

KATHMANDU UNIVERSITY  
End Semester Examination  
June/July, 2023

Marks Scored:

Level : B.E.

Year : I

Exam Roll No. :

Time: 30 mins.

Registration No.:

Course : MEEG 112

Semester : I

F. M. : 20

Date :

14 JUL 2023

SECTION "A"

[20 Q. × 1 = 20 marks]

Mark [X] appropriate answer from the given choices.

1. Which of the following is not a part of the transmission system?  
 Clutch             Wheels             Gear box             Axles
2. Which of the following is a cylinder head type of an IC Engine?  
 U head             F head             C head             X head
3. The temperature of the piston will be more at \_\_\_\_\_ in an automobile engine.  
 The piston rings             The piston walls  
 The crown of the piston             The skirt of the piston
4. Which of the following material is used to make connecting rod?  
 Cast iron             Mild steel             Forged steel             Tool steel
5. The valve is opened as the cam lobe on the cam raises the \_\_\_\_\_.  
 Bearing             Piston             Valve lifter             Valve seat
6. In case of four cylinder opposed cylinder engines the firing order is \_\_\_\_\_.  
 1-4-3-2             1-3-4-2             1-2-3-4             1-2-4-3
7. A car is fitted with 6 × 14 wheels and 185/65 R 14 tires on them. What is the rolling radius of the original tire?  
 398.05 mm             298.05 mm             288.05 mm             278.05 mm
8. Where is the clutch located?  
 Between transmission and engine  
 Between transmission and rear axle  
 Between transmission and propeller shaft  
 Between transmission and differential
9. In which of the gearbox sun and planet gear set is used?  
 Constant-mesh gearbox             Sliding mesh gearbox  
 Synchromesh gearbox             Epicyclical gearbox
10. Where is the differential located?  
 Between transmission and rear axle             Between engine and transmission  
 Between two propeller shaft             Between steering wheel and steering column

11. How can a two-stroke engine identify by?  
 Piston size  Absence of valves  
 Cooling system  Lubrication system
12. The valve is opened as the cam lobe on the cam raises the\_\_\_\_\_.  
 Bearing  Piston  Valve lifter  Valve seat
13. In a four stroke cycle engine camshaft revolves at \_\_\_\_\_ the crank speed.  
 Two times  Half  Four times  Three times
14. The function of oil control rings is that it\_\_\_\_\_.  
 Lubricates the cylinder wall by releasing oil from its hole  
 Keeps the cylinder wall lubricated by holding oil in its channel  
 Prevents engine oil from going into the combustion chamber and returns excess lubricating oil off the cylinder wall through the return holes in the piston to the oil pan  
 Maintains a seal and prevents escape of burned gases and oil leakage
15. Flywheel stores energy in\_\_\_\_\_.  
 Chemical form  Electrical form  Mechanical form  Static form
16. \_\_\_\_\_ hydrid vehicle is either propelled by ICE to battery.  
 Parallel  Series  Split  Mild
17. On what principle does the braking system in the car work?  
 Frictional force  Gravitational force  
 Magnetic force  Electric force
18. What is the function of an Anti-lock braking system?  
 Used for car parking  To maintain tractive force  
 Programming the system  To drive the car
19. The correct flow of power through the drive train is\_\_\_\_\_.  
 Engine drive shafts, clutch, main shaft, counter shaft, final driven gear, wheels  
 Engine clutch, main shaft, counter shaft, final driven gear, drive shafts, wheels  
 Engine clutch, counter shaft, main shaft, final driven gear, drive shafts, wheels  
 Engine main shaft, counter shaft, clutch, final driven gear, drive shafts, wheels
20. The motion of the cam is transferred to the valves through\_\_\_\_\_.  
 Pistons  Rocker arms  Camshaft pulley  Valve stems