Program:CIVIL Engineering

Curriculum Scheme: Rev 2016

Examination: Third/Semester VI

Course Code: CEC603 and Course Name: TRANSPORTATION ENGG 2 (R16)

Time: 1 hour Max. Marks: 50

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For the students:- All the Questions are compulsory and carry equal marks .

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| Q1. | The standard dimensions of a wooden sleeper for a B.G. railway track are |
| Option A: | 2.74 m × 25 cm × 13 cm |
| Option B: | 1.52 m × 15 cm × 10 cm |
| Option C: | 1.83 m × 20 cm × 11 cm |
| Option D: | 1.75 cm × 20 cm × 12 cm |
|  |  |
| Q2. | The rail section which is not used on Indian metre gauge tracks, is |
| Option A: | 25 R |
| Option B: | 30 R |
| Option C: | 35 R |
| Option D: | 40 R |
|  |  |
| Q3. | Name the organization which is the research and development wing of Indian Railways. |
| Option A: | CRIS |
| Option B: | RDSO |
| Option C: | RSDO |
| Option D: | IRCTC |
|  |  |
| Q4. | What must be done to wooden sleepers before use? |
| Option A: | Seasoning |
| Option B: | Washing |
| Option C: | Painting |
| Option D: | Hydrating |
|  |  |
| Q5. | The limiting value of cant deficiency for Meter Gauge routes is |
| Option A: | 40mm |
| Option B: | 50mm |
| Option C: | 75mm |
| Option D: | 100mm |
|  |  |
| Q6. | Rail section first designed on Indian railways, was |
| Option A: | Double headed |
| Option B: | Bull headed |
| Option C: | Flat footed |
| Option D: | Option a and b both |
|  |  |
| Q7. |  The difference in the lengths of two diagonals of a rail diamond is |
| Option A: |  (2G/sin α) × (cos α/2 + sin α/2) |
| Option B: |  (2G/sin α) × (cos α/2 - sin α/2) |
| Option C: |  (2G/sin α) × (sin α/2 - cos α/2) |
| Option D: |  (2G/sin α) × (tan α/2 - cot α/2) |
|  |  |
| Q8. | The angle between the gauge faces of the stock rail and tongue rail, is called |
| Option A: | Switch angle |
| Option B: | Angle of crossing |
| Option C: | Angle of turnout |
| Option D: | None of these |
|  |  |
| Q9. | The runway orientation is made so that landing and takeoff are |
| Option A: | Against the wind direction |
| Option B: | Along the wind direction |
| Option C: | Perpendicular to wind direction |
| Option D: | None of these |
|  |  |
| Q10. | The thickness design of the pavement, is decided on the load carried by |
| Option A: | Nose wheel |
| Option B: | Tail wheel |
| Option C: | Main wheel |
| Option D: | All of the above |
|  |  |
| Q11. | Which of the following ensures standardization of ATM services worldwide? |
| Option A: | FAA |
| Option B: | ICAO |
| Option C: | IAO |
| Option D: | DGCA |
|  |  |
| Q12. | The aircraft whose attitude reference is solely based on the natural horizon follow \_\_\_\_\_\_ |
| Option A: | VFR |
| Option B: | IRF |
| Option C: | Pilot |
| Option D: | FAA commands |
|  |  |
| Q13. | What altitude does FL540 correspond to? |
| Option A: | 54,000ft |
| Option B: | 5.4 ft |
| Option C: | 54 ft |
| Option D: | 5400 ft |
|  |  |
| Q14. | Buoys which support the cables to which vessels are attached are of |
| Option A: | Cylindrical shape |
| Option B: | Pear shaped |
| Option C: | Spherical shape |
| Option D: | All of these |
|  |  |
| Q15. | The wavelength is computed by Bertin's formula (where T is the period in seconds). |
| Option A: | L = (T/2π) g |
| Option B: | L = (T²/2π) g |
| Option C: | L = (2T/π) g |
| Option D: | L = (2T²/2π) g |
|  |  |
| Q16. | In multiple point mooring system, vessel is secured to minimum of |
| Option A: | Two points |
| Option B: | Four points |
| Option C: | Six points |
| Option D: | Eight points |
|  |  |
| Q17. | Which of the following is not the component of substructure of a bridge? |
| Option A: | Pier |
| Option B: | Abutment |
| Option C: | Wing-wall |
| Option D: | Roadway |
|  |  |
| Q18. | Spread foundation is a type of |
| Option A: | Shallow foundation |
| Option B: | Raft foundation |
| Option C: | Deep foundation |
| Option D: | Pile foundation |
|  |  |
| Q19. | A end supports of the superstructure of a bridge are called \_\_ |
| Option A: | Wing wall |
| Option B: | Abutment |
| Option C: | Pier |
| Option D: | None of the above |
|  |  |
| Q20. | As per I.R.C. approaches should be straight for a minimum length of \_\_ on either side of a bridge. |
| Option A: | 10m |
| Option B: | 15m |
| Option C: | 20m |
| Option D: | 30m |
|  |  |
| Q21. | The entrance channel ranges from: |
| Option A: | 100-160m |
| Option B: | 100-500m |
| Option C: | 0-400m |
| Option D: | 100-260m |
|  |  |
| Q22. | The open type of wharves are made of: |
| Option A: | Timber |
| Option B: | R. C. C |
| Option C: | Both a and b |
| Option D: | Earth and rock |
|  |  |
| Q23. | The mechanical widening of a track is given by \_\_\_\_\_\_\_\_\_\_\_ |
| Option A: | l2/2R |
| Option B: | nl2/2R |
| Option C: | nl3/2R |
| Option D: | nl/2R |
|  |  |
| Q24. | The most preferred type of transition curve by IRC for highway is \_\_\_\_\_\_\_\_\_\_\_l |
| Option A: | Spiral |
| Option B: | Cubic parabola |
| Option C: | Parabola |
| Option D: | Laminiscate |
|  |  |
| Q25. | The total shift of a transition curve is \_\_\_\_\_\_\_\_\_\_\_ |
| Option A: | L2/12R |
| Option B: | L2/24R |
| Option C: | L2/48R |
| Option D: | L2/96R |