

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY(AT)

II B.Tech II SEM II-MID Exam

BRANCH: ME

SET – 1

Sub : KOM

Date : 04/05/2015

Time : 20 MINS

Max. Marks: 10

Roll No:

Signature of invigilator:

1.

1. The two parallel and coplanar shafts are connected by gears having teeth parallel to the axis of the shaft. This arrangement is called ()
a. spur gearing (b) helical gearing (c) bevel gearing (d) spiral gearing
2. The type of gears used to connect two non-parallel non-intersecting shafts are ()
(a) spur gears (b) helical gears (c) spiral gears (d) none of these
3. An imaginary circle which by pure rolling action, gives the same motion as the actual gear, is called ()
(a) addendum circle (b) dedendum circle (c) pitch circle (d) clearance circle
4. The size of a gear is usually specified by ()
(a) pressure angle (b) circular pitch (c) diametral pitch (d) pitch circle diameter
5. The module is the reciprocal of ()
(a) diametral pitch (b) circular pitch (c) pitch diameter (d) none of these
6. If the module of a gear be m , the number of teeth T and pitch circle diameter D , then ()
(a) $m = D/T$ (b) $D = T/m$ (c) $m = D/2T$ (d) none of these
7. Law of gearing is satisfied if ()
(a) two surfaces slide smoothly (b) common normal at the point of contact passes through the pitch point on the line joining the centres of rotation
(c) number of teeth = P.C.D. / module (d) addendum is greater than dedendum
8. In a simple gear train, if the number of idle gears is odd, then the motion of driven gear will ()
(a) be same as that of driving gear (b) be opposite as that of driving gear
(c) depend upon the number of teeth on the driving gear (d) none of the above
9. The train value of a gear train is ()
(a) equal to velocity ratio of a gear train (b) reciprocal of velocity ratio of a gear train
(c) always greater than unity (d) always less than unity
10. In a clock mechanism, the gear train used to connect minute hand to hour hand, is ()
(a) epicyclic gear train (b) reverted gear train (c) compound gear train (d) simple gear train
11. In a gear train, when the axes of the shafts, over which the gears are mounted, move relative to a fixed axis, is called ()
(a) simple gear train (b) compound gear train (c) reverted gear train (d) epicyclic gear train
12. A differential gear in an automobile is a ()
(a) simple gear train (b) epicyclic gear train (c) compound gear train (d) none of these
13. A differential gear in automobiles is used to ()
(a) reduce speed (b) assist in changing speed (c) provide jerk-free movement of vehicle (d) help in turning
14. The size of a cam depends upon ()
(a) base circle (b) pitch circle (c) prime circle (d) pitch curve
15. The angle between the direction of the follower motion and a normal to the pitch curve is called ()
(a) pitch angle (b) prime angle (c) base angle (d) pressure angle
16. In a radial cam, the follower moves ()
(a) in a direction perpendicular to the cam axis (b) in a direction parallel to the cam axis
(c) in any direction irrespective of the cam axis (d) None of the above
17. The direction of linear velocity of any point on a link with respect to another point on the same link is ()
(a) parallel to the link joining the points (b) perpendicular to the link joining the points
(c) at 45° to the link joining the points (d) none of these
18. The magnitude of linear velocity of a point B on a link AB relative to point A is ()
(a) ωAB (b) $\omega (AB)^2$ (c) $\omega^2 \cdot AB$ (d) $\omega^2 (AB)^2$
19. A circle drawn with centre as the cam centre and radius equal to the distance between the cam centre and the point on the pitch curve at which the pressure angle is maximum, is called ()
(a) base circle (b) pitch circle (c) prime circle (d) none of these
20. In an internal gears, driver is rotating in clockwise, then driven is in----- ()
a) clockwise b) counterclockwise c) anti clock wise d) neither clockwise nor counter clockwise

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a. spur gearing (b) helical gearing (c) bevel gearing (d) spiral gearing
2. The type of gears used to connect two non-parallel non-intersecting shafts are ()
(a) spur gears (b) helical gears (c) spiral gears (d) none of these
3. An imaginary circle which by pure rolling action, gives the same motion as the actual gear, is called ()
(a) addendum circle (b) dedendum circle (c) pitch circle (d) clearance circle
4. The size of a gear is usually specified by ()
(a) pressure angle (b) circular pitch (c) diametral pitch (d) pitch circle diameter
5. The module is the reciprocal of ()
(a) diametral pitch (b) circular pitch (c) pitch diameter (d) none of these
6. If the module of a gear be m , the number of teeth T and pitch circle diameter D , then ()
(a) $m = D/T$ (b) $D = T/m$ (c) $m = D/2T$ (d) none of these
7. Law of gearing is satisfied if ()
(a) two surfaces slide smoothly (b) common normal at the point of contact passes through the pitch point on the line joining the centres of rotation
(c) number of teeth = P.C.D. / module (d) addendum is greater than dedendum
8. In a simple gear train, if the number of idle gears is odd, then the motion of driven gear will ()
(a) be same as that of driving gear (b) be opposite as that of driving gear
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10. In a clock mechanism, the gear train used to connect minute hand to hour hand, is ()
(a) epicyclic gear train (b) reverted gear train (c) compound gear train (d) simple gear train
11. In a gear train, when the axes of the shafts, over which the gears are mounted, move relative to a fixed axis, is called ()
(a) simple gear train (b) compound gear train (c) reverted gear train (d) epicyclic gear train
12. A differential gear in an automobile is a ()
(a) simple gear train (b) epicyclic gear train (c) compound gear train (d) none of these
13. A differential gear in automobiles is used to ()
(a) reduce speed (b) assist in changing speed (c) provide jerk-free movement of vehicle (d) help in turning
14. The size of a cam depends upon ()
(a) base circle (b) pitch circle (c) prime circle (d) pitch curve
15. The angle between the direction of the follower motion and a normal to the pitch curve is called ()
(a) pitch angle (b) prime angle (c) base angle (d) pressure angle
16. In a radial cam, the follower moves ()
(a) in a direction perpendicular to the cam axis (b) in a direction parallel to the cam axis
(c) in any direction irrespective of the cam axis (d) None of the above
17. The direction of linear velocity of any point on a link with respect to another point on the same link is ()
(a) parallel to the link joining the points (b) perpendicular to the link joining the points
(c) at 45° to the link joining the points (d) none of these
18. The magnitude of linear velocity of a point B on a link AB relative to point A is ()
(a) ωAB (b) $\omega (AB)^2$ (c) $\omega^2 \cdot AB$ (d) $\omega^2 (AB)^2$
19. A circle drawn with centre as the cam centre and radius equal to the distance between the cam centre and the point on the pitch curve at which the pressure angle is maximum, is called ()
(a) base circle (b) pitch circle (c) prime circle (d) none of these
20. In an internal gears, driver is rotating in clockwise, then driven is in----- ()
a) clockwise b) counterclockwise c) anti clock wise d) neither clockwise nor counter clockwise

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II B.Tech II SEM II-MID Exam

BRANCH: ME

SET – 2

Sub : KOM

Date : 04/05/2015

Time : 20 MINS

Max. Marks: 10

Roll No:

Signature of invigilator:

1. The size of a gear is usually specified by ()
(a) pressure angle (b) circular pitch (c) diametral pitch (d) pitch circle diameter
2. The module is the reciprocal of ()
(a) diametral pitch (b) circular pitch (c) pitch diameter (d) none of these
3. A differential gear in an automobile is a ()
(a) simple gear train (b) epicyclic gear train (c) compound gear train (d) none of these
4. A differential gear in automobiles is used to ()
(a) reduce speed (b) assist in changing speed (c) provide jerk-free movement of vehicle (d) help in turning
5. The size of a cam depends upon ()
(a) base circle (b) pitch circle (c) prime circle (d) pitch curve
6. The two parallel and coplanar shafts are connected by gears having teeth parallel to the axis of the shaft. This arrangement is called ()
spur gearing (b) helical gearing (c) bevel gearing (d) spiral gearing
7. The type of gears used to connect two non-parallel non-intersecting shafts are ()
(a) spur gears (b) helical gears (c) spiral gears (d) none of these
8. If the module of a gear be m , the number of teeth T and pitch circle diameter D , then ()
(a) $m = D/T$ (b) $D = T/m$ (c) $m = D/2T$ (d) none of these
9. The direction of linear velocity of any point on a link with respect to another point on the same link is ()
(a) parallel to the link joining the points (b) perpendicular to the link joining the points
(c) at 45° to the link joining the points (d) none of these
10. The magnitude of linear velocity of a point B on a link AB relative to point A is ()
(a) ωAB (b) $\omega (AB)^2$ (c) $\omega^2 \cdot AB$ (d) $\omega^2 (AB)^2$
11. A circle drawn with centre as the cam centre and radius equal to the distance between the cam centre and the point on the pitch curve at which the pressure angle is maximum, is called ()
(a) base circle (b) pitch circle (c) prime circle (d) none of these
12. In an internal gears, driver is rotating in clockwise, then driven is in----- ()
a) clockwise b) counterclockwise c) anti clock wise d)neither clockwise nor counter clockwise
13. Law of gearing is satisfied if ()
(a) two surfaces slide smoothly (b) common normal at the point of contact passes through the pitch point on the line joining the centres of rotation
(c) number of teeth = P.C.D. / module (d) addendum is greater than dedendum
14. An imaginary circle which by pure rolling action, gives the same motion as the actual gear, is called ()
(a) addendum circle (b) dedendum circle (c) pitch circle (d) clearance circle
15. In a simple gear train, if the number of idle gears is odd, then the motion of driven gear will ()
(a) be same as that of driving gear (b) be opposite as that of driving gear
(c) depend upon the number of teeth on the driving gear (d) none of the above
16. The train value of a gear train is ()
(a) equal to velocity ratio of a gear train (b) reciprocal of velocity ratio of a gear train
(c) always greater than unity (d) always less than unity
17. In a clock mechanism, the gear train used to connect minute hand to hour hand, is ()
(a) epicyclic gear train (b) reverted gear train (c) compound gear train (d) simple gear train
18. In a gear train, when the axes of the shafts, over which the gears are mounted, move relative to a fixed axis, is called ()
(a) simple gear train (b) compound gear train (c) reverted gear train (d) epicyclic gear train
19. The angle between the direction of the follower motion and a normal to the pitch curve is called ()
(a) pitch angle (b) prime angle (c) base angle (d) pressure angle
20. In a radial cam, the follower moves ()
(a) in a direction perpendicular to the cam axis (b) in a direction parallel to the cam axis
(c) in any direction irrespective of the cam axis (d) None of the above

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Time : 20 MINS

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Roll No:

Signature of invigilator:

1. The size of a gear is usually specified by ()
(a) pressure angle (b) circular pitch (c) diametral pitch (d) pitch circle diameter
2. The module is the reciprocal of ()
(a) diametral pitch (b) circular pitch (c) pitch diameter (d) none of these
3. A differential gear in an automobile is a ()
(a) simple gear train (b) epicyclic gear train (c) compound gear train (d) none of these
4. A differential gear in automobiles is used to ()
(a) reduce speed (b) assist in changing speed (c) provide jerk-free movement of vehicle (d) help in turning
5. The size of a cam depends upon ()
(a) base circle (b) pitch circle (c) prime circle (d) pitch curve
6. The two parallel and coplanar shafts are connected by gears having teeth parallel to the axis of the shaft. This arrangement is called ()
spur gearing (b) helical gearing (c) bevel gearing (d) spiral gearing
7. The type of gears used to connect two non-parallel non-intersecting shafts are ()
(a) spur gears (b) helical gears (c) spiral gears (d) none of these
8. If the module of a gear be m , the number of teeth T and pitch circle diameter D , then ()
(a) $m = D/T$ (b) $D = T/m$ (c) $m = D/2T$ (d) none of these
9. The direction of linear velocity of any point on a link with respect to another point on the same link is ()
(a) parallel to the link joining the points (b) perpendicular to the link joining the points
(c) at 45° to the link joining the points (d) none of these
10. The magnitude of linear velocity of a point B on a link AB relative to point A is ()
(a) ωAB (b) $\omega (AB)^2$ (c) $\omega^2 \cdot AB$ (d) $\omega^2 (AB)^2$
11. A circle drawn with centre as the cam centre and radius equal to the distance between the cam centre and the point on the pitch curve at which the pressure angle is maximum, is called ()
(a) base circle (b) pitch circle (c) prime circle (d) none of these
12. In an internal gears, driver is rotating in clockwise, then driven is in----- ()
a) clockwise b) counterclockwise c) anti clock wise d)neither clockwise nor counter clockwise
13. Law of gearing is satisfied if ()
(a) two surfaces slide smoothly (b) common normal at the point of contact passes through the pitch point on the line joining the centres of rotation
(c) number of teeth = P.C.D. / module (d) addendum is greater than dedendum
14. An imaginary circle which by pure rolling action, gives the same motion as the actual gear, is called
(a) addendum circle (b) dedendum circle (c) pitch circle (d) clearance circle ()
15. In a simple gear train, if the number of idle gears is odd, then the motion of driven gear will ()
(a) be same as that of driving gear (b) be opposite as that of driving gear
(c) depend upon the number of teeth on the driving gear (d) none of the above
16. The train value of a gear train is ()
(a) equal to velocity ratio of a gear train (b) reciprocal of velocity ratio of a gear train
(c) always greater than unity (d) always less than unity
17. In a clock mechanism, the gear train used to connect minute hand to hour hand, is ()
(a) epicyclic gear train (b) reverted gear train (c) compound gear train (d) simple gear train
18. In a gear train, when the axes of the shafts, over which the gears are mounted, move relative to a fixed axis, is called ()
(a) simple gear train (b) compound gear train (c) reverted gear train (d) epicyclic gear train
19. The angle between the direction of the follower motion and a normal to the pitch curve is called ()
(a) pitch angle (b) prime angle (c) base angle (d) pressure angle
20. In a radial cam, the follower moves ()
(a) in a direction perpendicular to the cam axis (b) in a direction parallel to the cam axis
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SET – 3

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Roll No:

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1. The two parallel and coplanar shafts are connected by gears having teeth parallel to the axis of the shaft. This arrangement is called ()
spur gearing (b) helical gearing (c) bevel gearing (d) spiral gearing
2. The type of gears used to connect two non-parallel non-intersecting shafts are ()
(a) spur gears (b) helical gears (c) spiral gears (d) none of these
3. If the module of a gear be m , the number of teeth T and pitch circle diameter D , then ()
(a) $m = D/T$ (b) $D = T/m$ (c) $m = D/2T$ (d) none of these
4. The direction of linear velocity of any point on a link with respect to another point on the same link is ()
(a) parallel to the link joining the points (b) perpendicular to the link joining the points
(c) at 45° to the link joining the points (d) none of these
5. The magnitude of linear velocity of a point B on a link AB relative to point A is ()
(a) ωAB (b) $\omega (AB)^2$ (c) $\omega^2 \cdot AB$ (d) $\omega^2 (AB)^2$
6. In a clock mechanism, the gear train used to connect minute hand to hour hand, is ()
(a) epicyclic gear train (b) reverted gear train (c) compound gear train (d) simple gear train
7. In a gear train, when the axes of the shafts, over which the gears are mounted, move relative to a fixed axis, is called ()
(a) simple gear train (b) compound gear train (c) reverted gear train (d) epicyclic gear train
8. The angle between the direction of the follower motion and a normal to the pitch curve is called ()
(a) pitch angle (b) prime angle (c) base angle (d) pressure angle
9. In a radial cam, the follower moves ()
(a) in a direction perpendicular to the cam axis (b) in a direction parallel to the cam axis
(c) in any direction irrespective of the cam axis (d) None of the above
10. A circle drawn with centre as the cam centre and radius equal to the distance between the cam centre and the point on the pitch curve at which the pressure angle is maximum, is called ()
(a) base circle (b) pitch circle (c) prime circle (d) none of these
11. The size of a gear is usually specified by ()
(a) pressure angle (b) circular pitch (c) diametral pitch (d) pitch circle diameter
12. The module is the reciprocal of ()
(a) diametral pitch (b) circular pitch (c) pitch diameter (d) none of these
13. A differential gear in an automobile is a ()
(a) simple gear train (b) epicyclic gear train (c) compound gear train (d) none of these
14. A differential gear in automobiles is used to ()
(a) reduce speed (b) assist in changing speed (c) provide jerk-free movement of vehicle (d) help in turning
15. The size of a cam depends upon ()
(a) base circle (b) pitch circle (c) prime circle (d) pitch curve
16. In an internal gears, driver is rotating in clockwise, then driven is in----- ()
a) clockwise b) counterclockwise c) anti clock wise d)neither clockwise nor counter clockwise
17. Law of gearing is satisfied if ()
(a) two surfaces slide smoothly (b) common normal at the point of contact passes through the pitch point on the line joining the centres of rotation
(c) number of teeth = P.C.D. / module (d) addendum is greater than dedendum
18. An imaginary circle which by pure rolling action, gives the same motion as the actual gear, is called ()
(a) addendum circle (b) dedendum circle (c) pitch circle (d) clearance circle
19. In a simple gear train, if the number of idle gears is odd, then the motion of driven gear will ()
(a) be same as that of driving gear (b) be opposite as that of driving gear
(c) depend upon the number of teeth on the driving gear (d) none of the above
20. The train value of a gear train is ()
(a) equal to velocity ratio of a gear train (b) reciprocal of velocity ratio of a gear train
(c) always greater than unity (d) always less than unity

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Signature of invigilator:

2. The two parallel and coplanar shafts are connected by gears having teeth parallel to the axis of the shaft. This arrangement is called ()
spur gearing (b) helical gearing (c) bevel gearing (d) spiral gearing
- 2.. The type of gears used to connect two non-parallel non-intersecting shafts are ()
(a) spur gears (b) helical gears (c) spiral gears (d) none of these
3. If the module of a gear be m , the number of teeth T and pitch circle diameter D , then ()
(a) $m = D/T$ (b) $D = T/m$ (c) $m = D/2T$ (d) none of these
4. The direction of linear velocity of any point on a link with respect to another point on the same link is ()
(a) parallel to the link joining the points (b) perpendicular to the link joining the points
(c) at 45° to the link joining the points (d) none of these
5. The magnitude of linear velocity of a point B on a link AB relative to point A is ()
(a) ωAB (b) $\omega (AB)^2$ (c) $\omega^2 \cdot AB$ (d) $\omega^2 (AB)^2$
6. In a clock mechanism, the gear train used to connect minute hand to hour hand, is ()
(a) epicyclic gear train (b) reverted gear train (c) compound gear train (d) simple gear train
7. In a gear train, when the axes of the shafts, over which the gears are mounted, move relative to a fixed axis, is called ()
(a) simple gear train (b) compound gear train (c) reverted gear train (d) epicyclic gear train
8. The angle between the direction of the follower motion and a normal to the pitch curve is called ()
(a) pitch angle (b) prime angle (c) base angle (d) pressure angle
9. In a radial cam, the follower moves ()
(a) in a direction perpendicular to the cam axis (b) in a direction parallel to the cam axis
(c) in any direction irrespective of the cam axis (d) None of the above
10. A circle drawn with centre as the cam centre and radius equal to the distance between the cam centre and the point on the pitch curve at which the pressure angle is maximum, is called ()
(a) base circle (b) pitch circle (c) prime circle (d) none of these
11. The size of a gear is usually specified by ()
(a) pressure angle (b) circular pitch (c) diametral pitch (d) pitch circle diameter
12. The module is the reciprocal of ()
(a) diametral pitch (b) circular pitch (c) pitch diameter (d) none of these
13. A differential gear in an automobile is a ()
(a) simple gear train (b) epicyclic gear train (c) compound gear train (d) none of these
14. A differential gear in automobiles is used to ()
(a) reduce speed (b) assist in changing speed (c) provide jerk-free movement of vehicle (d) help in turning
15. The size of a cam depends upon ()
(a) base circle (b) pitch circle (c) prime circle (d) pitch curve
16. In an internal gears, driver is rotating in clockwise, then driven is in----- ()
a) clockwise b) counterclockwise c) anti clock wise d)neither clockwise nor counter clockwise
17. Law of gearing is satisfied if ()
(a) two surfaces slide smoothly (b) common normal at the point of contact passes through the pitch point on the line joining the centres of rotation
(c) number of teeth = P.C.D. / module (d) addendum is greater than dedendum
18. An imaginary circle which by pure rolling action, gives the same motion as the actual gear, is called()
(a) addendum circle (b) dedendum circle (c) pitch circle (d) clearance circle
19. In a simple gear train, if the number of idle gears is odd, then the motion of driven gear will()
(a) be same as that of driving gear (b) be opposite as that of driving gear
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(a) equal to velocity ratio of a gear train (b) reciprocal of velocity ratio of a gear train
(c) always greater than unity (d) always less than unity

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BRANCH: ME

SET - 4

Sub : KOM

Date : 04/05/2015

Time : 20 MINS

Max. Marks: 10

Roll No:

Signature of invigilator:

1. The magnitude of linear velocity of a point B on a link AB relative to point A is ()
(a) ωAB (b) $\omega (AB)^2$ (c) $\omega^2 \cdot AB$ (d) $\omega^2 (AB)^2$
2. In a clock mechanism, the gear train used to connect minute hand to hour hand, is ()
(a) epicyclic gear train (b) reverted gear train (c) compound gear train (d) simple gear train
3. If the module of a gear be m , the number of teeth T and pitch circle diameter D , then ()
(a) $m = D/T$ (b) $D = T/m$ (c) $m = D/2T$ (d) none of these
4. The direction of linear velocity of any point on a link with respect to another point on the same link is ()
(a) parallel to the link joining the points (b) perpendicular to the link joining the points
(c) at 45° to the link joining the points (d) none of these
5. In a gear train, when the axes of the shafts, over which the gears are mounted, move relative to a fixed () axis, is called
(a) simple gear train (b) compound gear train (c) reverted gear train (d) epicyclic gear train
6. The two parallel and coplanar shafts are connected by gears having teeth parallel to the axis of the shaft. This arrangement is called ()
a. spur gearing (b) helical gearing (c) bevel gearing (d) spiral gearing
7. The type of gears used to connect two non-parallel non-intersecting shafts are ()
(a) spur gears (b) helical gears (c) spiral gears (d) none of these
8. An imaginary circle which by pure rolling action, gives the same motion as the actual gear, is called ()
(a) addendum circle (b) dedendum circle (c) pitch circle (d) clearance circle
9. In a simple gear train, if the number of idle gears is odd, then the motion of driven gear will ()
(a) be same as that of driving gear (b) be opposite as that of driving gear
(c) depend upon the number of teeth on the driving gear (d) none of the above
10. The angle between the direction of the follower motion and a normal to the pitch curve is called ()
(a) pitch angle (b) prime angle (c) base angle (d) pressure angle
11. In a radial cam, the follower moves ()
(a) in a direction perpendicular to the cam axis (b) in a direction parallel to the cam axis
(c) in any direction irrespective of the cam axis (d) None of the above
12. The train value of a gear train is ()
(a) equal to velocity ratio of a gear train (b) reciprocal of velocity ratio of a gear train
(c) always greater than unity (d) always less than unity
13. A circle drawn with centre as the cam centre and radius equal to the distance between the cam () centre and the point on the pitch curve at which the pressure angle is maximum, is called
(a) base circle (b) pitch circle (c) prime circle (d) none of these
14. The size of a gear is usually specified by ()
(a) pressure angle (b) circular pitch (c) diametral pitch (d) pitch circle diameter
15. The module is the reciprocal of ()
(a) diametral pitch (b) circular pitch (c) pitch diameter (d) none of these
16. A differential gear in an automobile is a ()
(a) simple gear train (b) epicyclic gear train (c) compound gear train (d) none of these
17. A differential gear in automobiles is used to ()
(a) reduce speed (b) assist in changing speed (c) provide jerk-free movement of vehicle (d) help in turning
18. The size of a cam depends upon ()
(a) base circle (b) pitch circle (c) prime circle (d) pitch curve
19. In an internal gears, driver is rotating in clockwise, then driven is in----- ()
a) clockwise b) counterclockwise c) anti clock wise d) neither clockwise nor counter clockwise
20. Law of gearing is satisfied if ()
(a) two surfaces slide smoothly (b) common normal at the point of contact passes through the pitch point on the line joining the centres of rotation
(c) number of teeth = P.C.D. / module (d) addendum is greater than dedendum

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY(AT)

II B.Tech II SEM II-MID Exam

BRANCH: ME

SET - 4

Sub : KOM

Date : 04/05/2015

Time : 20 MINS

Max. Marks: 10

Roll No:

Signature of invigilator:

1. The magnitude of linear velocity of a point B on a link AB relative to point A is ()
(a) ωAB (b) $\omega (AB)^2$ (c) $\omega^2 \cdot AB$ (d) $\omega^2 (AB)^2$
2. In a clock mechanism, the gear train used to connect minute hand to hour hand, is ()
(a) epicyclic gear train (b) reverted gear train (c) compound gear train (d) simple gear train
3. If the module of a gear be m , the number of teeth T and pitch circle diameter D , then ()
(a) $m = D/T$ (b) $D = T/m$ (c) $m = D/2T$ (d) none of these
4. The direction of linear velocity of any point on a link with respect to another point on the same link is ()
(a) parallel to the link joining the points (b) perpendicular to the link joining the points
(c) at 45° to the link joining the points (d) none of these
5. In a gear train, when the axes of the shafts, over which the gears are mounted, move relative to a fixed () axis, is called
(a) simple gear train (b) compound gear train (c) reverted gear train (d) epicyclic gear train
6. The two parallel and coplanar shafts are connected by gears having teeth parallel to the axis of the shaft. This arrangement is called ()
a. spur gearing (b) helical gearing (c) bevel gearing (d) spiral gearing
7. The type of gears used to connect two non-parallel non-intersecting shafts are ()
(a) spur gears (b) helical gears (c) spiral gears (d) none of these
8. An imaginary circle which by pure rolling action, gives the same motion as the actual gear, is called ()
(a) addendum circle (b) dedendum circle (c) pitch circle (d) clearance circle
9. In a simple gear train, if the number of idle gears is odd, then the motion of driven gear will ()
(a) be same as that of driving gear (b) be opposite as that of driving gear
(c) depend upon the number of teeth on the driving gear (d) none of the above
10. The angle between the direction of the follower motion and a normal to the pitch curve is called ()
(a) pitch angle (b) prime angle (c) base angle (d) pressure angle
11. In a radial cam, the follower moves ()
(a) in a direction perpendicular to the cam axis (b) in a direction parallel to the cam axis
(c) in any direction irrespective of the cam axis (d) None of the above
12. The train value of a gear train is ()
(a) equal to velocity ratio of a gear train (b) reciprocal of velocity ratio of a gear train
(c) always greater than unity (d) always less than unity
13. A circle drawn with centre as the cam centre and radius equal to the distance between the cam () centre and the point on the pitch curve at which the pressure angle is maximum, is called
(a) base circle (b) pitch circle (c) prime circle (d) none of these
14. The size of a gear is usually specified by ()
(a) pressure angle (b) circular pitch (c) diametral pitch (d) pitch circle diameter
15. The module is the reciprocal of ()
(a) diametral pitch (b) circular pitch (c) pitch diameter (d) none of these
16. A differential gear in an automobile is a ()
(a) simple gear train (b) epicyclic gear train (c) compound gear train (d) none of these
17. A differential gear in automobiles is used to ()
(a) reduce speed (b) assist in changing speed (c) provide jerk-free movement of vehicle (d) help in turning
18. The size of a cam depends upon ()
(a) base circle (b) pitch circle (c) prime circle (d) pitch curve
19. In an internal gears, driver is rotating in clockwise, then driven is in----- ()
a) clockwise b) counterclockwise c) anti clock wise d) neither clockwise nor counter clockwise
20. Law of gearing is satisfied if ()
(a) two surfaces slide smoothly (b) common normal at the point of contact passes through the pitch point on the line joining the centres of rotation
(c) number of teeth = P.C.D. / module (d) addendum is greater than dedendum