

Mark scored:

KATHMANDU UNIVERSITY
End Semester Examination [C]
June 2018

Level : B.E
Year : IV

Course : MEPP 412
Semester: I

Exam. Roll No.:

Time : 30 mins

F.M : 20

Registration No.:

Date JUN 15 2018

SECTION "A"
[20 Q. ×1=20]

Attempt all the questions (Select and mark [X] for most appropriate answer)

1. The short turning radius results when the frame at the front is
 narrow then at rear equal to that of rear
 wider than at rear lighter in weight that at rear
2. A particular firing order is necessary in a multi- cylinder engine so as to
 have better balance of the engine
 obtain uniform torque
 give good distribution of fuel to all cylinders
 operate the ignition system smoothly
3. Multiple jet compensation is a provision for
 multi point fuel injection on petrol
 electronic fuel injection on petrol
 adjusting the quality of air fuel mixture required at different in petrol engine
 efficient operation of supercharger at high altitude
4. Specific fuel consumption is expressed as
 fuel consumed per km of distance travelled
 fuel consumed during one hour running
 fuel consumption for producing unit brake power
 fuel consumed per brake power per hour
5. Which one of the following set of materials is most commonly used in a catalytic converter
 platinum, palladium and rhodium platinum, rhodium and ruthenium
 rhodium, ruthenium and palladium ruthenium, platinum and palladium
6. The most commonly used friction materials for clutch facing is
 cork fabric asbestos leather
7. How many gears are there in three forwards speed and reverse transmission consisting of three shaft
 3 5 8 10
8. In the coupling stage of conventional torque converter
 both the stator and turbine are stationary
 both the stator and impeller are stationary
 both the impeller and turbine turn almost at the same speed
 the stator free wheels

9. A sliding joint is provide at the front end of a propeller shaft to allow
 variation in speed of the front universal joint
 change in distance between the gearbox and rear axle
 removal and refitting of the shaft
 transmission of drive through a varying angel
10. The full- floating axle has to withstand the following loads
 driving torque
 driving torque and end thrust
 weight of the vehicle and end thrust
 driving torque and weigh of the vehicle
11. Which of the following is a false statement?
 the amount of toe -in cannot be zero
 increase in cornering force is not linear with slip angle
 in Elliot type stub axle, the axle beam and stub axle are connected side by side
 the scrub radius depends upon the amount of included angle
12. Identify the gas used in modern shock absorbers
 oxygen hydrogen nitrogen carbon dioxide
13. The term brake fade as applied to braking system means
 requirement of greater effect due to increase shoe clearance
 excessive wear causing decrease in friction
 fall in efficiency due to heat
 discoloration of oil soaked lining
14. The wear of tread in an under-inflated tyre will be maximum near the
 corner center edges outside face
15. When a battery is undercharged
 excessive gassing occurs
 temperature increase
 specific gravity of electrolyte reduces
 capacity of the battery increase
16. The stationary magnetic field in the starting motor is produced by
 brushes and commutator
 relay and solenoid
 field winding or permanent magnets
 armature winding
17. The purpose of regulator in an alternator setup is to
 prevent the alternator from producing excessive voltage
 keep alternator output high enough to charge the battery
 allow the alternator to produce a high current
 keep the alternator speed form going too high

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18. The centrifugal advance mechanism is located in

- cam shaft gear
- crankshaft
- valve actuating mechanism
- distributor

19. The function of unloaded valve in the air brake system is to

- filter the air
- assist in the periodic cleaning of reservoir
- relieve the load on the compressor
- control the air pressure in the reservoir

20. The correct flow of power through the drive train is

- engine- driven shaft- clutch – main shaft – counter shaft – final driven gear- wheel
- engine –clutch- main shaft- counters shaft -final driven gear -drive shaft- wheel
- engine clutch –counter shaft –main shaft –final driven gear -drive shaft -wheel
- engine- main shaft-counter shaft –clutch- final driven gear- drive shaft - wheel

