



**General Certificate of Secondary Education
2018**

Motor Vehicle and Road User Studies

Unit 1: Motor Vehicle and Road User Theory

Higher Tier

[GMV12]

MONDAY 14 MAY, MORNING

**MARK
SCHEME**

General Marking Instructions

Introduction

Mark schemes are published to assist teachers and students in their preparation for examinations. Through the mark schemes teachers and students will be able to see what examiners are looking for in response to questions and exactly where the marks have been awarded. The publishing of the mark schemes may help to show that examiners are not concerned about finding out what a student does not know but rather with rewarding students for what they do know.

The Purpose of Mark Schemes

Examination papers are set and revised by teams of examiners and revisers appointed by the Council. The teams of examiners and revisers include experienced teachers who are familiar with the level and standards expected of students in schools and colleges.

The job of the examiners is to set the questions and the mark schemes; and the job of the revisers is to review the questions and mark schemes commenting on a large range of issues about which they must be satisfied before the question papers and mark schemes are finalised.

The questions and the mark schemes are developed in association with each other so that the issues of differentiation and positive achievement can be addressed right from the start. Mark schemes, therefore, are regarded as part of an integral process which begins with the setting of questions and ends with the marking of the examination.

The main purpose of the mark scheme is to provide a uniform basis for the marking process so that all the markers are following exactly the same instructions and making the same judgements in so far as this is possible. Before marking begins a standardising meeting is held where all the markers are briefed using the mark scheme and samples of the students' work in the form of scripts. Consideration is also given at this stage to any comments on the operational papers received from teachers and their organisations. During this meeting, and up to and including the end of the marking, there is provision for amendments to be made to the mark scheme. What is published represents this final form of the mark scheme.

It is important to recognise that in some cases there may well be other correct responses which are equally acceptable to those published: the mark scheme can only cover those responses which emerged in the examination. There may also be instances where certain judgements may have to be left to the experience of the examiner, for example, where there is no absolute correct response – all teachers will be familiar with making such judgements.

			AVAILABLE MARKS
1	Reverse	[1]	1
2	(i) Give way (major road or mini-roundabout)	[1]	
	(ii) Stop	[1]	2
3	Any two from: Audible warning, barrier rails, dipped kerbs, textured tiles	[2]	2
4	(a) Any two from: environmentally friendly, increased use of public transport, quicker to city centre than car, more economical, less stressful, more relaxing, no need for parking	[2]	
	(b) Any two from: more economical, running costs lower, less wear and tear, less congestion on roads	[2]	4
5	(a) Any two from: no vehicles, only pedestrians allowed, people can roam freely	[2]	
	(b) delivery vehicles and service vehicles	[2]	4
6	(a) Any two from: walk in single file, face oncoming traffic, keep close to right-hand side of road, listen for vehicles	[2]	
	(b) Any two from: zebra crossing, light controlled crossing, pedestrian bridge, where you can see traffic coming both ways, where there is a central refuge	[2]	4
7	(a) Certificate, renewal notice, cover note, policy	[4]	
	(b) Yearly discount for not making a claim	[1]	5
8	(a) Any two from: narrow road, sharp bend, hedges overgrown, no road markings	[2]	
	(b) Create shadows on the road	[1]	
	(c) Any two from: flooded roads, fallen branches, leaves on road	[2]	
	(d) Harder to see, water looks like a puddle	[1]	6

		AVAILABLE MARKS
<p>9 Fig. 9.1 dual carriageway ends [1] Fig. 9.2 uneven road [1] Fig. 9.3 national speed limit [1] Fig. 9.4 no left turn [1] Fig. 9.5 mini-roundabout [1] Fig. 9.6 loose chippings [1]</p>	[6]	6
<p>10 (a) 13.6 miles</p> <p>(b) B road/non-primary route/secondary</p> <p>(c) 1. Junction = 9 [1] 2. 19 miles [1]</p> <p>(d) Green</p>	[1] [1] [2] [1]	5
<p>11 (a) 1. Agent – person who acts for only one company [1] 2. Broker – person who acts on behalf of various companies. [1] 3. Proposer – person seeking insurance [1]</p> <p>(b) Any two from: buy smaller car, no modifications, bigger excess, drive safe app, 3rd party insurance</p>	[3] [2]	5
<p>12 Car advantage: Any one from: gets to destination quicker, gets closer to destination, can go at own time, can make stops, can use alternative routes, comfort, privacy [1]</p> <p>Car disadvantage: Any one from: wear and tear of vehicle, parking, stressful, traffic queues [1]</p> <p>Bus advantage: Any one from: relaxing, don't have to worry about parking, bus lanes, avoid traffic queues, reliable, arrive at destination on time [1]</p> <p>Bus disadvantage: Any one from: scheduled times only, may not leave you close to destination, have to travel to bus stop/depot, noisy/crowded [1]</p>	[4]	4

		AVAILABLE MARKS
13 (a) £5700	[2]	
(b) Advantage: Any one from: negotiate discount, no APR [1]		
Disadvantage: uses up savings [1]	[2]	
(c) FSH – Full service history [1] RCL – Remote central locking [1]	[2]	6
14 1:6 $0.8 \times 6 = 4.8$ litres	[2]	2
15 (a) Any three from: take keys out of ignition, chock the wheels, put handbrake on, disconnect battery	[3]	
(b) Talk to them	[1]	
(c) In case they have internal injuries	[1]	5
16 (a) mechanical – handbrake [1] hydraulic – footbrake [1]	[2]	
(b) Induction [1] Compression [1] Exhaust [1]	[3]	
(c) Any three from: windscreen washer, coolant level, power steering fluid, electrolyte in battery, brake fluid	[3]	8

			AVAILABLE MARKS
17 (a)	1. piston [1] 2. gudgeon pin [1] 3. connecting rod [1] 4. crankshaft [1]	[4]	
(b)	1. charging [1] 2. ignition [1] 3. suspension [1] 4. lubrication [1] 5. braking [1]	[5]	
(c)	1. cylinder head/rocker cover [1] 2. cylinder block/block [1] 3. crankcase [1]	[3]	
(d)	To absorb up and down bumps, jolts and shocks	[1]	
(e)	Any one from: coil springs, shock absorbers, wishbones, leaf springs	[1]	14
18 (a)	Fig. 18.1 Tourist information [1] Fig. 18.2 Motorway direction sign [1] Fig. 18.3 Diversion route [1] Fig. 18.4 Emergency services [1] Fig. 18.5 Primary route [1]	[5]	
(b)	Rumble strip	[1]	
(c)	Safe grip/antiskid surface	[1]	7
19 (a)	 <p>Hump Bridge</p> <p><small>© Crown copyright 2015. The Official Highway Code for Northern Ireland prepared by the Department for Infrastructure. https://www.nidirect.gov.uk/content/crown-copyright</small></p>	[1]	
(b)	Risk of grounding	[1]	
(c)	Any two from: parked cars, person getting out of car, blue bin, oncoming vehicle	[2]	
(d)	Any three from: mobile phone, radio, children, pets, passengers, unsecured items, smoking, eating, drinking, sat nav	[3]	7

			AVAILABLE MARKS	
20	(a)	Any four from: previous owners, year of manufacture, make, model, reg, engine capacity, bhp, colour, fuel type, number of seats, number of doors, address, registered keeper, owner	[4]	8
	(b) (i)	Any two from: change of address, change of marital status/change name, medical condition	[2]	
	(ii)	Any two from: change of colour, change of engine, personalised number plate, SORN, bought the vehicle, modifications	[2]	
21	(a)	Any three from: one way streets, restricted parking, box junctions, clearways, no parking zones, mini roundabouts	[3]	5
	(b)	Any two from: on/off street parking, park & ride, parking meters, parking restrictions	[2]	
22	(a)	Any three from: cleaning, parking, fines, clothing, alloy wheels, spoilers, trim, cd players, garaging	[3]	10
	(b)	155 miles	[1]	
	(c) (i)	315 miles	[1]	
	(ii)	66.31 mph	[1]	
	(d)	Any two from: shop for insurance, lower tax band, smaller car, free parking	[2]	
	(e)	Any two from: drive gently, brake gently, no harsh acceleration, no spinning the wheels, cornering, maintain consistent speed, drive in high gear	[2]	
23	(a)	Fig. 23.1 punctured [1] Fig. 23.2 incised [1] Fig. 23.3 lacerated [1]	[3]	4
	(b)	contused	[1]	

		AVAILABLE MARKS
24 (a)	Any four from: oil pump, oil filter, strainer, sump, pipelines, dipstick, filler cap	[4]
(b)	Fig. 24.1 engine management check [1] Fig. 24.2 windscreen washer level [1] Fig. 24.3 battery [1] Fig. 24.4 front fog lights [1] Fig. 24.5 fuel [1]	[5]
(c)	1. alternator/dynamo [1] 2. fan belt [1] 3. cut-out box [1] 4. battery [1] 5. cooling fan [1]	[5]
25	Any three from: Good tyres for added grip and to disperse water, windscreen wipers to ensure windows are clear providing good visibility, ABS – to ensure a vehicle can be slowed down and brought to a stop gently, working lights and indicators to ensure other road users can see you and to improve your own visibility (3 x [2])	[6]
26	Driver: Ensure vehicle is serviced and roadworthy, avoid alcohol/drugs, maintain focus, avoid distractions, driver's health Driving Practices: Using indicators, driving within speed limits, being courteous, observing the road ahead, anticipation, avoid distractions, adherence to signage Passengers: Ensure seatbelts are on, not overloading the vehicle, avoid distractive behaviour, no smoking, for children appropriate restraints and child locks	[12]
27	Emergencies: Accidents, breakdowns, bad weather Equipment: Shovel, blanket, de-icer, warning triangle, mobile phone, hi-vis jacket, torch, jump leads, tow rope, first aid kit, fire extinguisher	[12]
		14
		6
		12
		12

- 28** Rest before journey, turn radio up, take refreshments,
Planned stops for fresh air/toilet breaks, route planner
Vehicle engineering – air conditioning, seating position
Traffic engineering – signs, rumble strips, road studs
Legislation – maximum hours for driving

[0] A zero mark will be awarded if the response is not worthy of credit.

Level 1 ([1]–[4])

The candidate may focus only on one or two of the required references and contain limited or irrelevant detail. Specialist vocabulary will be limited or inappropriately used. The answer may lack clarity and/or cohesion and may also contain significant grammatical, punctuation or spelling errors.

Level 2 ([5]–[8])

The candidate addresses at least two of the required references in some relevant detail. Specialist vocabulary is correctly used. The style of writing is appropriate and the meaning is clear although there may be some errors in spelling, punctuation or grammar.

Level 3 ([9]–[12])

The candidate addresses at least two of the required references in line with the detail set out above. Specialist vocabulary is used correctly. The answer is well structured and relevant material is presented with a high degree of clarity and coherence. Spelling, punctuation and grammar will generally be correct. [12]

Total

**AVAILABLE
MARKS**

12

180