





General Certificate of Secondary Education 2011

# Motor Vehicle and Road User Studies

Unit 1: Motor Vehicle and Road User Theory Foundation Tier

[GMV11]

# THURSDAY 19 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 **52**.

For Examiner's use only		
Question Number	Marks	
1–7		
8–16		
17–20		
21–30		
31–35		
36–39		
40–41		
42–48		
49–52		
Total Marks		

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	Section A	-	Examine Marks	er Only Remark
	Answer <b>all</b> questions.			
1	Speed bumps, speed cushions, road narrowing and gateways are all considered			
	measures.	[1]		
2	Motorway signs usually have white lettering on a	[1]		
3	The legal limit for a drink-driving offence is mg of	[4]		
	alcohol per 100 ml of blood.	[1]		
4	The sign in <b>Fig. 4.1</b> below means	. [1]		
	<b>Fig. 4.1</b> © Crown copyright. Department of Transport. TSO			
5	is the term used to describe vehicle's wheels losing contact with the road because of excess surface			
	water.	[1]		
6	Red coloured road studs identify	[1]		
U		. [ ']		
7	Airbags, seat belts and side impact bars are all features of			
	safety.	[1]		
6351			[Turr	l over

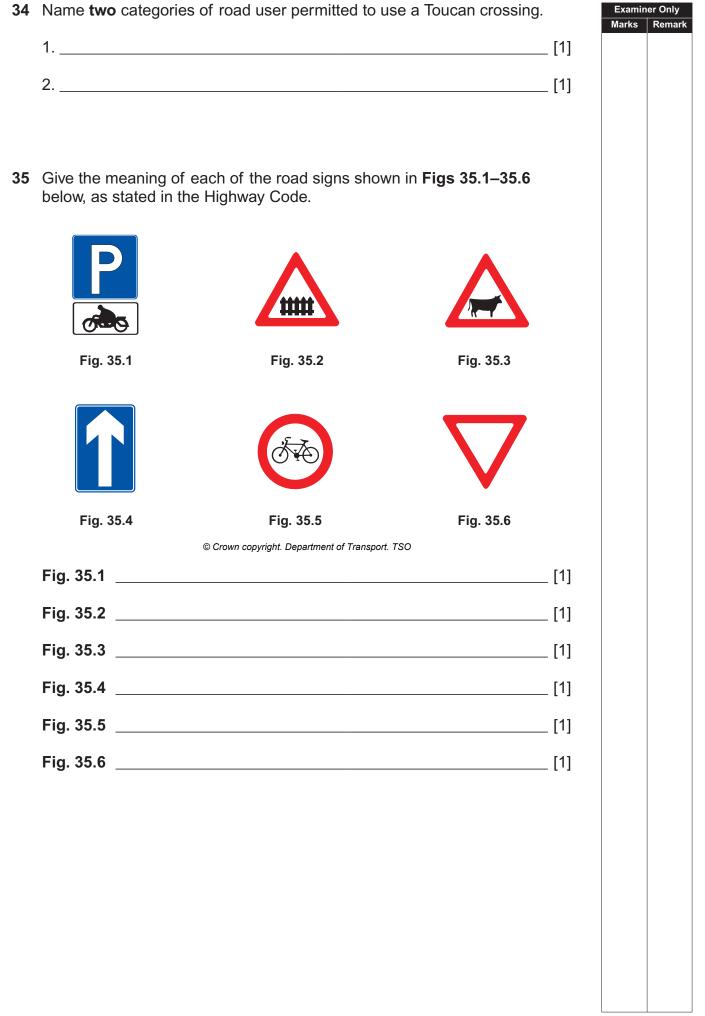
8	Driver and Vehicle Agency Enforcement Officers drive vehicles with		Examiner Marks I	r Only Remark
	flashing lights.	[1]		
9	Which one of the following should a vehicle use when driving in foggy conditions?			
	Side lights, No lights, Full beam, Dipped headlights.			
		. [1]		
10	The speed limit for a bus on a motorway is mph.	[1]		
11	The legal tread depth for tyres on a motorcycle is m	m. [1]		
12	In Northern Ireland all vehicles over years old mu complete an annual MOT test.	st [1]		
13	In 1885 a man called Karl Benz produced the first	. [1]		
14	is the most expensive standing cost for a motorist	. [1]		
4.5				
15	Apart from bank loans, state one other method of financing the purchas of a vehicle.	se		
	·	[1]		

16	What is the name given to a wound caused by being struck by a blunt instrument?		er Only Remark	
		[1]		
17	The differential is found in the system.	[1]		
18	Engine oil level can be checked using the	[1]		
19	Inlet, outlet and are the ports in a 2-stroke engine.	[1]		
20	Oil is stored in the at the bottom of the engine.	[1]		

	Section B		Examiner Only Marks Remark
	Answer <b>all</b> questions.		
21	What is the name given to a motorway in Germany?	[1]	
		[ ' ]	
22	What is the rule in the Highway Code for using a box junction?	[1]	
23	How could a colour blind driver recognise a red traffic light?		
		[1]	
24	What is the maximum speed for a car towing a trailer on a single carriageway?		
		_mph [1]	
25	Name the <b>two</b> components to which the gudgeon pin is attached.		
	1		
	2	[']	

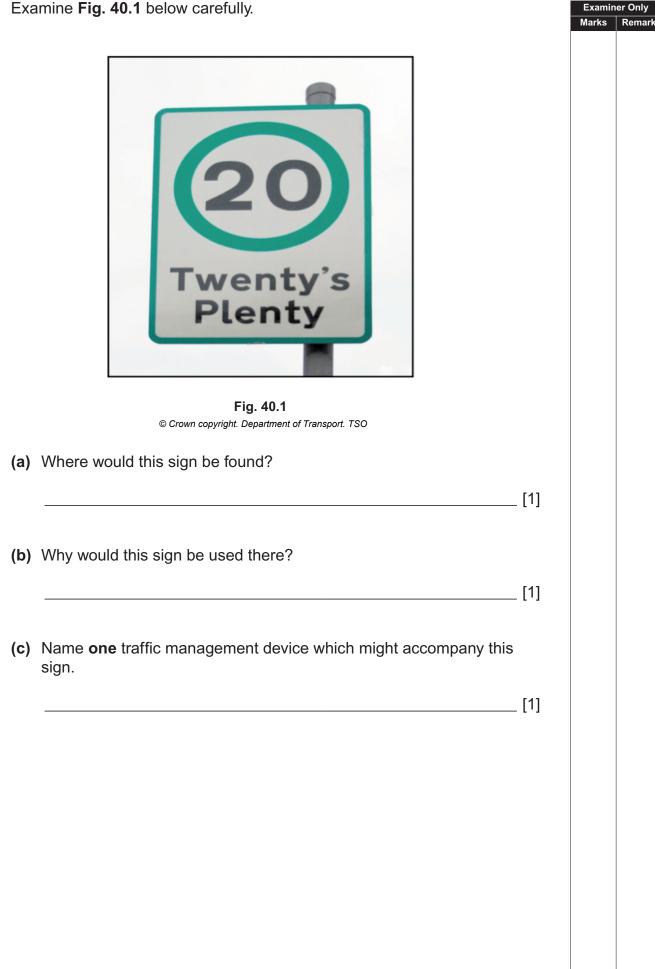
26	(a)	Describe the main difference between a pelican crossing and a zeb crossing.	ora	Examiner O Marks Rei	only mark
			[4]		
			[1]		
	(b)	Name <b>two</b> engineering methods which could help a partially sighted a hard of hearing pedestrian using a pelican crossing.	d or		
		1	[1]		
		2	[1]		
		۲	. [']		
27		art from Fire and Rescue, name <b>one</b> other emergency service you Id request when dialling 999.			
			[1]		
28	M/b	en should a front passenger air bag be switched off?			
20	VVII	en should a front passenger all bag be switched on ?			
			[1]		
29		k and Ride schemes help ease congestion in cities. Suggest <b>two</b> efits of such schemes.			
	1		[1]		
	Ζ		.[']		
30	Giv	e <b>two</b> reasons why it makes sense to car share.			
	1		[1]		
	2.		[1]		
	_		- L J		

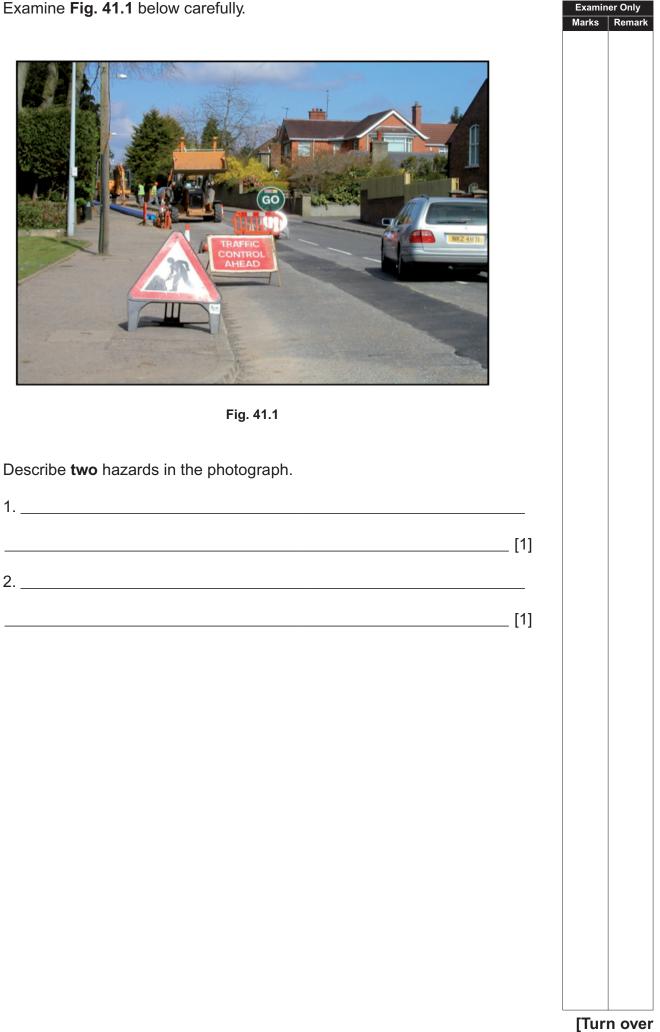
31	(a)	Apart from cost, what is the main differenc fully comprehensive insurance?	e betv	vee	en t	hirc	l party	and	Examiner Only Marks Rema	
								[1]		
	(b)	In motoring insurance, who is referred to a		-	-					
								[1]		
20	Civ	the meaning of the following initials:								
32		e the meaning of the following initials:						[4]		
		Т ,								
	PC	/						[1]		
33		d a phrase in Group B to complete each ser ce a circle around your answer.	ntence	e in	Gr	oup	o A bel	ow.		
	Gro	up A								
	1.	The inlet manifold connects the	а	b	С	d	е	[1]		
	2.	The universal joint connects the	а	b	С	d	е	[1]		
	3.	The high tension lead connects the	а	b	С	d	е	[1]		
	4.	The negative lead connects the	а	b	С	d	е	[1]		
	5.	The big end bearing connects the	а	b	С	d	е	[1]		
	Gro	up B								
	а	battery to the car body								
	b	crankshaft to the connecting rod								
	С	carburettor to the cylinder head								
	d	drive shaft to the differential								
	е	distributor to a spark plug								



36	<ul> <li>G Joe is eighteen years old and has been driving for one year. He drives a 1.6 L fuel injected, turbo powered two door saloon car which does 0–60 mph in 7.4 secs.</li> <li>Sarah is thirty five years old and has been driving for seventeen years. She drives a 1.1 L fuel injected four door saloon which does 0–60 mph in 13 secs.</li> <li>They both need third party, fire and theft insurance from the same company.</li> </ul>				er Only Remark
	(a)	Who pays more for insurance?	[1]		
	(b)	Who would most need a higher excess?	[1]		
	(c)	Who would be a greater risk for the insura	ance company?		
	(d)	Who would most likely have a no claims d			
			[1]		
37	(a)	How far would a vehicle travel in forty min 30 mph?	nutes at a steady speed of miles [1]		
	(b)	What is the average speed of a car which a half hours?	n travels 69 miles in one and		
		-	mph [1]		

38	(a)	State <b>three</b> ways in which you could make an accident scene safe.		Examine Marks	r Only Remark
		1			rtoniarit
		2	[1]		
		3	[1]		
	(b)	Explain what is meant by 'the B. B. C. of First Aid'.			
		B	[1]		
		B			
		C	[1]		
39	Des	scribe briefly the actions required to replace a vehicle's flat tyre.			
			. [9]		
6351				[Turn	over





42	(a)	Under what circumstances can an unauthorised person legally sto traffic?	DD Examiner Only Marks Remark
			_[1]
	(b)	Name <b>three</b> parts of a motor vehicle which must be cleared of sn before driving.	ow
		1	_ [1]
		2	_[1]
		3	_[1]
	(c)	Name the only reason why a motorist should sound the horn.	
			_[1]
43	(a)	Name <b>two</b> places where you must not stop and park.	
		1	_[1]
		2	_ [1]
	(b)	Why might a motorist drive with headlights on during the day?	
			_[1]
44	Sta	te the minimum age for driving the following vehicles:	
	Мој	oed	_[1]
	Car		_ [1]
	LG۱	/	_[1]
45	Nar	ne <b>two</b> ways in which traffic calming can make for a safer environn	nent.
	1		_[1]
	2		_ [1]

46	(a)	Name <b>one</b> advantage and <b>one</b> disadvantage of buying a new car.		Examine Marks	er Only Remark
		advantage	[1]		Roman
		disadvantage	[1]		
	(b)	Name <b>one</b> advantage and <b>one</b> disadvantage of buying a second ha	and		
		advantage	[1]		
		disadvantage	[1]		
47	pov	me the <b>three</b> strokes of the four stroke engine which do not produce ver.			
	3		[1]		
48	1. T	at is the main purpose of the following systems? Transmission system			
			[1]		
			.[']		

49	(a)	Explain briefly why a vehicle on a motorway might require a police escort.		Examine Marks	er Only Remark
	(b)	Name three differences between a motorway and a dual carriagev	vay.		
		1	_ [1]		
		2	_ [1]		
		3	_ [1]		
	(c)	On a motorway, when would it be necessary for a driver to use a lifesaver check?			
			_ [1]		
50	(a)	State <b>two</b> hazards found on rural roads which might not be encountered in towns or cities.			
		1	_ [1]		
		2	_ [1]		
	(b)	Describe briefly how lying water on the road could be a danger to t motorist.	he		
			[1]		

51	Inattention is a major contributory factor in many road traffic accidents. Describe briefly how drivers can reduce distractions while driving.		Examine Marks	er Only Remark
		[6]		
50				
52	Vehicles are becoming faster, more fuel efficient and safer. Discuss how a combination of vehicle engineering and driver behaviour can reduce accidents.			
		_		
		_		

	Examiner Only Marks Remar
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	_
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THIS IS THE END OF THE QUESTION PAPER	

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