## REGISTRATION NUMBER

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## SRINIX COLLEGE OF ENGINEERING

## 2nd INTERNAL EXAMINATION-2021-22

Sub-RAE
Semester-6 ${ }^{\text {TH }}$
Branch-CE
Full Mark-100
Time-2.30Hrs

## ANSWER ALL QUESTIONS (PART-A)

[2X10]

1. What do you mean by cant deficiency?
2. Write down the objectives of signaling?
3. Distinguish between aerodrome and airport?
4. Write the maximum cant deficiency value for different gauges for indian railway?
5. What is ruling gradient?
6. Write down a short note about acute angle crossing?
7. What do you understand by home signal?
8. What is hanger?
9. What is Apron?
10. What is the imaginary surface used in airport?

ANSWER ANY Eight QUESTIONS (PART-B)
[6X8=48]

1. Write short notes in pusher gradient?
2. What is the necessity of interlocking?
3. What are the possible causes of creep? How the creep is measure?
4. Briefly explain the different types of rail joints with the different types of neat sketches?
5. Determine the length of transition curve for M.G Curve of $4^{\circ}$ having a cant og 8 cm . the maxium permissible speed on curve is 65 kmph .
6. What are the requirements of an ideal permanent way?
7. What are the different types of airport marking ?Draw with neat sketches?
8. Briefly explain about wind rose diagram type 1 and 2.
9. Write short notes on necessity of interlocking?
10. Write the merits and demerits of pre-stressed concrete sleeper?

## ANSWER ANY TWO QUESTIONS (PART-B)

[16X2=32]

1. Briefly write down the airport site selection?
2. What are the objects of signaling?Briefly explain about shunting signal?
3. Calculate the necessary element required to set out a 1 in 8.5 turnout taking up from a straight B.G track with its curve starting from the toe of the switch i.e tangential to the gauge face of the outer main rail and passes through theoretical nose of cross-section given heel divergence $\mathrm{d}=11.4 \mathrm{~cm}, \mathrm{G}=1.676 \mathrm{~m}, \mathrm{~N}=8.5$
