

**EDUCATION DEVELOPMENT INTERNATIONAL PLC
LCCI IQ
SAMPLE PAPER
BUSINESS CALCULATIONS
LEVEL 2
MARKING SCHEME**

**DISTINCTION MARK 75%
CREDIT MARK 60%
PASS MARK 50%**

TOTAL 100 MARKS

QUESTION 1

Syllabus Topic 2: The small business (2.2), (2.3)

- (a) Cost price per item = $(£1,700 / 5,000) = 34p$ **M1**
- Profit on one item = $51p - 34p = 17p$ **M1**
- Profit as a percentage of cost price = $100\% \times 17p / (£1,700 / 5,000) = 50\%$ **M1 A1**
(4 marks)
- (b) (i) Profit = $(4,500 \times £0.51) - £1,700 = £595$ **M1 A1**
(2 marks)
- (ii) Profit as a percentage of outlay = $100\% \times £595 / £1,700 = 35\%$ **M1 A1**
(2 marks)
- (c) Net profit = $£595 - £319.60 = £275.40$ **M1**
- Net profit as a percentage of sales (turnover) = $100\% \times £275.40 / (4,500 \times £0.51) = 12\%$ **M1 A1**
(3 marks)

Syllabus Topic 1: Simple and compound interest (1.2)

- (d) Interest percent = $100\% \times £11.90 / £1,700 = 0.7\%$ **M1 A1**
(2 marks)
- (e) Percentage interest per annum = $100\% \times (£11.90 / £1,700) \times (12 / 1.5) = 5.6\%$ **M1 A1**
(2 marks)

(Total 15 marks)

QUESTION 2**Syllabus Topic 3: Wages and commission (3.2), (3.3), (3.4) and (3.5)**

- (a) Sam receives $\pounds 20,878 / 52 = \pounds 401.50$ M1 A1
- Trevor receives commission of $2\frac{1}{4}\% \times \pounds 10,320 = \pounds 232.20$ M1
- Trevor receives a total of $\pounds 232.20 + \pounds 245 = \pounds 477.20$ A1
- Ursula receives overtime pay of $3.5 \times 1.2 \times \pounds 6.75 = \pounds 28.35$ M1
- Ursula receives a total of $(38 \times \pounds 6.75) + \pounds 28.35 = \pounds 284.85$ M1 A1
(7 marks)
- (b) (i) Gross pay for March = $\pounds 1,547 + \pounds 220 + \pounds 133 = \pounds 1,900$ M1
- NI as a percentage of gross pay = $100\% \times \pounds 133 / \pounds 1,900 = 7\%$ M1 A1
(3 marks)
- (ii) Gross pay per annum = $\pounds 1,900 \times 12 = \pounds 22,800$ M1 A1
(2 marks)

(Total 12 marks)

QUESTION 3**Syllabus Topic 1: Simple and compound interest (1.2)**

- (a) 20 days = $20 / 365$ year M1
- Interest = $\pounds 150 \times 6\% \times 20 / 365$ year = $\pounds 0.49$ M1 A1
(3 marks)

Syllabus Topic 4: Buying and selling (4.4)

- (b) (i) Discount = $2.5\% \times \pounds 150 = \pounds 3.75$ M1 A1
(2 marks)
- (ii) Amount paid = $\pounds 150 - \pounds 3.75 = \pounds 146.25$ M1 A1
(2 marks)

Syllabus Topic 9: Averages (9.2)

- (c) Total payment = $\pounds 214.50 + \pounds 187.20 + \pounds 273 + \pounds 118.95 + \pounds 156 + \pounds 146.25$ M1
 $= \pounds 1,095.90$
- Average payment per month = $\pounds 1,095.90 / 6 = \pounds 182.65$ M1 A1
(3 marks)

(Total 10 marks)

QUESTION 4
Syllabus Topic 5: Insurance (5.2)

- (a) Cost of insuring the building = $\text{£}21.50 \times \text{£}230,000 / \text{£}10,000 = \text{£}494.50$ M1 A1
(2 marks)
- (b) Cost of insuring the contents = $\text{£}587.25 - \text{£}494.50 = \text{£}92.75$ M1
 Cost of contents insurance per $\text{£}1,000 = \text{£}92.75 \times \text{£}1,000 / \text{£}35,000 = \text{£}2.65$ M1 A1
(3 marks)
- (c) (i) Service fee = $4.25\% \times \text{£}587.25 = \text{£}24.96$ M1 A1
(2 marks)
- (ii) Total payable = $\text{£}587.25 + \text{£}24.96 = \text{£}612.21$ M1
 Monthly instalment = $\text{£}612.21 / 12 = \text{£}51.02$ M1 A1r
(3 marks)

(Total 10 marks)

QUESTION 5
Syllabus Topic 6: Foreign currencies (6.3)
Syllabus Topic 4: Buying and selling (4.2)

- (a) $\text{\$}1,520 = \text{£}(1,520/1.9) = \text{£}800$ M1
 Rachel paid $\text{£}800 + \text{£}10 = \text{£}810$ M1 A1
(3 marks)
- (b) Rachel's dollars remaining = $\text{\$}1,520 - \text{\$}1,012 = \text{\$}508$ M1
 Rachel received in euros $\text{€}(508 / 1.45) = \text{€}350.34$ M1 A1
(3 marks)
- (c) 1 litre = $1 / 0.57$ pints = 1.8 pints M1 A1r
(2 marks)
- (d) (i)

7 friendship rings	at	€4.50 each	=	€31.50		
3 bottles of perfumed water	at	€9.90 each	=	€29.70		
1 beret	for	€21.40	=	<u>€21.40</u>		
Total cost in euros				=	€82.60	M1 A1 (3 marks)
- (ii) Total cost in pounds sterling = $\text{£}(82.60 / 1.4) = \text{£}59$ M1 A1
(2 marks)

(Total 13 marks)

QUESTION 6**Syllabus Topic 7: Hire purchase (7.2), (7.3), (7.4), (7.5)**

- (a) Store A deposit = $1/6 \times \text{£}630 = \text{£}105$ M1
- Store A hire purchase loan = $\text{£}630 - \text{£}105 = \text{£}525$ M1 A1
(3 marks)
- (b) (i) Amount of simple interest = $9\% \times 16/12 \times \text{£}525 = \text{£}63$ M1 A1
(2 marks)
- (ii) Total to be repaid in instalments = $\text{£}525 + \text{£}63 = \text{£}588$ M1
- Cost of each monthly instalment = $\text{£}588 / 16 = \text{£}36.75$ M1 A1
(3 marks)
- (iii) Total cost of games console = $\text{£}105 + \text{£}588 = \text{£}693$ M1 A1
(2 marks)
- (c) (i) Store B total cost = $\text{£}100 + 12 \times \text{£}48.50 = \text{£}682$ M1 A1
(2 marks)
- (ii) Harvey might choose to purchase the games console on hire purchase from store A because its payment each month is less than store B A1ft
(1 mark)

(Total 13 marks)**QUESTION 7****Syllabus Topic 8: Partnerships (8.2), (8.3), (8.4)**

- (a) $\text{€}150,000 : \text{€}105,000 : \text{€}240,000 = 10 : 7 : 16$ M1 A1
(2 marks)
- (b) Total investment = $\text{€}150,000 + \text{€}105,000 + \text{€}240,000 = \text{€}495,000$ M1
- Profit percent = $100\% \times \text{€}39,600 / \text{€}495,000 = 8\%$ M1 A1
(3 marks)
- (c) (i) Interest received by Mr Franklin = $9/12 \times 6\% \times \text{€}240,000 = \text{€}10,800$ M1 A1
(2 marks)
- (ii) Salary received by Mr Kwan = $9 \times \text{€}1,600 = \text{€}14,400$ M1
- Total received by Mr Kwan = $\text{€}14,400 + 9/12 \times 6\% \times \text{€}105,000 = \text{€}19,125$ M1 A1
(3 marks)
- (iii) Interest received by Mrs Berezof = $9/12 \times 6\% \times \text{€}150,000 = \text{€}6,750$ M1
- Total paid to the partners = $\text{€}10,800 + \text{€}19,125 + \text{€}6,750 = \text{€}36,675$ M1
- Profit remaining = $\text{€}39,600 - \text{€}36,675 = \text{€}2,925$ M1 A1
(4 marks)

(Total 14 marks)

QUESTION 8**Syllabus Topic 1: Simple and compound interest (1.3)****Syllabus Topic 4: Buying and selling (4.2)****Syllabus Topic 9: Averages (9.2), (9.3)**

(a) (i)	Number of buses	Estimated mileage	Total mileage	
	5	3,200	16,000	M1
	8	3,300	26,400	
	24	3,400	81,600	
	15	3,500	52,500	
	10	3,600	<u>36,000</u>	
	Total estimated monthly mileage =		212,500	M1 A1 (3 marks)

(ii) Average estimated monthly mileage per bus = $212,500 / 62 = 3,427 = 3,420$ miles M1 A1r
(2 marks)

(b) Year 1 interest = $5.8\% \times \text{£}350,000 = \text{£}20,300$ M1

Year 2 interest = $5.8\% \times (\text{£}350,000 + \text{£}20,300) = \text{£}21,477.40$ M1

Total interest = $\text{£}20,300 + \text{£}21,477.40 = \text{£}41,777.40$ A1
(3 marks)

(c) (i) Total cost of units = $18.3\text{p} \times 420 = \text{£}76.86$ M1

Amount of bill = $\text{£}76.86 + \text{£}29.40 = \text{£}106.26$ M1 A1
(3 marks)

(ii) Average cost per unit = $\text{£}106.26 / 420 = 25.3\text{p}$ M1 A1
(2 marks)

(Total 13 marks)