

MVM – Transmission

**T083**

Thursday, 22/11/2018

08:30 – 11:30 AM

WORKFORCE DEVELOPMENT AUTHORITY



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**ADVANCED LEVEL NATIONAL EXAMINATIONS, 2018,  
TECHNICAL AND PROFESSIONAL STUDIES**

**EXAM TITLE: TRANSMISSION**

**OPTION: Motor Vehicle Mechanics (MVM)**

**DURATION: 3 hours**

**INSTRUCTIONS:**

The paper is composed of **three (3) main Sections** as follows:

**Section I: Sixteen (16) compulsory questions. 55 marks**

**Section II: Attempt any three (3) out of five questions. 30 marks**

**Section III: Attempt any one (1) out of three questions. 15 marks**

**Note:**

***Every candidate is required to carefully comply with the above instructions. Penalty measures will be applied on their strict consideration.***

**Section I. Sixteen (16) Compulsory questions****55 marks**

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01. Why are helical gears preferred in transmission? **(3 marks)**
  02. What are the different angles that form the steering geometric? **(5 marks)**
  03. Which forces help to keep the pressure plate firm with flywheel at normal and high speeds in semi centrifugal clutch? **(3 marks)**
  04. List three advantages of a hypoid drive. **(3 marks)**
  05. Mention the causes in a braking system of a long stroke to the brake pedal? **(4 marks)**
  06. Give the symptoms of a faulty brake booster and give its remedies. **(3 marks)**
  07. Name the different types of automatic differential lock. **(5 marks)**
  08. How do you check for ball joint wear? **(2 marks)**
  09. Give the function of an automobile final drive. **(3 marks)**
  10. Mention the main requirements of brake fluids. **(3 marks)**
  11. Differentiate positive caster from negative caster. **(2 marks)**
  12. How many joints does the simple open propeller shaft have and what sorts are they? **(3 marks)**
  13. When is it told that the front trains is understeer or oversteer? **(2 marks)**
  14. What are the functions of a propeller shaft? **(4 marks)**
  15. What could be the possible causes of a tachometer not reacting on the dashboard? **(4 marks).**
  16. Give the requirements of the tyres. **(6 marks)**

**Section II. Choose and Answer any three (3) questions****30 marks**

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17. List the most causes of automatic transmission problems. **(10 marks)**
  18. List ten causes of clutch rattles. **(10 marks)**
  19. Give the causes of excessive play in steering wheel. **(10 marks)**
  20. What are the causes of transmission noisy in neutral? **(10 marks)**

**21.** The maintenance plan includes tests that are to be performed in an inspection.

(a) Which work must be performed on tyres during an inspection?

(b) Which components are to be checked on braking system?

**(10 marks)**

**Section III. Choose and Answer any one (1mark) question      15 marks**

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**22.** What are causes of the system will not shift into 2WD/4WD and vibration or shudder? **(15 marks)**

**23.** List fifteen causes car leads to one side. **(15 marks)**

**24.** Give steps of front driving axle disassemble and reassemble. **(15 marks)**