

Code : 15AT32T

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III Semester Diploma Examination, Nov./Dec. 2018

AUTOMOBILE TRANSMISSION AND CONTROL SYSTEM

Time : 3 Hours]

[Max. Marks : 100

- Instructions :**
- (1) Answer any **six** full questions from Part – A.
 - (2) Answer any **seven** full questions from Part – B.

PART – A

1. State the functions of chassis frame and list the loads acting on it. 5
2. Draw the sketch of conventional frame (ladder type) and label the parts. 5
3. State requirements of a good clutch. 5
4. State the functions of gear box. 5
5. Explain the constructional details of propeller shaft. 5
6. Explain the necessity of constant velocity joints and list types. 5
7. Define camber angle and caster angle. 5
8. Draw the layout of hydraulic braking system and label the parts. 5
9. Explain specification of tyre. 5

PART – B

10. Explain the construction of coil spring type single plate clutch.
 11. Explain construction and working of constant mesh gear box with a sketch.
 12. Explain the construction and working of differential with a sketch.
 13. Explain the construction and working of fully floating type rear axle with sketch.
 14. Explain construction and working of rack and pinion steering system.
 15. Explain the layout of steering linkages for independent suspension.
 16. Explain the construction and working of internal expanding drum brake with sketch.
 17. Explain the construction and working of master cylinder with a sketch.
 18. Explain the construction and working of McPherson Strut with sketch.
 19. (a) List different types of springs used in suspension system.
(b) List the requirement of steering system.
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