**MOTORCYCLE THEORY AND PRACTICE ASSESSMENT**

**About this tool:** This tool can be used as a guide when interviewing and testing motorcycle operators.

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| **Questions** | **Acceptable Responses (This list is not meant to be exhaustive)** |
| **Describe the technique you would use to identify traffic hazards.** | Active scanning, looking for things that will impact on me |
| ·     Commentary driving |
| ·     Use of mirrors |
| ·     Observing all around the vehicle, identifying hazards |
| **How often would you do this?** | ·     Frequently (every 3-10 seconds depending on circumstances) |
| **What type of hazard are you looking for?** | Anything that has the potential to increase the risk of a crash such as: |
| ·     Road users |
| ·     Intersections |
| ·     Pedestrians, animals |
| **What are the consequences if you did not look for hazards?** | ·     Be unaware of hazards until it is too late |
| ·     Could be involved in a crash |
| ·     May involve injury to myself or another person |
| **What is the recommended safe following distance?** | ·     A minimum of 2 seconds (3 seconds preferred) behind another vehicle |
| Increased time when visibility is reduced or safety compromised |
| **How do you achieve this following distance?** | ·     Pick an object that the vehicle in front is passing and count 1001, 1002, 1003. Motorbike should not reach that object before the 2 or 3 second count. |
| ·     Count the seconds (2 minimum) between a vehicle in front passing an object and you reaching that object |
| **In regards to your following distance, what action should you take if vision or safety is compromised?** | ·     Increase following distance |
| ·     Increase space zone around motorbike |
| ·     Reduce speed |

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| **Questions** | **Acceptable Responses (This list is not meant to be exhaustive)** |
| **Explain "reaction distance".** | ·     It is the distance travelled from when you first see and then react to a hazard. (1.5 seconds average) |
| ·     The distance travelled from when you first see the hazard and the motorbike commences to slow down |
| **Would your reaction distance increase if you are not concentrating?** | ·     Yes, more time and distance would be taken before responding |
| **If speed is doubled, what effect does this have on the braking distance?** | ·     Braking distance increases by 4 times |
| (Triple the speed - 9 times braking distance) |
| **What effect does a wet road have on braking distance?** | ·     Increases the braking distance |
| ·     Wet roads increase the risk of wheel lock-up. |
| ·     Tyres lose a degree of friction and the motorbike may take longer to stop. |

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| **1.1 Perform pre-ride safety check** |
| **Learner performs pre-ride motorbike safety check using motorbike manufacturer terminology.** |
| **Evidence** |
| Smooth hard surface, free of loose material is chosen for exercise |
| Motorbike controls are identified and used according to manufacturer’s instructions |
| Electrical system is activated and items checked. |
| (brake lights, tail, indicator, headlights; horn;) |
| Items are checked for cleanliness |
| (mirrors; headlights, brake & tail lights, indicators) |
| Motorbike is inspected for safe legal operation |
| (tyres; registration label; chain guard, fluid leaks) |
| Abnormal operation of controls or systems are noted for attention |

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| **1.2 Initiate regular maintenance and routine service** |
| **Learner identifies and initiates any required service.** |
| **Evidence** |
| Smooth hard surface, free of loose material is chosen for exercise |
| Demonstrates knowledge of repair and maintenance items |
| Fluid levels are checked as required by manufacturer |
| (Fuel; engine oil; hydraulic oil) |
| Tyres are checked for correct inflation pressures |
| Clutch & brake levers are not broken |
| Excessive clutch and/or brake free play is identified |
| Excessive chain/drive belt slack is identified |
| Motorbike is checked for other wear requiring attention by learner or mechanic |

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| **1.3 Mount/Dismount motorbike** |
| **Learner is able to mount and dismount a motorbike safely.** |
| **Evidence** |
| Smooth hard surface, free of loose material is chosen for exercise |
| Front brake is applied before mounting motorbike |
| Traffic is checked before mounting motorbike from the left side |
| Side stand is fully retracted, or |
| Motorbike is safely taken off centre stand |
| Front brake is applied before dismounting motorbike |
| First gear is selected (centre stand use only excepted) |
| Side stand is fully extended |
| Motorbike is dismounted from the left side |
| Front brake is gently eased off, allowing motorbike to settle |
| Learner locates and uses manufacturer's lifting points when placing motorbike on centre stand |

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| **2.1 Posture** |
| **Learner adopts the specified posture that is comfortable and minimises fatigue.** |
| **Evidence** |
| Learner is seated squarely on the seat |
| Knees are kept close together/in to the motorbike |
| Arms are kept slightly bent |
| Instep of both feet are positioned on learner's foot pegs, toes facing slightly out (conventional style motorbike) |
| Feet are positioned on learner's foot pegs (cruiser style motorbike) |
| Feet are positioned forward against headboard (step-through motorbike) |
| Shoulders are relaxed |
| Rides with eyes level with the horizon, looking well ahead |
| Electrical switches on handlebars and fuel tap are operated without being viewed |

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| **2.2 Starting/stopping motorbike** |
| **Learner is to be able to safely start and stop the motorbike.** |
| **Evidence** |
| Fuel tap position is checked for running |
| Engine cut-off switch is set to 'run' |
| Brake is applied, pulls clutch in, neutral selected |
| Key on, engine is started, button is released immediately |
| Clutch is slowly released |
| Stopping engine –brake is applied |
| Turn engine off |
| Front brake and clutch levers are operated by all available fingers |

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| **2.3 Move off and stop** |
| **Learner successfully moves off for a short distance and stop** |
| **Evidence** |
| Rides with eyes level with the horizon, looking well ahead |
| Starts motorbike and selects first gear |
| Friction point obtained and brake relaxed |
| Throttle increased to suit load |
| Clutch further released and brake released |
| Throttle applied, clutch fully released slowly |
| Exercises good control over clutch |
| Foot returns to foot pegs as motorbike increases speed |
| Both brakes used to stop the motorbike |
| Pull clutch in, neutral selected |
| Clutch released, brake remains on |

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| **2.4 Changing gears** |
| **Learner is able to change up and down gears as required to manufacturers' standards.** |
| **Evidence** |
| Rides with eyes level with the horizon, looking well ahead |
| Prepares for change by placing front of foot under gear shift lever |
| Up-changes gears at the appropriate engine and road speed |
| Throttle and clutch are operated simultaneously |
| Clutch is released gently |
| Prior to changing down, appropriate road speed is obtained |
| Prepares for change by placing foot above gear shift lever |
| Throttle and clutch are operated simultaneously |
| Clutch is released gently |
| Release pressure on gear shift lever after each change |

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| **2.5 (a) Perform low speed manoeuvres** |
| **Learner successfully negotiates a marked course in not less than 11 seconds, maintaining control and balance within the specified parameters in Appendix A.** |
| **Evidence** |
| Learner maintains correct posture |
| Maintains balance. No excessive steering input. |
| Wheels kept within marked course |
| Maintains constant throttle |
| No markers are hit during exercise |
| Manoeuvre completed in not less than 11 seconds |

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| **2.5 (b) Perform low speed manoeuvres** |
| **Learner successfully completes four Figure 8 in 50-80 seconds within the specified parameters in Appendix B.** |
| **Evidence** |
| Learner maintains correct posture |
| Maintains balance. No excessive steering input |
| Learner looks in the direction they are intending to go |
| Motorbike kept within specified limits of the course |
| Uses throttle to assist control |
| Maintain correct gear for motorbike speed |

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| **3.1 (a) Carry out counter-steering manoeuvre** |
| **Learner successfully completes a slalom exercise within the specified parameters in Appendix C.** |
| **Evidence** |
| Learner maintains correct posture |
| Throttle use is controlled |
| Learner extends arm and makes pronounced handlebar movements (counter-steering) |
| 7 directional changes are executed |
| Speed is appropriate to allow counter-steering |
| Clutch to remain fully released |
| Maintain correct gear for motorbike speed |
| Motorbike is not allowed to go excessively wide |
| No markers are hit during exercise |

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| **3.1 (b) Carry out counter-steering manoeuvre** |
| **Learner successfully undertakes a crash avoidance counter-steering exercise** |
| **Evidence** |
| Learner maintains correct posture |
| Speed is maintained within limits of 40-50 km/h |
| Learner extends arm and makes pronounced handlebar movements (counter-steering) |
| Motorbike remains within marked parameters on approach and departure |
| No markers are hit during exercise |
| Learner maintains control of the motorbike |

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| **3.2 (a) Execute braking procedures** |
| **Learner successfully undertakes a controlled stop at a designated position.** |
| **Evidence** |
| Learner maintains correct posture |
| Learner stops motorbike as close as practicable to designated position |
| Both brakes are applied together |
| Majority of braking effort is taken by the front brake causing progressive compression of the front suspension |
| Right wrist is rolled forward during braking |
| Any skidding is controlled by relaxing and reapplying pressure on relevant brake |
| First gear is selected prior to stopping |
| Clutch is fully released between gear changes |
| Learner stops with left foot down |

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| **3.2 (b) Execute braking procedures** |
| **Learner successfully undertakes an emergency stop on demand from an approximate speed of 40 km/h within 18m.** |
| **Evidence** |
| Learner maintains correct posture |
| Exercise is commenced from approximate speed of 40 km/h |
| Learner does not pre-empt signal |
| Learner stops motorbike as quickly as possible and within 18 metres |
| Both brakes are applied together |
| Majority of braking effort is taken by the front brake causing distinct, progressive compression of the front suspension |
| Right wrist is rolled forward during braking |
| Any skidding is controlled by relaxing and reapplying pressure on relevant brake |
| Learner stops with left foot down |
| Learner maintains balance and control of motorbike |

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| **4.2 Apply Roadcraft** |
| **Learner safely operates and rides a motorbike on public roads, obeying all traffic rules.** |
| **Evidence** |
| Learner maintains posture |
| Monitors road position and adapts to suit environment |
| Demonstrates legal riding in marked lanes |
| Adopts correct road position before, during and after turns |
| Demonstrates a safe following distance |
| Identifies and responds to hazards early by consistently scanning |
| Frequent use of mirrors |
| Mirrors and shoulder checks are undertaken before changing direction |
| Applies the System of Vehicle Control to all hazards (including corners) |
| Negotiates roundabouts correctly |
| Demonstrates courtesy to other road users |
| Gives way as required |
| Obeys all traffic controls (signs, signals, road markings) |
| Stops at appropriate position on road at traffic controls |
| Negotiates hazards in a safe manner |
| Maintains a safe speed |
| Correct operation of turning indicators |
| Maintains defensive riding techniques |

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| **4.3 Manage riding situations** |
| **Learner safely controls a motorbike to manufacturer's standards on public roads.** |
| **Evidence** |
| Learner starts off in a smooth manner |
| Controls are operated to manufacturer standards without looking at them |
| Transmission and engine are operated appropriately to manufacturer's requirements |
| All gear changes are made without clashing or excessive slipping of clutch |
| Engine speed kept to within manufacturer's requirements |
| Learner demonstrates smooth, controlled hill starts |
| Rides within motorbike's limitations |
| Demonstrates a knowledge of motorbike dynamics |
| Avoids specific hazards (slippery surfaces; animals, etc) |
| Learner is able to successfully negotiate road environments stated in Range of Variables Scope B and C. |