

1.5 LEGAL, MORAL & ETHICAL · 1.5.2

Moral, ethical & cultural issues — Mark scheme

30 marks · spec 1.5.2

AO key: AO1 = knowledge · AO2 = application · AO3 = reasoned judgements. Credit any valid point; the short questions reward developed points, the essay rewards balance & a justified conclusion.

Q	ANSWER	AO	MARKS
1(a)	Positive (any 1): higher productivity · new tech jobs · removes dangerous/repetitive work (1); Negative (any 1): job losses · need for reskilling · widening inequality (1). (2)	AO1	2
1(b)	One concern developed, e.g. the system may be biased (point) (1) so people are treated unfairly / can't challenge a decision (consequence) (1). (2)	AO2	2
1(c)	Any one: energy use of devices/data centres · e-waste · rare materials in manufacturing. (1)	AO1	1
1(d)	Any one: remote/home working reduces travel · paperless processes · smarter energy management. (1)	AO1	1

Q	ANSWER	AO	MARKS
2(a)	Developed point, e.g. AI can be biased / its reasoning is opaque (point) (1); so a person affected may be treated unfairly and unable to challenge it, with unclear accountability (consequence) (1). (2)	AO2	2
2(b)	Creators lose income/sales when work is copied for free (1); which can reduce the incentive/ability to create new work (1). (2)	AO2	2
2(c)	For (any 1): protects people from harmful/illegal content (1); Against (any 1): can suppress information / restrict free speech / be abused by governments (1). (2)	AO2	2

Q	ANSWER	AO	MARKS
3(a)	1 mark each, max 2: fewer accidents (no tiredness/distraction) · better access for those who can't drive · lower running costs / more reliable service · reduced emissions if electric. (2)	AO2	2
3(b)	1 mark each, max 2: who is responsible/accountable in a crash · safety/reliability of the software · how the vehicle should act in unavoidable-harm situations · data/privacy of passengers · trust in the technology. (2)	AO2	2
3(c)	Bus drivers could lose their jobs (point) (1); though new roles in maintaining/monitoring the autonomous fleet may be created / reskilling needed (consequence) (1). (2)	AO2	2

Q	LEVELS-OF-RESPONSE MARK SCHEME (12 MARKS)	AO	MARKS												
4	Mark using the levels descriptors below. AO1 (knowledge of AI/impact), AO2 (application), AO3 (balanced, justified judgement). <table><tr><th>LEVEL</th><th>DESCRIPTOR</th></tr><tr><td>Level 4 (10–12)</td><td>A thorough, balanced discussion with well-developed arguments for and against, clearly applied, leading to a justified conclusion. Sustained line of reasoning; accurate terminology.</td></tr><tr><td>Level 3 (7–9)</td><td>A good discussion with arguments on both sides, mostly developed, with a conclusion that is reasonably justified.</td></tr><tr><td>Level 2 (4–6)</td><td>Some arguments on both sides with limited development; a basic or partial conclusion.</td></tr><tr><td>Level 1 (1–3)</td><td>A few points, largely one-sided, with little development and no real conclusion.</td></tr><tr><td>0</td><td>Nothing creditworthy.</td></tr></table> Indicative content (credit any valid point): • Benefits: medical diagnosis & treatment, safer transport, efficiency, assistance/ accessibility, handling huge data, freeing humans from dull/dangerous tasks. • Risks: bias & unfair decisions, job displacement, accountability when AI errs, over-reliance, loss of human judgement, privacy/surveillance, misuse, "black box" opacity. • Application: examples from healthcare/recruitment/transport in the scenario. • A justified conclusion weighing the strongest benefits against the strongest risks (e.g. AI as a tool supporting humans, with regulation/oversight).	LEVEL	DESCRIPTOR	Level 4 (10–12)	A thorough, balanced discussion with well-developed arguments for and against , clearly applied, leading to a justified conclusion . Sustained line of reasoning; accurate terminology.	Level 3 (7–9)	A good discussion with arguments on both sides , mostly developed, with a conclusion that is reasonably justified.	Level 2 (4–6)	Some arguments on both sides with limited development; a basic or partial conclusion.	Level 1 (1–3)	A few points, largely one-sided, with little development and no real conclusion.	0	Nothing creditworthy.	AO1 ×4 AO2 ×4 AO3 ×4	12
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Total for paper: 30 marks