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180345

**4th Sem. Branch: Automobile Engg.**  
**Sub :Automobile Engg. Drawing**

Time : 3 Hrs.

M.M. : 100

**SECTION-A**

**Note: Multiple choice Questions. All Questions are compulsory. (5x1=5)**

- Q.1 The smallest permissible size of a component is called. (CO3)
- a) Lower limit                      b) Upper limit  
c) Fit                                  d) Deviation
- Q.2 It supports and guides rotating shaft. (CO2)
- a) Cam                                  b) Gear  
c) Bearing                              d) Follower
- Q.3 Clutch is a part of..... (CO2)
- a) Braking system                  b) Suspension system  
c) Transmission system          d) Steering system
- Q.4 Ratio of pitch circle diameter to the number of teeth of a gear is called. (CO2)
- a) Pitch                                  b) Module  
c) Lift                                      d) Clearance

- Q.5 One part moves freely into other part of assembly is called. (CO3)
- a) Push fit                      b) Running fit
- c) Force fit                      d) Driving fit

### Section-B

**Note: Objective type questions. All questions are compulsory. (5x1=5)**

- Q.6 In shaft basis system, the tolerance zone is of \_\_\_\_\_ is kept constant. (CO3)
- Q.7 Zero line is the line of zero deviation and represents the basic size. (True/False) (CO3)
- Q.8 \_\_\_\_\_ End of connecting rod is connected to piston pin. (CO2)
- Q.9 Clutch pedal is pressed to engage the clutch. (True/False) (CO2)
- Q.10 Write the name of any one method to draw tooth profile of spur gear. (CO3)

### Section-C

**Note: Attempt any four question. (4x15=60)**

- Q.11 Draw any two views of bush bearing by free hand sketching. (CO1)

- Q.12 Describe nomenclature of spur gear by neat sketch. (CO2)
- Q.13 Draw free hand sketch of battery ignition system. (CO1)
- Q.14 Draw layout of shock absorber. (CO1)
- Q.15 Draw layout of petrol engine piston. (CO2)

### Section-D

**Note: Attempt any one question. (1x30=30)**

- Q.16 Draw gear teeth profile of a spur gear having 20 teeth and pitch circle diameter is 200 mm. Take pressure angle 22 degree. (CO2)
- Q.17 Draw the profile of a cam to raise a knife edge follower upto 45 mm lift with S.H.M. during out stroke and return stroke. (CO1)
- (i) Minimum diameter of cam = 40 mm
- (ii) Out stroke angle = 120 degree
- (iii) Angle of dwell = 30 degree
- (iv) Return stroke angle = 60 degree
- Remaining is dwell.