



General Certificate of Secondary Education  
2012

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**Motor Vehicle and Road User Studies**

Unit 1: Motor Vehicle and Road User Theory

Higher Tier

**[GMV12]**

**THURSDAY 17 MAY, MORNING**

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**MARK  
SCHEME**

		AVAILABLE MARKS
1	the right.	[1] 1
2	Speed cushions.	[1] 1
3	(a) £320.	[1]
	(b) £35.20 per m.	[3] 4
4	(a) On slip road of motorway/end of dual carriageway/approaching city or dual carriageway.	[1]
	(b) Morning or evening rush hour.	[1] 2
5	(a) Less parts etc.	[1]
	(b) Any <b>three</b> from: Thermostat, water pump, top hose/bottom hose etc.	[3] 4
6	Education/enforcement/warning etc.	[3] 3
7	Less risk to pedestrians. Less accidents etc.	[2] 2
8	(a) 1. Mandatory.	
	2. Tell other drivers.	[2]
	(b) Any <b>two</b> from: Inexperienced; take risks; drive fast; impetuous; show off etc.	[2] 4
9	108m = $1\frac{1}{2}$ hours 36m = $\frac{1}{2}$ hour $36 \times 2 = 1$ hour = 72 mph.	[1] 1
10	Driving in lane against traffic on opposite carriageway.	[2] 2

			AVAILABLE MARKS
<b>11 (a)</b>	Exhaust system.	[1]	
<b>(b)</b>	Removes noxious and environmentally unfriendly emissions.	[1]	2
<b>12</b>	Any <b>two</b> from: Countdown markers; rumble strips/lines across carriageway/ painted surface.	[2]	2
<b>13 (a)</b>	1. Children.		
	2. The elderly etc.	[2]	
<b>(b)</b>	Every 5 years after 70.	[1]	
<b>(c)</b>	Any <b>two</b> from: To ensure no impediment to driving ability; no illnesses/or change in medical condition etc.	[2]	5
<b>14 (a)</b>	Make sure person is breathing	B	
	Stop/reduce bleeding	B	
	Make sure person is conscious	C	[3]
<b>(b)</b>	Any <b>three</b> from: Pale/feels sick/dizzy, shallow but quick breathing, pulse weak, feeling sick, thirsty etc.	[3]	6
<b>15 (a)</b>	Any <b>two</b> from: Shop for insurance; street parking; lower tax band vehicle etc.	[2]	
<b>(b)</b>	Drive gently; brake gently etc.	[2]	
<b>(c)</b>	1:10 = 11 parts 4.4L divided by 11 = 0.4L	[2]	6

			AVAILABLE MARKS
<b>16</b>	A = 70		
	B = 50		
	C = 60		
	D = 50		
	E = 70		
	F = 60	[6]	6
<b>17</b>	1. Silencer.		
	2. Brake servo.		
	3. Thermostat.	[3]	3
<b>18</b>	(a) Garage: Advantage: – car serviced/checked. – can return car if faulty. – consumer protection. Disadvantage: – higher price.	[2]	
	(b) Private: Advantage: – lower price for spec. – cheaper. – affordable higher spec Disadvantage: – little consumer protection – can have hidden faults	[2]	4
<b>19</b>	(a) 35.	[1]	
	(b) By the liver, over time etc.	[2]	
	(c) Amount eaten/body weight/size etc.	[2]	5
<b>20</b>	(a) Provisional licences, driving tests, speed limits, compulsory insurance, driving offences incl. d/driving.	[2]	
	(b) Penalty points.	[1]	3

			AVAILABLE MARKS
<b>21</b>	21.1 – priority over oncoming vehicles.	[1]	
	21.2 – level crossing without a barrier.	[1]	
	21.3 – road works.	[1]	
	21.4 – no through road for vehicles.	[1]	
	21.5 – side winds.	[1]	
	21.6 – picnic site.	[1]	6
<b>22</b>	<b>(a)</b> Any <b>two</b> from: Better tyres, suspension, vision etc.	[2]	
	<b>(b)</b> Any <b>two</b> from: On/off street parking; park and ride; Parking meters etc.	[2]	4
<b>23</b>	Broker: B. Insurance agent: A. Policy holder: C.	[3]	3
<b>24</b>	<b>(a)</b> Any one of: location/time/casualties/vehicles etc.	[1]	
	<b>(b)</b> Insurance and licence.	[2]	3
<b>25</b>	Any <b>three</b> valid points: Keep sunglasses in car, stay cool, carry water, be aware of glare and shift from light to shade, be aware of soft tar etc.	[3]	3
<b>26</b>	<b>(a)</b> It must not be fitted in a seat with an active frontal airbag.	[1]	
	<b>(b)</b> The driver.	[1]	
	<b>(c)</b> The passenger.	[1]	
	<b>(d)</b> From a GP.	[1]	
	<b>(e)</b> Shoulder, chest or arm injury etc.	[1]	
	<b>(f)</b> May travel unrestrained if none available.	[1]	
	<b>(g)</b> Penalty points/fine.	[1]	
	<b>(h)</b> Booster seat, baby carrier, child car seat.	[3]	10

		AVAILABLE MARKS
<b>27 (a)</b>	Fig 27.1	[1]
<b>(b)</b>	A Wishbones.	
	B Shock absorber/damper.	
	C Coil spring.	
	D Leaf spring.	
	E Shock absorbers/dampers.	[5]
<b>(c)</b>	Easier control/safer handling/less maintenance, absorbs shocks/bounces/reduces wear. Any two correct.	[2]
		8
<b>28 (a)</b>	1. Piston crown.	
	2. Exhaust port.	
	3. Inlet port.	
	4. Gudgeon pin.	
	5. Transfer port.	[5]
<b>(b)</b>	1. Compression.	
	2. Power.	
	3. Transfer.	[3]
<b>(c)</b>	Lighter/cheaper etc.	[1]
		9
<b>29</b>	Fig. 29.1 Brake fluid.	
	Fig. 29.2 Engine oil.	
	Fig. 29.3 Windscreen washer.	
	Fig. 29.4 Coolant/water.	
	Fig. 29.5 Battery.	
	Fig. 29.6 Oil.	[6]
		6

		AVAILABLE MARKS
30	Might get caught by tail of lorry etc. [1]	1
31	(a) Any <b>three</b> correct: Tread depth, pressure, wall defects, foreign bodies. [3]	
	(b) Tyre fits a 20 inch diameter rim. [1]	4
32	(a) Box junction. [1]	
	(b) You must not enter the box unless your exit road/lane is clear. [2]	3
33	Glare from the sun, blind corner, corner is in shade etc. [3]	3
34	(a) Moped, tractor, vehicle displaying "L" plate, slow moving vehicles, powered wheelchairs etc. [3]	
	(b) Reverse, cross the central reservation, drive against the traffic flow etc. [3]	
	(c) Any vehicle towing a trailer, a goods vehicle fitted with a speed limiter, a large goods vehicle etc. [1]	
	(d) Check mirrors, make sure the lane you are joining is clear, lifesaver, signal, move out etc. [4]	
	(e) Pull onto hard shoulder, exit vehicle by LHS, go to nearest emergency phone, return and wait near vehicle etc. [4]	15
35	Vulnerable users: mobility drivers, handicapped people, blind people/guide dogs, disabled/crutches, wheelchair users, elderly people, young people, pedestrians with prams etc.  Candidates should make reference to difficulties experienced by those vulnerable selected. Slow down/anticipate, more consideration, allow time to cross etc. [12]	12
36	Candidates will address reasons for higher use in autumn, (e.g. increased use on return to education and need for transport, being caught out by changing weather conditions etc).  Candidates will refer to measures taken or which could be taken by DoE, Police, motoring organisations etc. [12]	12

- 37** Candidates will address: 1. difficulties of winter driving and differing conditions; 2. daily checks; and 3. precautions giving relevant examples. [12]

AVAILABLE  
MARKS

12

Questions 35–37 will use the following banding system.

**Level 1 ([1]–[4])**

The candidate may focus only on one or two of the required references and give 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 all 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. [0] a zero mark will awarded if the response is not worthy of credit.

**Total**

**180**