The gears are used to connect two parallel shafts except

a. Spur gear
b. Helical gear
c. Double helical gears
d. Bevel gears

(Ans:d)

The gears used to connect non-parallel and non-intersecting shafts is

a. Straight bevel gears
b. Spiral bevel gears
c. Spiral gears
d. Double helical gears

(Ans:c)

To connect two intersecting shafts we use

a. Spur gear
b. Helical gear
c. Worm and wheel
d. Bevel gears

(Ans:d)

The gear used to convert rotary motion into translating motion is

a. Worm and wheel
b. Crown gear
c. Rack and pinion
d. Spiral Bevel gear

(Ans:c)

Which of the following type of gear has inclined teeth?

a. Spur gear
b. Helical gear
c. Spiral gear
d. All of the above

(Ans:b)

The point of contact of two pitch circles of mating gears is called

a. Pressure point
b. Pitch point
c. Module
d. Contact point

(Ans:b)

The circular pitch of a gear is given by

a. Πd/t
b. Πd/2t
c. 2Πd/t
d. Πd/3t

Where d=diameter of pitch circle

t=number of teeth

(Ans:a)

The module of a gear is given by

a. d/t
b. 2d/t
c. d/2t
d. d/3t

Where d=diameter of pitch circle

t=number of teeth

(Ans:a)

Which of the following does not give velocity ratio of gears?

a. ω2/ω1
b. N1/N2
c. D1/D2
d. T1/T2

(Ans:b)

The clearance in toothed gear is kept as

a. 1.50 module
b. 1.57 module

c. 1.60 module
d. 1.67 module

(Ans:b)

Which of the following is a form of teeth?

a. Cycloidal
b. Spherical
c. Helical
d. All of the above

(Ans:a)

Which of the following pressure angle (in degrees) is commonly used for gears?

a. 15
b. 20
c. 25
d. 30

(Ans:b)

In gears, arc of contact is

a. Arc of approach + Arc of recess
b. Arc of approach – Arc of recess
c. Arc of approach / Arc of recess
d. Arc of approach x Arc of recess

(Ans:a)

Length of arc of contact is given by

a. Length of path of contact / CosΦ
b. Length of path of contact / SinΦ
c. Length of path of contact x CosΦ
d. Length of path of contact x SinΦ

Where, Φ = pressure angle

(Ans:a)

The minimum number of teeth on pinion to avoid interference in rack and pinion is

a. 15
b. 18
c. 21
d. 24

(Ans:b)

In worm and wheel, the shaft axes are at

a. 90 degrees
b. 45 degrees
c. 180 degrees
d. 270 degrees

(Ans:a)