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**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER I  
SESSION 2018/2019**

**COURSE NAME : BUSINESS VALUATION**  
**COURSE CODE : BPE 44903**  
**PROGRAMME : 4 BPD**  
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**DURATION : 3 HOURS**  
**INSTRUCTION : ANSWER ALL QUESTIONS**

**THIS QUESTION PAPER CONSISTS OF EIGHT (8) PAGES**

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**Q1** In 2009, following the worldwide credit crisis, several US-based car manufacturers, such as Chrysler and General Motors, approached bankruptcy and needed to be bailed out by the US government and private investors. Italy-based Fiat Group SpA, decided to help rescue Chrysler by acquiring 20 to 35 percent of the car manufacturer's shares. In exchange, Fiat would get access to Chrysler's vehicle platforms and manufacturing facilities, which could eventually help the Italian manufacturer to re-enter the US market. Following the initial rumors about private negotiations between Fiat and Chrysler in addition of Fiat's (coinciding) announcement that it would not pay dividend for 2008, Fiat's share price dropped by more than 25 percent in just one week. The question arose whether Fiat's performance was really stronger than Chrysler's.

**Tables Q1** shows the financial statements of the Fiat Group SpA, for the fiscal years 2006-2008. In all three years, Fiat earned a return on equity in excess of 12 percent.

**Table Q1: Financial Statements of the Fiat Group SpA 2006-2008**

<b>Income Statement (€ millions)</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
Net revenues	59,380	58,529	51,832
Cost of sales	(49,423)	(48,924)	(43,888)
Selling, general, and administration costs	(5,075)	(4,924)	(4,697)
Research and development costs	(1,497)	(1,536)	(1,401)
Other income (expenses)	(23)	88	105
<b>Trading profit</b>	<b>3,362</b>	<b>3,233</b>	<b>1,951</b>
Gains (losses) on the disposal of investments	20	190	607
Restructuring costs	(165)	(105)	(450)
Other unusual income (expenses)	(245)	(166)	(47)
<b>Operating profit/(loss)</b>	<b>2,972</b>	<b>3,152</b>	<b>2,061</b>
Financial income (expenses)	(947)	(564)	(576)
Results from investments	162	185	156
<b>Profit before taxes</b>	<b>2,187</b>	<b>2,773</b>	<b>1,641</b>
Income taxes	(466)	(719)	(490)
<b>Profit from continuing operations</b>	<b>1,721</b>	<b>2,054</b>	<b>1,151</b>
Profit from discontinued operations	0	0	0
<b>Net profit/(loss)</b>	<b>1,721</b>	<b>2,054</b>	<b>1,151</b>

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Balance sheet (€ millions)	2008	2007	2006
Intangible assets	7,048	6,523	6,421
Property, plant and equipment	12,607	11,246	10,540
Investment property	0	10	19
Investment and other financial assets	2,177	2,144	2,280
Leased assets	505	396	247
Defined benefit plan assets	120	31	11
Deferred tax assets	2,386	1,892	1,860
<b>Total non-current assets</b>	<b>24,843</b>	<b>22,312</b>	<b>21,378</b>
Inventories	11,346	9,990	8,548
Trade receivables	4,390	4,384	4,944
Receivables from financing activities	13,136	12,268	11,743
Current tax receivables	770	1,153	808
Other current assets	2,600	2,291	2,278
Current financial assets	967	1,016	637
Cash and cash equivalents	3,683	6,639	7,736
<b>Total current assets</b>	<b>36,892</b>	<b>37,741</b>	<b>36,694</b>
Assets held for sale	37	83	332
<b>TOTAL ASSETS</b>	<b>61,772</b>	<b>60,136</b>	<b>58,404</b>
Shareholders' equity	10,354	10,606	9,362
Minority interest	747	673	674
Employee benefits	3,366	3,597	3,761
Other provisions	4,778	4,965	4,850
Asset-backed financing	6,663	6,820	8,344
Other debt	14,716	11,131	11,844
Other financial liabilities	1,202	188	105
Trade payable	13,258	14,725	12,603
Current tax payables	331	631	311
Deferred tax payables	170	193	263
Other current liabilities	6,185	6,572	5,978
Liabilities held for sale	2	35	309
<b>TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES</b>	<b>61,772</b>	<b>60,136</b>	<b>58,404</b>

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<b>Cash flow statement (€ millions)</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
Net profit/(loss)	1,721	2,054	1,151
Amortization and depreciation (net of vehicles sold under buy-back commitments)	2,901	2,738	2,969
Gains (losses) on disposal	(50)	(297)	(575)
Other non-cash items	253	(138)	7
Dividend received	84	81	69
Change in provisions	(161)	6	229
<b>Cash flow statement (€ millions)</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
Change in deferred taxes	(490)	(157)	(26)
Change in items due to buy-back commitments	(88)	34	(18)
Change in working capital	(3,786)	1,588	812
<b>Cash flows from (used in) operating expenses</b>	<b>384</b>	<b>5,909</b>	<b>4,618</b>
<b>Cash flows from (used in) investment activities</b>	<b>(6,310)</b>	<b>(4,601)</b>	<b>(1,390)</b>
<b>Cash flow from (used in) financing activities</b>	<b>3,127</b>	<b>(2,375)</b>	<b>(1,731)</b>
Translation exchange differences	(159)	(33)	(173)
<b>Total change in cash and cash equivalents</b>	<b>(2,958)</b>	<b>(1,100)</b>	<b>(1,324)</b>

(a) Decompose Fiat's return on equity for each year.

(10 marks)

(b) Evaluate the drivers of the company's performance during the period 2006-2008.

(15 marks)

**Q2** Free cash flows (FCF) used in Discounted Cash Flows (DCF) valuations are defined as follows:

$$\text{FCF to debt and equity} = \text{Earnings before interest and taxes} \times (1 - \text{tax rate}) + \text{Depreciation deferred taxes} - \text{Capital expenditures} - / + \text{Increase/decrease in working capital}$$

$$\text{FCF to equity} = \text{Net profit} + \text{Depreciation and deferred taxes} - \text{Capital Expenditures} - / + \text{Increase/decrease in working capital} + / - \text{Increase/decrease in debt}$$

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- (a) Explain the way in which the following items affect either FCF to debt and equity or FCF to equity.
- (i) An increase in trade receivables.
  - (ii) An increase in property, plant, and equipment.
  - (iii) Interest expense.

(15 marks)

- (b) It is arguably that the DCF valuation method has increased managers' focus on short-term rather long-term performance, since the discounting process places much heavier weight on short-term cash flows than long term ones.

Justify the relevance of the above statement.

(10 marks)

- Q3** (a) Jonas Borg, an analyst at EMH Securities, states: "I don't know why anyone would ever try to value earnings. Obviously, the market knows that earnings can be manipulated and only values cash flows".

Discuss the significance of the above statement in relation to evaluating firm's performance.

(10 marks)

- (b) Sven Broker, an analyst with an established brokerage firm, comments: "The critical number I look at for any company is operating cash flow. If cash flows are less than earnings, I consider a company to be a poor performer and a poor investment prospect".

Justify whether you are in agreement or otherwise with the analyst's assessment.

(15 marks)

**Q4** On April 21, 2009, UK-based retailer Tesco plc presented its preliminary financial statements for the fiscal year ending on March 31, 2009. **Table Q4** shows a selection of Tesco's financial figures for the fiscal years 2007/2008 and 2008/2009 (i.e., the fiscal years ending on March 31, 2008 and 2009, respectively).

**Table Q4: Tesco's financial figures for the fiscal years 2007/2008 and 2008/2009**

<b>Income statement (£ millions)</b>	<b>2008/2009</b>	<b>2007/2008</b>
Sales	54,327	47,298
Operating expenses	(51,121)	(44,507)
Interest expense	(284)	(112)
Investment income	32	124
Tax expense	(788)	(673)
<b>Net Profit</b>	<b>2,166</b>	<b>2,130</b>
<b>Balance sheet (£ millions)</b>	<b>2008/2009</b>	<b>2007/2008</b>
<b>Net working capital</b>	<b>(4,912)</b>	<b>(3,885)</b>
Non-current tangible assets	23,152	19,787
Non-current intangible assets	4,027	2,336
Other non-current assets	3,469	1,725
Non-interest bearing liabilities	(888)	(954)
<b>Total business assets</b>	<b>29,760</b>	<b>22,894</b>
Debt	11,910	7,194
Equity	12,938	11,815
<b>Total Capital</b>	<b>24,848</b>	<b>19,009</b>

<b>Other information (£ millions)</b>	<b>2008/2009</b>	<b>2007/2008</b>
Depreciation of non-current tangible assets	1,036	876
Amortization of non-current intangible assets	153	116
Non-current tangible assets at cost	29,844	25,550
Non-current intangible assets at cost	4,790	2,944
Dividend paid	883	792

In addition to disclosing the financial statements, Tesco's management also provided guidance about future investment plans, financing strategies, and performance expectations. In particular, the following information became available to investors and analysts on the publication date:

- In 2008/2009, Tesco opened 9 million square feet of new store space. The retailer plans to open 8 million square feet of new store space in 2009/2010.
- Revenues in 2008/2009 were the revenues of 53 weeks. The fiscal year 2009/2010 will include 52 weeks.

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- Group capital expenditure during 2008/2009 was GBP 4.7 billion, a little more than planned (GBP 4.5b) due to currency movements. Tesco's management indicates that capital expenditures in 2009/2010 will be around GBP3.5 billion. One reason for why capital expenditures can be reduced is the in the current economic downturn, Tesco can buy more new store space for less.
- Tesco's effective tax rate in 2008/2009 was 26.7 percent versus 24.0 percent in 2007/2008. The increase in tax rate was primarily the result of one-time tax benefit in 2007/2008. Management expects the effective tax rate for 2009/2010 to be around 27 percent.
- In 2008/2009, Tesco was able to realize cost saving on close to GBP 550 million through is Step-Change program. Management expects these cost savings to persist.
- In 2008/2009, Tesco's net finance cost, including the company's return on pension assets, was GBP 284 million. The underlying interest charge was GBP 309 million, up from GBP 159 million in 2007/2008. The weighted average coupon rate of Tesco's debt was 5.6 percent.
- Tesco's debt rose substantially during 2008/2009 as a result of:
  1. Increase capital expenditures.
  2. An increase pension deficit (GBP 0.65 billion increase)
  3. The significant depreciation in the sterling-dollar/euro exchange rate (with a debt impact of approximately GBP 1 billion)

If exchange rates remain stable, management intends to bring down debt by approximately GBP 1 billion during 2009/2010. Further, management disclosed the following information about realized and planned store opening:

(£ millions)	UK	Rest of Europe	Asia	US
<b>2008/2009 (Realized)</b>				
Revenues	38,191	8,862	7,068	206
Operating profit	2,540	479	343	(156)
Square feet store space ( × 1,000):				
Beginning-of-year	29,549	22,517	23,363	530
Opening, extension, adjustments	1,773	3,502	3,006	620
Acquisitions	239	3,015	0	0
Closures/disposals	(276)	(196)	(190)	0
End-of-year	31,285	28,838	26,179	1,150
<b>2009/2010 (Expected)</b>				
Square feet store space ( × 1,000):				
Beginning-of-year	31,285	28,838	26,179	1,150
Opening, extension, adjustments	1,897	2,697	2,733	600
Acquisitions	98	0	0	0
Closures/disposals	(225)	0	(63)	0
End-of-year	33,055	31,535	28,849	1,750

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- (a) Predict Tesco's 2009/2010 sales using the information about the company's store space and revenues (per geographical segment).  
(10 marks)
- (b) Estimate Tesco's 2009/2010 interest expense and debt-to-equity ratio under the assumption that the company reduces its debt in 2009/2010, as planned.  
(15 marks)

**-END OF QUESTIONS-**

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