

Q:) The design of horizontal and vertical alignments, super elevation, gradient is worst affected by

A : Length of vehicle
B : Width of vehicle
C : Speed of vehicle
D : Height of vehicle

Q:) The most raised portion of the pavement is called A: Super elevation **B**: Camber C: Crown D:Kerb

#### Q:) Transition curve is introduced in

A: Horizontal curve **B**: Circular curve C: Between horizontal curve and circular curve **D**: Vertical curve

# Q:) The most important factor that is required for road geometrics is

A : SSD B : OSD C : ISD D : Speed of vehicle

Q:) The design speed of NH on a cross slope of up to 10% is A: 100kmph B:80kmph C:60kmph D:50kmph

Q:) A part of pavement raised with respect to one side keeping the other side constant is called A: Footpath **B**: Kerb C: Super elevation D: Camber

**Q:**) The main purpose of providing camber is A : To collect storm water B : To maintain equilibrium C: To follow IRC specifications D: To follow geometric specifications

**Q**: ) In India, the type of traffic assumed to design pavements is? A: Low traffic **B**: Heavy traffic C: Mixed traffic flow D: Very low traffic

**Q:**) The braking efficiency mainly depends on A : Sight distance **B**: **PIEV** theory C: Friction D: Length of the curve

Q:) The braking efficiency for a vehicle moving with a speed of 18kmph, having a lag distance of 14m and coefficient of longitudinal friction is 0.36. A:25.28% B:25.4% C:25.6% D:25.8%

## Q:) The unevenness index for a good pavement surface of high speed should be \_\_\_\_\_.

- A:1500mm/km
- B:2500mm/km
- C:3500mm/km
- D:4500mm/km

#### Q:) The camber required depends on

- A : Type of pavement B : Rainfall
- C : Type of pavement and rainfall D : Rainfall characteristics

**Q:**) The minimum camber required in heavy rainfall area for bituminous roads as per IRC is A:1% B:2.5% C:2.7% D:3%

Q:) The equation of parabolic camber is given by A: Y=x/a $B: Y=x^2/a$  $C: Y=x^3/q$  $D: Y=ax^2$ 

**Q**:) The minimum width of carriage way in urban roads is \_ A:2.5m B: 3.0m C: 3.5m D: 3.75m

#### Q:) A median is also called as

A : Traffic separator B : Traffic junction C : Traffic check post D : Traffic flow

**Q**:) The minimum shoulder width recommended by IRC is A:1.0m B: 1.5m C:2.0m D:2.5m

Q:) A road running parallel to highway for some selected areas with grade separator are called

- A: Footage road
- **B: Urban road**
- C: Frontage road
- D: Parallel highway

Q:) The width of formation is calculated by adding? A: Sum of the width of pavements **B**: Width of pavement+ separators C: Width of pavement + separators + shoulders D: Width of pavement + separator + shoulders + side drains

# Q:) The boundary till which building activities are prohibited is called

A : Right of way B : Boundary line C : Building line D : Control line

Q:) The stopping sight distance does not depend on A : Break reaction time **B: Speed of vehicle** C: Length of vehicle

D: Friction

Q:) The reaction time considered in SSD is A : 1.5 sec B:2 sec C: 2.5 sec **D:3 sec** 

Q:) The desirable relationship between OSD and length of overtaking zone is A: Length of overtaking zone = OSD B: Length of overtaking zone = 2 OSD C: Length of overtaking zone = 3 OSD D: Length of overtaking zone = 5 OSD

# Q:) If the speed of overtaken vehicle is 80Kmph, then the design speed is

A : 80kmph B : 96kmph C : 100kmph D : 106kmph

# Q:) The ratio between centrifugal force and weight of the vehicle is called \_\_\_\_\_.

- A: Impact factor
- B: Impact ratio
- C: Centrifugal factor
- D: Centrifugal impulse

Q:) If the super elevation of the highway provided is zero, then the design speed of highway having a curve of 200m and coefficient of friction 0.10 is? A:40kmph B: 50kmph C:55kmph D:60kmph

#### Q:) The super elevation is calculated for

A : 75% of design speed including friction
B : 80% of design speed neglecting friction
C : 75% of design speed neglecting friction
D : 80% of design speed including friction

Q:) The ruling minimum radius in the curve is given by A :  $R = V^2 / 127(e+f)$ **B** :  $R = V'^2 / 127$  (e+f) C: R = 127(e+f)D: R=127/(e+f)

### Q:) The extra widening is the sum of

A: Mechanical widening and psychological widening **B**: Two times of mechanical widening C: Two times of psychological widening D: Mechanical widening – physical widening

**Q:**) The mechanical widening of a track is given by  $A : I^2/2R$ **B** :  $nl^{2}/2R$  $C: nl^{3}/2R$ D: nl/2R

Q:) The length of wheel base usually considered in India is? A:6.1m B:5.9m C:5.8m D:5.5m

Q:) The mechanical widening of a curve is 1.5m, the curve is having a radius of 120m and design speed as 80kmph find the total widening on the curve. A:2.20m B:2.26m C:2.25m D:2.24m

# Q:) The most preferred type of transition curve by IRC for highway is

A : Spiral B : Cubic parabola C : Parabola D : Lemniscate

**Q:)** The rate of change of acceleration in m/sec3 for a design speed of 85kmph is A:0.5 **B**: 0.6 C:0.7 D:0.8

# **Q**: ) The total shift of a transition curve is A: $L^{2}/12R$ $B: L^2/24R$ $C: L^2/48R$ $D: L^2/96R$

