



Rewarding Learning

General Certificate of Secondary Education
2015

Motor Vehicle and Road User Studies

Unit 1: Motor Vehicle and Road User Theory

Foundation Tier

[GMV11]

MONDAY 11 MAY, AFTERNOON

**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.

Section A

- 1 Secondary
- 2 Green
- 3 Diversion
- 4 Motorway
- 5 Wet/raining
- 6 Green
- 7 Waiting
- 8 Blue
- 9 Toxic
- 10 Circular
- 11 Proposer/First party
- 12 V5
- 13 Bypass
- 14 Standing costs
- 15 £525
- 16 Bleeding
- 17 Charging
- 18 Rear
- 19 Transmission
- 20 Braking

20 × [1]

Section A

AVAILABLE
MARKS

20

20

Section B

		AVAILABLE MARKS
21	Crossing two way traffic/having to look both ways	[1] 1
22	At the scene of an accident etc.	[1] 1
23	Traffic congested/blocked/parade/demonstration etc.	[1] 1
24	(a) motorcycle/scooter/moped etc.	[1]
	(b) heavy traffic/congestion/rush hour etc.	[2] 3
25	(a) 80	[1]
	(b) vision/judgement impaired etc.	[1]
	(c) banned from driving for 12 months, resit test, display R plates for 12 months etc.	[2]
	(d) serviced/MOT'd/check fluids, tyres etc.	[2] 6
26	(a) Any two from: hi viz vest/helmet/gloves ride on left/single file etc.	[2]
	(b) Any two from: cycle lanes/toucan crossings	[2] 4
27	(a) lighting up time/half hour after sunset	[1]
	(b) when visibility is seriously reduced/less than 100m	[1]
	(c) Any two from: Dipped headlights/keep safe distance/use wipers/ Listen for traffic etc.	[2]
	(d) Mirror, signal, manoeuvre	[1]
	(e) checks before making any manoeuvre or change of direction etc.	[2] 7
28	Any two from: AA, RAC, Road Safety Committees, Local Councils, RoSPA etc.	[2] 2

		AVAILABLE MARKS
29	(a) three	[1]
	(b) Any three from: speeds bus flow, makes public transport more attractive, encourages increased bus use.	[3]
30	(a) Fig. 30.1 – clearway. [1] Fig. 30.2 – no overtaking. [1] Fig. 30.3 – no entry. [1] Fig. 30.4 – ahead only. [1] Fig. 30.5 – national speed limit. [1] Fig. 30.6 – cycle route. [1]	[6]
	(b) (i) 30 mph	[1]
	(ii) street lights, housing etc.	[1]
	(c) greater visibility, view cannot be blocked by high sided vehicles	[1]
31	(a) coil - - - - - ignition system [1] Solenoid - - - - - starting system [1] Rack and pinion - - - - - steering system [1] Expansion/ header tank - - cooling system [1]	[4]
	(b) glow plugs, absence of spark plugs etc.	[1]
32	(a) $1 : 24 = 25$ 5000 ml divided by 25 = 200 ml/20 cl Ans 200 ml	[1] [1]
	(b) 550 km divided by 50 l = 11 km/l	[1]
	(c) $£475 \times 34 = £16\ 150$ $£19\ 000 - £16\ 150 = £2850$ Ans £2850	[1] [1]
33	(a) Any two from: Plant trees/bushes, build fences, build earth banks, lower road, smoother surface etc.	[2]
	(b) Any two from: electricity, petrol, diesel or gas.	[2]
	(c) Lead is a poison	[1]
34	(a) Primary, A or dual carriageway	[1]
	(b) Any two from: No junctions, roundabouts, hard shoulder, slip roads, acc lane etc.	[2]
	(c) Any two from: Traffic separated, moving in same direction etc.	[2]

		AVAILABLE MARKS
35 (a) Any two from: Age, make, model, engine size etc.	[2]	5
(b) Any two from: Age, gender, previous record, address etc.	[2]	
(c) the annual cost, money paid	[1]	
36 (a) wear on pads displaces fluid. [1] wear on shoes displaces fluid. [1]	[2]	14
(b) 1. induction [1] 2. compression [1] 3. power [1] 4. exhaust [1]	[4]	
(c) 1. piston [1] cylinder [1] 2. connecting rod [1] 3. crankshaft [1] 4. gudgeon pin [1]	[4]	
(d) A. inlet valve [1] B. exhaust valve [1]	[2]	
(e) camshaft/springs	[2]	
37 (a) Any two from: First aid kit, fire extinguisher, torch, reflective/fluorescent jacket etc.	[2]	
(b) Any two from: Switch off ignition, handbrake, chock wheels etc.	[2]	5
(c) doesn't catch fire, roll away, cause obstruction etc.	[1]	
38 Answer may include: – drive carefully – observe speed limits – look out for pedestrians – keep safe distance from vehicle in front – be aware of all signage etc.		
([0]–[2]) Some knowledge and basic understanding.		6
([3]–[4]) Relevant knowledge, good understanding.		
([5]–[6]) Good knowledge, thorough understanding.	[6]	

39 Drivers

Drive carefully, observe all aspects of highway code. Care for vehicle/fit for use (service, MOT, fluids, tyres) etc.

Vehicle

Design improvements; primary and secondary safety and examples etc.

Roads

Improvement to existing roads – straightening, widening, line of sight; junctions; dual carriageways, motorways etc.

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

Level 1 ([1]–[4])

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

Level 2 ([5]–[8])

The candidate will address at least two of the required references in some relevant detail. Some specialist vocabulary is used and used correctly. The style of writing is appropriate and the meaning is clear. 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 and used correctly. The answer is well structured and relevant material is presented with a high degree of clarity. Spelling, punctuation and grammar will generally be correct. [12]

Section B**Total****AVAILABLE
MARKS**

12

100**120**

