



*Rewarding Learning*

**General Certificate of Secondary Education  
2025**

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## **Motor Vehicle and Road User Studies**

**Unit 1: Motor Vehicle and Road User Theory**

**[GMR11]**

**TUESDAY 6 MAY, MORNING**

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**MARK  
SCHEME**

## **General Marking Instructions**

### ***Introduction***

The main purpose of a mark scheme is to ensure that examinations are marked accurately, consistently and fairly. The mark scheme provides examiners with an indication of the nature and range of candidates' responses likely to be worthy of credit. It also sets out the criteria which they should apply in allocating marks to candidates' responses.

### **Assessment objectives**

Below are the assessment objectives for Motor Vehicle and Road User Studies.

Candidates should be able to:

- AO1** Recall, select and communicate their knowledge and understanding in relation to motor vehicle and road user studies;
- AO2** analyse, evaluate and draw logical conclusions from motor vehicle and road user information;
- AO3** collect, select and use road traffic information from a variety of sources; and
- AO4** demonstrate skills of vehicle (moped) control and roadcraft.

### ***Quality of candidates' responses***

In marking the examination papers, examiners should be looking for a quality of response reflecting the level of maturity which may reasonably be expected of a 15–16 year old which is the age at which the majority of candidates sit their GCSE examinations.

### ***Flexibility in marking***

Mark schemes are not intended to be totally prescriptive. No mark scheme can cover all the responses which candidates may produce. In the event of unanticipated answers, examiners are expected to use their professional judgement to assess the validity of answers. If an answer is particularly problematic, then examiners should seek the guidance of the supervising examiner.

### ***Positive marking***

Examiners are encouraged to be positive in their marking, giving appropriate credit for what candidates know, understand and can do rather than penalising candidates for errors or omissions. Examiners should make use of the whole of the available mark range for any particular question and be prepared to award full marks for a response which is as good as might be expected of a 15 or 16-year-old GCSE candidate.

### ***Types of mark scheme***

Mark schemes for tasks or questions which require candidates to respond in extended written form are marked on the basis of levels of response which take account of the quality of written communication.

Other questions which require only short answers are marked on a point for point basis with marks awarded for each valid piece of information provided.

### ***Awarding zero marks***

Marks should only be awarded for valid responses and no marks should be awarded for an answer which is completely incorrect or inappropriate.

### ***Levels of response***

In deciding which level of response to award, examiners should look for the 'best fit' bearing in mind that weakness in one area may be compensated for by strength in another. In deciding which mark within a particular level to award to any response, examiners are expected to use their professional judgement.

The following guidance is provided to assist examiners:

- **Threshold performance:** Response which just merits inclusion in the level and should be awarded a mark at or near the bottom of the range.
- **Intermediate performance:** Response which clearly merits inclusion in the level and should be awarded a mark at or near the middle of the range.
- **High performance:** Response which fully satisfies the level description and should be awarded a mark at or near the top of the range.

### ***Marking calculations***

In marking answers involving calculations, examiners should apply the 'own figure rule' so that candidates are not penalised more than once for a computational error.

### ***Quality of written communication***

Quality of written communication is taken into account in assessing candidates' responses to all tasks and questions that require them to respond in extended written form. These tasks and questions are marked on the basis of levels of response. The description for each level of response includes reference to the quality of written communication.

**Level 1:** 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:** Specialist vocabulary is mainly 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:** 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.

<b>1</b>	40	[1]
<b>2</b>	mirror	[1]
<b>3</b>	hidden dip	[1]
<b>4</b>	behind	[1]
<b>5</b>	central reservation	[1]
<b>6</b>	green	[1]
<b>7</b>	right	[1]
<b>8</b>	45	[1]
<b>9</b>	aquaplane	[1]
<b>10</b>	queues likely	[1]
<b>11</b>	16	[1]
<b>12</b>	MOT	[1]
<b>13</b>	ring road/bypass	[1]
<b>14</b>	running	[1]
<b>15</b>	MPG	[1]
<b>16</b>	bleeding	[1]
<b>17</b>	transfer	[1]
<b>18</b>	front	[1]
<b>19</b>	jackets	[1]
<b>20</b>	transmission	[1]

**AVAILABLE  
MARKS**

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## Vehicle Control & Road User Behaviour

			AVAILABLE MARKS
21	blind spot	[1]	1
22	secondary safety features	[1]	1
23	legal requirement, alerts other drivers/road users	[2]	2
24	Any <b>two</b> from: inexperience, likely to take risks, showing off, overconfident, impetuous	[2]	2
25	Any <b>two</b> from: no harsh acceleration, no harsh braking, no cornering, no burnouts, avoid kerbing	[2]	2
26	Statutory Off Road Notification Large Goods Vehicle Passenger Carrying Vehicle	[1] [1] [1]	3
27	(a) 70 mph	[1]	
	(b) Autostrada	[1]	
	(c) slip road	[1]	
	(d) continue to the next exit	[1]	
	(e) Any <b>two</b> from: stopping/parking, reversing, u turns	[2]	
	(f) Any <b>three</b> from: pull over to hard shoulder, side lights or hazard warning lights on, walk to nearest emergency phone, inform police, place warning triangle 45 m behind vehicle, stay out of vehicle in a safe place, wear reflective clothing leave vehicle by left hand door	[3]	9
28	(a) police, school crossing patrols	[2]	
	(b) Endorsable: fine & penalty points entered on licence	[1]	
	Non-endorsable: fine	[1] [2]	4

			AVAILABLE MARKS
<b>29</b>	<p><b>(a)</b> Any <b>two</b> from: cyclists could sway, narrow road not much room, winding road can't see oncoming traffic, overtaking on a bend, could take longer than expected</p> <p><b>(b)</b> wait until straight clear stretch of road</p> <p><b>(c)</b> not much room, wind gust from lorry, vision restricted</p> <p><b>(d)</b> safer for cyclists, quicker</p> <p><b>(e)</b> Any <b>two</b> from: vehicles parked either side, narrow road, pedestrians crossing between parked cars, people getting out of cars, pets, ramp ahead</p> <p><b>(f)</b> parallel parking</p>	<p>[2]</p> <p>[1]</p> <p>[2]</p> <p>[2]</p> <p>[2]</p> <p>[1]</p>	10
<b>30</b>	<p><b>(a)</b> <b>Fig. 30.1 a</b> give way to oncoming vehicles [1]  <b>Fig. 30.1 b</b> school crossing patrol [1]  <b>Fig. 30.1 c</b> end of motorway [1]  <b>Fig. 30.1 d</b> no through road [1]  <b>Fig. 30.1 e</b> picnic site 150 yds [1]  <b>Fig. 30.1 f</b> side winds/crosswinds [1]</p> <p><b>(b)</b> B route/non-primary [1]</p> <p><b>(c)</b> opening bridge ahead [1]</p> <p><b>(d)</b> primary route/dual/single carriageway [1]</p> <p><b>(e)</b> keeps vehicles a safe distance apart [1]</p>	<p>[6]</p> <p>[1]</p> <p>[1]</p> <p>[1]</p> <p>[1]</p>	10

### Legal Requirements

			AVAILABLE MARKS
<b>31</b>	<b>(a)</b> Any <b>four</b> from: make, model, name of owner, address of owner, engine size, number of previous owners, year of manufacture, BHP, colour, number of doors, chassis number, fuel type	[4]	
	<b>(b)</b> the person seeking insurance	[1]	
	<b>(c)</b> fully comprehensive	[1]	
	<b>(d)</b> cost	[1]	7
<b>32</b>	<b>(a)</b> full driving licence, at least 21 years of age, driving for a minimum of 3 years	[3]	
	<b>(b)</b> Any <b>two</b> from: car seat, baby carrier, harness, booster seat	[2]	
	<b>(c)</b> GP/doctor	[1]	
	<b>(d)</b> child	[1]	7

### Road Transport and its Effect on Society

- 33 (a)** Any **one** from:  
Advantage: cleaner, charged at home, quiet, cheaper to run,  
environmentally friendly, lower tax band [1]
- Any **one** from:  
Disadvantage: expensive, quiet for pedestrians, charger not at home [1]
- (b)** Any **two** from:  
taxation class, MOT, cleaner fuel [2]
- (c)** helps driver concentration, reduces noise pollution [2]
- (d)** wear ear plugs [1]

AVAILABLE  
MARKS

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### Motoring Mathematics

- |           |            |   |  |  |  |
|-----------|------------|---|--|--|--|
| <b>34</b> | <b>(a)</b> | $\pounds 750 - 40\%$<br>$= 750 - 300 = \pounds 450$ [1]<br>$\pounds 450 \div 12 = \pounds 37.50$ [1]  |  |  |  |
|           | <b>(b)</b> | $\pounds 60 \div 12 = \pounds 5$ [1]<br>$\pounds 5 + \pounds 37.50 = \pounds 42.50$ [1]   |  |  |  |
|           | <b>(c)</b> | $3000 \div 40 = 75$ [1]<br>$75 \times \pounds 5.80 = \pounds 435$ [1]   |  |  |  |
| <b>35</b> | <b>(a)</b> | Any <b>three</b> from:<br>avoid unnecessary trips, avoid sudden braking/acceleration,<br>only use air conditioning if necessary,<br>keep tyres at correct pressure, high gear/low revs,<br>shop for cheapest available legal fuel |  |  |  |
|           | <b>(b)</b> | Any <b>two</b> from:<br>speed varies, clutch on/off, traffic congestion,<br>driving through towns and cities  |  |  |  |
|           | <b>(c)</b> | cash, cheque, credit/debit card, monthly instalments  |  |  |  |

AVAILABLE  
MARKS

6

8

### Collision Procedures

- 36 (a) call the emergency services [1]
- (b) Any **two** from:  
switch off ignition, chock the wheels, put handbrake on, disconnect the battery [2]
- (c) 1. contused  
2. lacerated  
3. incised  
4. punctured [4]

AVAILABLE  
MARKS

7

**Motor Vehicle Technology**

			AVAILABLE MARKS
<b>37</b>	<b>(a)</b> Fig. 37.1	[1]	
	<b>(b)</b> 1. leaf springs	[1]	
	2. damper/shock absorber	[1]	
	3. coil spring	[1]	
	4. wishbones	[1]	
	5. strut	[1]	
	<b>(c)</b> absorbs bumps, shocks and jolts; provides a more comfortable, smoother ride; assists vehicle handling including steering	[2]	8
<b>38</b>	<b>(a)</b> piston, crankshaft	[2]	
	<b>(b)</b> Any <b>two</b> from: battery, ignition switch, coil, distributor, HT leads, spark plug	[2]	
	<b>(c)</b> rotary, up and down	[2]	
	<b>(d)</b> electrolyte	[1]	
	<b>(e)</b> coil	[1]	8
<b>39</b>	<b>(a)</b> cooling	[1]	
	<b>(b)</b> 1. radiator	[1]	
	2. radiator/pressure cap	[1]	
	3. top hose	[1]	
	4. thermostat	[1]	
	5. water jackets	[1]	
	6. water pump	[1]	
	7. cooling fan	[1]	
	8. bottom hose	[1]	
	<b>(c)</b> to prevent expansion caused by overheating/seizing	[1]	
	<b>(d)</b> the engine would overheat	[1]	
	<b>(e)</b> to prevent freezing of coolant	[1]	12
<b>40</b>	Differences: motorways have slip roads, dual carriageways have junctions, motorways have permanent separation barriers; motorways have vehicle and driver restrictions; cyclists and pedestrians prohibited. Motorways have hard shoulders, signs are different colours, tolls on motorways		
	Similarities: central reservation, multiple lanes, speed limits, vehicles travelling same direction	[6]	6

		AVAILABLE MARKS
<p><b>41</b> Rider behaviour: undertake training, obey speed limits, lane discipline, see and be seen, consider weather conditions, follow Highway Code</p> <p>Precautions: vehicle maintenance, wear appropriate safety gear, apply two second rule, headlight on, appropriate clothing, heed weather warnings [10]</p>		10
<p><b>42</b> Observation: scanning the road ahead; MSM; be aware of your surroundings including other road users; expect the unexpected, identify potential hazards</p> <p>Anticipation: expect the unexpected; observe two second rule; anticipate pedestrians/pets; other vehicle manoeuvres [10]</p> <p><b>[0]</b> A zero mark will be awarded if the response is not worthy of credit.</p> <p><b>Level 1 ([1]–[3])</b> 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.</p> <p><b>Level 2 ([4]–[7])</b> 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.</p> <p><b>Level 3 ([8]–[10])</b> 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.</p>		10
<b>Total</b>		<b>160</b>