

General Certificate of Secondary Education 2012

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

Unit 1: Motor Vehicle and Road User Theory

Foundation Tier

[GMV11]

THURSDAY 17 MAY, MORNING



TIME

1 hour 30 minutes.

## **INSTRUCTIONS TO CANDIDATES**

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.
Answer **all** questions.

## **INFORMATION FOR CANDIDATES**

The total mark for this paper is 120.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question. Quality of written communication will be assessed in question **49**.

For Examiner's use only		
Question Number	Marks	
1–6		
7–10		
11–14		
15–20		
21		
22		
23		
24		
25		
26		
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29		
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39		
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43		
44		
45		
46		
47		
48		
49		

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Total	
Marks	

## Answer **all** questions in the spaces provided.

	Examin Marks	er Only Remark
[1]		
[1]		
[1]		
[1]		
e [1]		
[1]		

2	At a roundabout, you should always give way to traffic coming from	m

Tourist information signs have white lettering on a \_\_\_\_\_

background.

		[4]
 	. •	[1]

A part of the road which cannot be seen from the driving seat even with the use of mirrors is known as the \_\_\_\_\_

4 A strong wind which blows against road users, slowing their forward movement, is referred to as a \_\_\_\_\_\_. [1]

- A road user who finds it difficult to recognise certain colours is said to be

  \_\_\_\_\_\_. [1]
- 6 In Northern Ireland, what does the abbreviation PSNI stand for?

\_\_\_\_\_ . [1]



Fig. 7.1

8 What does the sign in Fig. 8.1 below indicate?\_\_\_\_\_[1]



Fig. 8.1
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**9** What does the traffic light signal in **Fig. 9.1** below mean?

\_\_\_\_\_[1]



Fig. 9.1
© Crown copyright

The Highway Code states that, unless a different speed limit is shown, it is illegal to drive at a speed greater than \_\_\_\_\_ mph. [1]

11	Where should a tax disc (and MOT disc in Northern Ireland) be displayed inside a vehicle?	ed	Examin Marks	er O
		[1]		
12	At what age can a road user apply for a provisional licence?	[1]		
13	What is the name given to the type of road shown in the photograph in Fig.13.1 below?	[1]		



Fig. 13.1

14 The word used for the amount by which a vehicle decreases in value is
\_\_\_\_\_\_\_\_. [1]

15	A motorist entitled to 3 years' no claims discount at 50% is quoted an insurance premium of £640, before deduction. This means that the		Examine Marks	er Only Remark
	motorist will have to pay	[1]		
16	If you are involved in a road traffic accident, it should be reported to the	<b>:</b>		
	police within hours.	[1]		
17	The flywheel is toothed to engage with the	[1]		
18	The clutch is part of which vehicle system?	[1]		
19	What does the abbreviation ABS stand for?			
20	The component which delivers fuel to the cylinder in modern cars is	[1]		

		[1]	
	Fig. 22.1 © Crown copyright		
(a)	Where would you see the sign in Fig 22.1 above?		
		[1]	
(b)	State <b>one</b> time of day when the hazard shown in <b>Fig. 22.1</b> above is likely to occur.		
	incly to occur.		
		[1]	
(a)		[1]	
(a)	Give <b>two</b> reasons why newly qualified drivers should display an	[1]	
(a)	Give <b>two</b> reasons why newly qualified drivers should display an R plate.	[1]	
(a) (b)	Give <b>two</b> reasons why newly qualified drivers should display an R plate.  1	[1]	
	Give <b>two</b> reasons why newly qualified drivers should display an R plate.  1	[1] [1]	
	Give <b>two</b> reasons why newly qualified drivers should display an R plate.  1	[1] [1] o	
	Give <b>two</b> reasons why newly qualified drivers should display an R plate.  1	[1] [1] o	
(b)	Give <b>two</b> reasons why newly qualified drivers should display an R plate.  1	[1] [1] o	

25	Explain the meaning of the term "contratiow".	Marks Remark
	[2]	
26	Calculate the average speed of a vehicle which travels 108 miles in $1\frac{1}{2}$ hours.	
	mph [1]	
27	(a) In which of the following vehicle systems would a catalytic converter be found?	
	<ol> <li>Electrical</li> <li>Fuel</li> <li>Exhaust</li> <li>Transmission</li> </ol>	
	(b) What is the purpose of a catalytic converter?	
	[1]	
28	Suggest <b>one</b> reason why a cyclist should not cycle too close to the kerb on a road.	
	[1]	

29	Explain why the white centre lines on a single carriageway road vary length.	y in	Examine Marks	er Only Remar
		[1]		
80	Apart from the sign, name <b>two</b> ways in which you can be reminded to you are approaching a roundabout.	that		
	1	[1]		
	2	[1]		
81	In the spaces provided, match the insurance meanings in <b>List A</b> to t insurance terms in <b>List B</b> .	he		
	List A			
	a : A person acting for an insurance company who will sell you one their policies.	e of		
	b : A person who sells insurance for many companies.			
	c : The person who has bought the insurance.			
	List B			
	1. Broker			
	2. Insurance Agent			
		[1]		
	3. Policy Holder			
		[1]		



Fig. 32.1

(a) Suggest **one** reason why a wooden fence has been built along this stretch of motorway.

\_\_\_\_\_[1]



Fig. 32.2

**(b)** Suggest **one** reason why speed has been reduced on this stretch of motorway.

33	(a)	Name <b>two</b> groups of vulnerable pedestrians.	Examiner Only  Marks Remark
		1	
		2	[1]
	(b)	After age 70, how often must a licence be renewed?	
			[1]
	(c)	State <b>two</b> reasons why motorists of 70 years and over must reapply for their driving licence more frequently than younger drivers.	<b>,</b>
		1	[1]
		2	[1]
34	Wh	ich vehicle component:	
	1. r	educes engine noise?	
			[1]
	2. a	llows the brakes to be applied with only a little pressure?	
			[1]
	3. c	pens to allow coolant to circulate?	
			[1]
35		sed car may be bought from a garage, or privately from the owner. te <b>one</b> advantage and <b>one</b> disadvantage in each case.	
	Gar	age: Advantage	[1]
		Disadvantage	[1]
	Priv	rately: Advantage	[1]
		Disadvantage	[1]

Explain the meaning of each of the road signs **Fig. 36.1** to **Fig. 36.6** below.







Fig. 36.2



Fig. 36.3



Fig. 36.4



Fig. 36.5



Fig. 36.6 © Crown copyright

Fig. 36.1	[1]
Fig. 36.2	[1]
Fig. 36.3	[1]
Fig. 36.4	[1]
Fig. 36.5	[1]
Fig. 36.6	[1]

37 (a) Describe two actions a driver can take to be a safe driver.

1.	[1]
2.	[1]

(b) Describe two ways in which a person can be a safe pedestrian.

1.	1	ı
	-	-

2.	[1	1
	-	-

30	(a)	accident reduction.		Marks	Remark
		1	[1]		
		2	[1]		
	(b)	State <b>two</b> ways in which road engineers/planners can manage parl in a city.	king		
		1	_ [1]		
		2	_ [1]		
39	(a)	State <b>two</b> ways in which a motorist could reduce the cost of owning vehicle.	g a		
		1	_ [1]		
		2			
	(b)	Explain <b>two</b> ways in which your driving style can reduce running costs.			
		1	[1]		
		2	_ [1]		
	(c)	Antifreeze has to be added to a 4.4 litre engine cooling system in the ratio of 1:10. Calculate the amount of antifreeze required.	ne		
			_[2]		
			_ [4]		

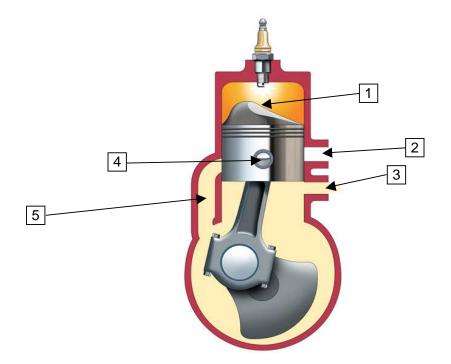


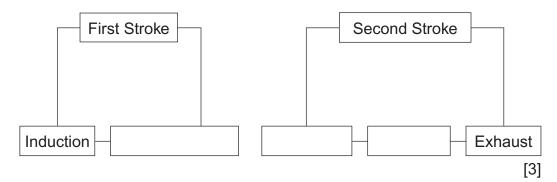
Fig. 40.1

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(a) Name the parts marked 1 to 5 on Fig. 40.1 above.

1	[1]
2	[1]
3	[1]
4	[1]
5.	[1]

(b) Complete the block diagram below for the two stroke cycle.



**Examiner Only** 

41	(a)	Explain now a confused would could occur.		Marks	Remark
			_ [1]		
	(b)	Under what circumstances would you place a person in the recove position?	ry		
			_ [1]		
	(c)	Name <b>two</b> ways in which motorists can lessen the impact of their vehicles on the environment.			
		1	_ [1]		
		2	_ [1]		
42	(a)	Name <b>one</b> piece of information you could give to the police, by phowhen reporting an accident.	one,		
			_ [1]		
	(b)	Name the <b>two</b> documents required when reporting an accident to t police at the station.	he		
		1	<sub>_</sub> [1]		
		2	_ [1]		
43	(a)	Name <b>two</b> filters found in a vehicle engine.			
		1	_ [1]		
		2	_ [1]		
	(b)	What is the purpose of a filter?			
			_ [1]		

44		ne <b>two</b> items, not normally supplied with the vehicle, which you conce in your car to help cope with emergencies.	uld Exam Marks	Remark
	1		_ [1]	
	2		_ [1]	
45	in w	ne <b>two</b> actions a motorist must take at the scene of an injury accid hich he/she is involved.		
	2		[1]	
46	(a)	What is the meaning of "passive" when referring to seat belt restraints?		
	(b)	Name <b>two</b> examples of secondary safety found in a vehicle.		
		1	_ [1]	
		2	_ [1]	
47	(a)	Explain briefly how you would overtake a horse and rider when driving.		
			[2]	
	(b)	State the meaning of the term "cut in" in reference to overtaking another vehicle.		
			[1]	

cribe briefly how y	•	•	,		Marks	nei
				[6]		

valuerable road users, the difficulties they face and how other motorists can show more consideration towards them.	the roads.  Discuss this statement, making reference to the different types of		
can show more consideration towards them.	ulporable read users, the difficulties they face and how other met	oriete	
	can show more consideration towards them	011313	
	can show more consideration towards them.		
[12]			

