for evaluator:**

1. In case of more than 100 questions are answered, only the 1<sup>st</sup> 100 answers should be evaluated.
2. There is **NO** negative marking.

**PLEASE ANSWER ANY 100 QUESTIONS:-**

Q1. What is frequency if examination of tools and plants for SE( Works) for artisans?			
(a) Once a Year	(b) Once in six months	(c) Once in three months	(d) Once a month

Q2. What is the minimum water requirement taken for design of water supply and drainage systems in litre/person/day			
(a) 200	(b) 300	(c) 100	(d) 50

Q3. Which of the following is <b>NOT</b> a member for Colony Committee:-			
(a) AEN	(b) HI	(c) Sr. DME	(d) SSE( Works)

Q4. What is the schedule of inspection of building along running lines for SE/JE ( Works)			
(a) Once in a Year	(b) Once in 6 months	(c) Once in 2 Months	(d) Every Month

Q5. What is the frequency of meeting of colony committees'?			
(a) Once in a Year	(b) Once in 2 months	(c) Once in 4 Months	(d) Every Month

Q6. In how many days after commissioning should an asset from Construction Organisation to Open Line as per IRWM			
(a) Within 90 days	(b) Immediately	(c) Within 30 days	(d) Within 60 days

Q7. When does Zonal Contract Commence from?			
(a) 1 <sup>st</sup> April	(b) 1 <sup>st</sup> January	(c) 1 <sup>st</sup> May	(d) 1 <sup>st</sup> July

Q8. What is the full form of PAMS?			
(a) Passenger Augmentation Management System	(b) Public Augmentation Management System	(c) Passenger Amenities Management System	(d) Public Amenities Management System

Q9. What is the frequency of inspection for SE/JE (Works) for Structures with Roof Trusses?			
(a) Once in 6 months	(b) Once in a month	(c) Once in 2 months	(d) Once a Year

Q10. During Monsoon months, super- chlorination shall be done if required at what concentration of chlorine?			
(a) >1ppm	(b) >5ppm	(c) >3ppm	(d) >2ppm

Q11. What test is done for checking residual chlorine			
(a) Orthotolodine test	(b) pH test	(c) Atterberg Test	(d) SPT test

Q12. What is maximum limit of Arsenic in portable drinking water?			
(a) 10mg/L	(b) 0.01 mg/L	(c) 0.05mg/L	(d) 1.0mg/L

Q13. What should be the minimum contact time for Chlorine for drinking water supply?			
(a) 10-15 mins	(b) 30- 60 mins	(c) 5 mins	(d) 120 mins

Q 14. What is the method of decomposition in Septic Tanks?			
(a) Anaerobic	(b) Aerobic	(c) Both	(d) None of the above

Q 15. What is the maximum interval of cleaning of septic tanks?			
(a) Once in a month	(b) Once in 5 years	(c) Once a year	(d) Once in 6 Months

Q 16. What is the meaning of M in M25 in concrete?			
(a) Mean Strength	(b) Mostly	(c) Mix	(d) Material

Q 17. What should be the length of Platforms dealing with passenger trains?			
(a) 1000m	(b) Length of Longest passenger train	(c) 500m	(d) None of the above

Q18. What should be the height of platform surface from Rail Level for High Level Platforms?			
(a)760-840mm	(b) 1000-1200mm	(c) 800-1000mm	(d) 1500-2000mm

Q19. What is the minimum width of pathways for connecting of platforms?			
(a) 1 feet	(b) 10m	(c) 5m	(d) 2m

Q20. What is the minimum self cleansing velocity for sewage systems?			
(a) 10-20m/s	(b) 100-200 m/s	(c) 1000m/s	(d) 0.6-0.8 m/s

Q21. What is the minimum size of sewer pipes as per IRWM except for hilly areas?			
(a) 200mm	(b) 500mm	(c) 1m	(d) 2m

Q22. Which of the following gases are highly poisonous?			
(a) Oxygen	(b) Methane	(c) Hydrogen Sulphide	(d) Carbon Dioxide

Q23. What does 1:2:4 mean in cement concrete?			
(a) Cement: Coarse aggregate: Fine aggregate	(b) Cement: Fine aggregate: Coarse aggregate	(c) Coarse aggregate: Cement: Fine aggregate	(d) Coarse aggregate: Fine aggregate: Cement.

Q24. What does 20 mean in M20?			
(a) Minimum characteristic strength not less than 20N/mm <sup>2</sup> at the end of 28 days	(b) Minimum characteristic strength not less than 20N/mm <sup>2</sup> at the end of 30 days	(c) Minimum characteristic strength not less than 20N/mm <sup>2</sup> at the end of 14 days	(d) Minimum characteristic strength not less than 20N/mm <sup>2</sup> at the end of 10 days

Q25. What concrete is High strength concrete in terms of strength?			
(a) >30 MPa	(b) > 50 MPa	(c) >= 60 MPa	(d) >100 Mpa

Q26. What is the size of cube used for testing of concrete?			
(a) 2000mm	(b) 1000mm	(c) 500mm	(d) 150mm

Q27. What is not an exposure condition in terms of durability?			
(a) Severe	(b) Harsh	(c) Mild	(d) Moderate

Q28. What is the maximum water- cement ratio for Mild Exposure conditions for RCC			
(a) 0.50	(b) 1.50	(c) 1.0	(d) 0.10

Q29. What is maximum permissible limit for cementitious material in concrete in Kg/m <sup>3</sup>			
(a) 1000	(b) 500	(c) 200	(d) 2000

Q30. Upto what grade of PCC is nominal mix permitted?			
(a) M40	(b) M50	(c) M15	(d) M20

Q31. What is the minimum grade of concrete for RCC structures exposed to sea water?			
(a) M50	(b) M40	(c) M20	(d) M30

Q32. What is the full form of RMC?			
(a) Ready Material Concrete	(b) Ready Mixed Concrete	(c) Rapid Mix Concrete	(d) Ready Made Concrete

Q33. What is the minimum cover for structural members exposed to moderate conditions?			
(a) 150mm	(b) 75mm	(c) 100mm	(d) 30mm

Q34. What is the full form of TMT?			
(a) Thermal Material Treatment	(b) Thermo Mechanically Treated	(c) Total Mechanical Treatment	(d) Thermo Mild Treated.

Q35. For more than 5m<sup>3</sup> of concrete work, how many samples to be collected for testing strength?

- |        |        |       |        |
|--------|--------|-------|--------|
| (a) 10 | (b) 20 | (c) 2 | (d) 50 |
|--------|--------|-------|--------|

Q36. For compacting of granular soil, which roller is most effective?

- |                         |                       |                           |                      |
|-------------------------|-----------------------|---------------------------|----------------------|
| (a) Smooth Wheel Roller | (b) Sheep Foot Roller | (c) Pneumatic tyre Roller | (d) Vibratory Roller |
|-------------------------|-----------------------|---------------------------|----------------------|

Q37. What is the full form of OMC?

- |                              |                              |                               |                           |
|------------------------------|------------------------------|-------------------------------|---------------------------|
| (a) Overall Moisture content | (b) Optimum Moisture content | (c) Observed Moisture content | (d) Only Moisture content |
|------------------------------|------------------------------|-------------------------------|---------------------------|

Q38. For proper compaction of formation, how much extra width of bank should be kept?

- |            |                  |            |           |
|------------|------------------|------------|-----------|
| (a) 2000mm | (b) Not required | (c) 1000mm | (d) 500mm |
|------------|------------------|------------|-----------|

Q39. Which of the below is not a desirable property of blanket material?

- |              |            |                 |                 |
|--------------|------------|-----------------|-----------------|
| (a) Granular | (b) Coarse | (c) Skip Graded | (d) Well Graded |
|--------------|------------|-----------------|-----------------|

Q40. What is the full form of BIS?

- |                               |                        |                             |                             |
|-------------------------------|------------------------|-----------------------------|-----------------------------|
| (a) Bureau of Indian Standard | (b) By Indian Standard | (c) Book of Indian Standard | (d) Best of Indian Standard |
|-------------------------------|------------------------|-----------------------------|-----------------------------|

Q41. What is the full form of USSOR?

- |   |                                       |  |  |
|---|---------------------------------------|--|--|
| (a) Unified Standard Specification of Rates | (b) United Specific Schedule of Rates | (c) Unified Specific Schedule of Rates | (d) Unified Standard Schedule of Rates |
|---|---------------------------------------|--|--|

Q42. SOR items are described in how many digits?

- |        |       |       |       |
|--------|-------|-------|-------|
| (a) 10 | (b) 6 | (c) 8 | (d) 2 |
|--------|-------|-------|-------|

Q43. What does the first two digits in SOR item describe?

- |               |               |             |                       |
|---------------|---------------|-------------|-----------------------|
| (a) Paragraph | (b) Item Name | (c) Chapter | (d) None of the above |
|---------------|---------------|-------------|-----------------------|

Q44. How many chapters are there in USSOR?

- |        |        |        |        |
|--------|--------|--------|--------|
| (a) 10 | (b) 40 | (c) 50 | (d) 25 |
|--------|--------|--------|--------|

Q45. Which chapter pertains to water supply?

- |       |       |        |        |
|-------|-------|--------|--------|
| (a) 1 | (b) 6 | (c) 13 | (d) 10 |
|-------|-------|--------|--------|

Q46. What is the standard size of a modular clay brick?			
(a) 20cmx10cmx10cm	(b) 15cmx15cmx15cm	(c) 20cmx5cmx5cm	(d) 30cmx15cmx15cm

Q47. Which of the following s not a basic amenity for staff quarter?			
(a) Ventilation arrangements	(b) Individual Bathroom	(c) Kitchen	(d)Swimming pool

Q48. What is the minimum notice period for auction of Natural products in railways?			
(a) 15 days	(b) 21 days	(c) 30 days	(d) 100 days

Q49. Who of the following fix Reserve Price for auctioning?			
(a) DEN	(b) Accounts Officer	(c) Both	(d) None of the above

Q50. What is the gauge in Broad Gauge track over Indian Railways?			
(a) 2000mm	(b) 760mm	(c) 1676mm	(d) 1000mm

Q51. What is the minimum vertical clearance above rail level for 25kV AC traction?			
(a) 7000mm	(b) 6250mm	(c) 10000mm	(d) 5300mm

Q52. What is the maximum horizontal distance from centre of track to coping face of platform?			
(a) 1000mm	(b) 1900mm	(c) 1720mm	(d) 1680mm

Q53. What is the minimum distance from centre of track to face of platform wall?			
(a) 1675mm	(b) 1840mm	(c) 760mm	(d) 1000mm

Q54. Which of the following is <b>NOT</b> a treatment method for water?			
(a) sedimentation	(b) filtration	(c) tuberculation	(d) flocculation

Q55. What is the percentage of water supply considered for designing of sewage systems?			
(a) 50%	(b) 80%	(c) 90%	(d)100%

Q56. What should be the residual pressure head of water supplied in 3 Storey buildings?			
(a) 17m	(b) 100m	(c) 20m	(d) 50m

Q57. Who is the head of Civil Engineering Department in Open Line?			
(a) Sr DEN Coordination	(b) DRM	(c) PCE	(d) GM

Q58. Inspection of foundation and substructure of Bridges is done by which of the following:-			
(a) BRI	(b) SSE/P.way	(c) SSE/Works	(d)None of the above

Q59.As per IRWM, For office buildings, what is the norm for provision of water closets for female bathrooms?			
(a) 1 per 15 persons	(b) 1 per person	(c) 1 per 100 persons	(d) 1 per 50 persons

Q60. What is the full form of SMR?			
(a) Schedule Measurement Register	(b) Standard Measurement Register	(c) Standard Material Register	(d) Specification Measurement Register

Q61. Which of the following locations, manholes shall be provided?			
(a) Change in Alignment	(b) Change in diameter	(c) Change in gradient	(d) All of the above

Q62. What is the maximum interval at which manholes are provided?			
(a) 500m	(b) 1000m	(c) 30m	(d) 100m

Q63. What is the full form of OPC?			
(a) Ordinary Portland Cement	(b) Oakland Portland Cement	(c) Ordinary Pozzolana Cement	(d) Ordinary Plastic Cement

Q64. For station Name Board, what is the order of languages in which the station name is to be written ( Except Tamil Nadu)?			
(a) Regional Language, English, Hindi	(b) Hindi, Regional Language, English	(c) English, Hindi, Regional Language	(d) Regional Language, Hindi, English

Q65. What is the schedule of inspection for FOB's for SE( Works)?			
(a) Once in 2 years	(b) Once in 2 months	(c) Once in a year	(d) Once in a month

Q66. What is the full form for PI for soil?			
(a) Plasticity Index	(b) Performance Index	(c) Permeability Index	(d) Performance Indicator

Q67. Which of the following tests are used for determining the properties of soil?			
(a) Proctor Test	(b) Vane shear tests	(c) Standard Penetration Test	(d) All of the above

Q68. What is the full form of WBM?			
(a) Water Bitumen Macadam	(b) Wide Based Macadam	(c) Water Bound Macadam	(d) Water Bound Material

Q69. What does Bitumen of 80/100 grade mean?			
(a) Penetration value is 8-10mm	(b) Bitumen to be heated to 80-100 degree Celsius	(c) Thickness of bitumen to be kept as 80-100mm	(d) None of the above

Q70. Los Angles test is used for testing which property of aggregates?			
(a) Gradation	(b) Strength	(c) Abrasion	(d) Hardness

Q71. Which of the following is <b>NOT</b> a deep foundation?			
(a) Pile	(b) Well	(c) Pier	(d) Raft

Q72. What is Standard penetration Test Used for?			
(a) Settlement	(b) Shear strength	(c) Liquid limit	(d) Gradation

Q73. What should be the depth of exploration for shallow foundations?			
(a) 1 feet below base of footing	(b) 1.0m below base of footing	(c) At base of footing	(d) 1.5m below base of footing

Q74. Damp Proofing is done for what?			
(a) Protection against sound	(b) Protection against water	(c) Protection against termites	(d) Protection against heat

Q75. What does RDSO stand for?			
(a) Railway Design and Specification Organisation	(b) Research Design and Specification Organisation	(c) Research Design and Standards Organisation	(d) Railway Design and Standards Organisation

Q76. As per latest guidelines of Railway Board, which of the following is <b>NOT</b> a category of station			
(a) HG	(b) SG	(c) NSG	(d) Category A

Q77. What is the maximum permissible gradient in yards?			
(a) 1 in 260	(b) 1 in 1000	(c) 1 in 400	(d) 1 in 100

Q78. Which code is followed for Plain and Reinforced Cement Concrete?			
(a) IS 786	(b) IS 383	(c) IS 456	(d) IS 2311



Q79. What is the meaning of SBC of soil?			
(a) Simple Bearing Capacity	(b) Safe Bearing Capacity	(c) Soil Bearing Capacity	(d) None of the above

Q80. Mud- Phuska is a treatment for?			
(a) Termite treatment	(b) Water Proofing	(c) Heat treatment	(d) None of the above

Q81. How many Maternity leaves are available to a female employee?			
(a) 90 days	(b) 180 days	(c) 365 days	(d) 730 days

Q82. High Level platforms are to be provided at which of the following category of stations			
(a)NSG-1	(b) SG-1	(c) HG-1	(d) All of the above

Q83. What is the permissible limit of TDS in portable water?			
(a) 500-2000	(b) 600-1000	(c) 100-200	(d)0-100

Q84. As per IRWM what is the per passenger demand at station platform in L/day?			
(a) 10	(b) 15	(c) 20	(d) 25

Q85. What is the full form of QAP?			
(a) Quick Assurance Plan	(b) Quality Assurance Plan	(c) Quick Action Plan	(d) Quality Approval Plan

Q86. What is the capital of the USA?			
(a) Los Angles	(b) New York	(c) Washington DC	(d) California

Q87. Who has written the National Anthem?			
(a)Rabindranath Tagore	(b)Bakim Chand Chaterjee	(c)Dr. Abul Kalam Azad	(d) Munshi Premchand

Q88. Which disease is caused by deficiency of Vitamin C?			
(a) Cancer	(b) Anaemia	(c) Scurvy	(d) Blindness

Q89. Who is the Minister of Railway at present?			
(a) Piyush Goyal	(b) Suresh Prabhu	(c) Nitin Gadkari	(d)Rajnath Singh

Q90. In between which station did the first train run in India?			
(a) Surat and	(b) Delhi and Agra	(c) Bombay and Pune	(d) Bombay and Thane

Ahemdabad			
Q91. Which Virus causes Covid-19 disease?			
(a) Sars-CoV-2/Corona Virus	(b) HIV	(c) H1N1	(d) Ebola Virus

Q92. Who is known as the 'Missile Man of India'?			
(a) Dr. Homi Bhabha	(b) Dr. C V Raman	(c) Dr. APJ Abdul Kalam	(d) None of the above.

Q93. Which city is called the "Pink City"			
(a) Jaipur	(b) Jodhpur	(c) Udaipur	(d) Allahabad

Q94. Which Flower is the National Flower of India?			
(a) Lily	(b) Sunflower	(c) Rose	(d) Lotus

Q95. Which day is celebrated as the "International Day of Yoga"?			
(a) 5 <sup>th</sup> September	(b) 21 <sup>st</sup> June	(c) 14 <sup>th</sup> November	(d) 1 <sup>st</sup> January

Q96. When was the RTI Act Implemented in India?			
(a) 2005	(b) 2014	(c) 2000	(d) 2019

Q97. Which team does MS Dhoni play for in the IPL?			
(a) Delhi Capitals	(b) Chennai Super Kings	(c) Mumbai Indians	(d) Kolkata Night Riders

Q98. What gas is commonly called the Laughing Gas?			
(a) Carbon Monoxide	(b) Methane	(c) Nitrous Oxide	(d) Hydrogen Sulphide

Q99. Which is the highest peak in Southern India?			
(a) Anamudi Peak	(b) Dodabetta Peak	(c) Kanchenjunga Peak	(d) Mount Everest

Q100. What is the capital of Meghalaya?			
(a) Kohima	(b) Aizwal	(c) Shillong	(d) Guwahati

Q101. On which day is Hindi day celebrated?			
(a) 14 <sup>th</sup> August	(b) 14 <sup>th</sup> November	(c) 14 <sup>th</sup> October	(d) 14 <sup>th</sup> September

Q102. Official language Act 1963 was amended when?			
(a) 1972	(b) 1967	(c) 1969	(d) 1976

Q103. As per Official Language act, Karnataka fall in which region			
(a) Region A	(b) Region C	(c) Region B	(d) None

Q104. On which day has the Officials Languages Act come into force			
(a) 26 <sup>th</sup> January 1967	(b) 26 <sup>th</sup> January 1963	(c) 26 <sup>th</sup> January 1965	(d) None of the above

Q105. Himachal Pradesh falls in region as per Official Languages Act			
(a) Region A	(b) Region B	(c) Region C	(d) None of the above

Q106. In the Committee on Official Language, how many members shall be from Lok Sabha?			
(a) 30	(b) 10	(c) 20	(d) 100

Q107. In the Committee on Official Language, how many members shall be from Rajya Sabha?			
(a) 10	(a) 30	(a) 20	(a) 50

Q108. Which article of constitution is related to Hindi as Official Language of the Union?			
(a) 14	(b) 343	(c) 360	(d) 15

Q109. Which part of Constitution has provisions related to Official Language?			
(a) Part XVI	(b) Part XVII	(c) Part I	(d) Part X

Q110. Who is the Chairman of the Zonal Official Language Implementation Committee?			
(a) General Manager	(b) DRM	(c) PCPO	(d) AGM

---End of paper---