FOUNDATIONS IN ACCOUNTANCY

Foundations in Financial Management

Tuesday 12 June 2012

‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖

Paper FFM

Time allowed: 2 hours

This paper is divided into two sections:

Section A – ALL TEN questions are compulsory and MUST be attempted

Section B – ALL SIX questions are compulsory and MUST be attempted

Present Value and Annuity Tables are on pages 8 and 9.

Do NOT open this paper until instructed by the supervisor.

This question paper must not be removed from the examination hall.

The Association of Chartered Certified Accountants

ACCA

Section A – ALL TEN questions are compulsory and MUST be attempted

Please use the space provided on the inside cover of the Candidate Answer Booklet to indicate your chosen answer to each multiple choice question.

1 **Is the following statement about the Baumol cash management model true or false?**

'The model works satisfactorily for a business that occasionally has large irregular cash flows.'

A True
B False

(1 mark)

2 **Which of the following statement(s) is/are true?**

Statement 1: Monetary policy can be tightened through an increase in interest rates.
Statement 2: In a period of high inflation, a company will need to review its selling prices regularly.

A Statement 1 only
B Statement 2 only
C Both statements 1 and 2
D Neither statement 1 nor statement 2

(2 marks)

3 The following information about E Co is available:

	$
Operating profit	100,000
Finance charges	(20,000)
Profit before tax	80,000
Taxation	(24,000)
Profit for the period	56,000

E Co has 20,000 ordinary shares.

What is the earnings per share in $?

A $2·80
B $5·00
C $0·25
D $0·36

(2 marks)

4 The following information is available:

	$
Cash	30,000
Receivables	40,000
Inventory	25,000
	95,000
Payables	(10,000)
Working Capital	85,000

What is the quick (acid test) ratio?

A 6·5 times
B 8·5 times
C 9·5 times
D 7 times

(2 marks)

5 Dis Co is considering offering a discount of 2% to its customers if they pay within 10 days rather than the current 25 days. There are 365 days in the year.

What is the annual cost to Dis Co of offering such a discount?

A 34·3%
B 61·9%
C 63·5%
D 33·5%

(3 marks)

6 **Is the following statement true or false?**

'Bankruptcy is when an individual's assets are sold and the monies collected are distributed to the creditors.'

A True
B False

(1 mark)

7 An investment of $15,000 made now at time T_0 in a project will give an internal rate of return of 10%. The company's cost of capital for any project is 8%.

What is the amount of annual income from the project, to the nearest $, if the income is an eight-year annuity starting at time T_1?

A $2,235
B $2,812
C $2,441
D $2,610

(3 marks)

8 R Co needs to use two materials, X and Y, in a project. The following information about the two materials is available:

	Kgs in inventory	Original price	Replacement Cost	Realisable value	Kgs needed for the project
Material X	5	$6	$7	$5	10
Material Y	12	$8	$11	$10	8

Material X is regularly used in the business. Material Y is held in inventory as a result of overbuying some months ago and has no other use in the business.

What is the relevant cash flow for the materials that should be included in the project appraisal?

	Material X	Material Y
A	$70	$80
B	$65	$64
C	$70	$64
D	$65	$80

(3 marks)

9 **Which of the following statements are true/false?**

Statement 1: The Alternative Investment Market is regulated by the London Stock Exchange.
Statement 2: The higher the level of gearing an organisation has, the higher the risk to the business if sales fall.

	Statement 1	Statement 2
A	False	False
B	True	False
C	False	True
D	True	True

(2 marks)

10 **Which of the following should NOT be considered as externally generated information when assessing the creditworthiness of a customer?**

A Bank references
B A report by the sales team after visiting a customer.

(1 mark)

Section B – ALL SIX questions are compulsory and MUST be attempted

1   Joe the Window Cleaner

Joe began trading as a window cleaner in December.

Capital Expenditure

In March, Joe will take delivery of new equipment costing $2,400, which will be paid for half in the month Joe takes delivery and half the following month. This equipment is expected to last two years.

Income

House window cleaning

Joe charges on average $20 to clean the windows of a house, and he has decided to clean a maximum of 100 houses per month. He receives cash on the day the windows are cleaned.

It is now January and Joe has 50 houses on his round, but he is gaining a reputation for reliability and quality of service, and he expects this number to go up by 30% each month until his maximum is reached. Each house has its windows cleaned once a month.

Industrial window cleaning

Joe has obtained one monthly contract for cleaning the windows of a local doctor's surgery which he will start in February. Joe will invoice them $50 each time he cleans their windows.

The local swimming pool wants to use Joe's services, starting when he has his new equipment. This will also be a monthly contract, for $75 per month.

Both clients will pay Joe the month after he has cleaned the windows.

Costs

Joe has not taken a salary so far, but intends to draw $1,000 each month starting in February.

Costs are 5% of income, and are paid in the month incurred.

Bank Account

The balance on Joe's current account is expected to be $200 at the beginning of February and the bank has authorised an overdraft facility of $1,000.

Required:

(a) Prepare a cash budget for each of the four months, February, March, April and May. Work to the nearest $.
(10 marks)

(b) Briefly explain FIVE reasons why a small business, like Joe's window cleaning business, can find it difficult to obtain finance.
(10 marks)

(20 marks)

2   **(a) Define financial intermediation.**
(2 marks)

(b) Identify and explain THREE benefits of financial intermediation.
(8 marks)

(10 marks)

3   L Co is leasing the machinery it requires, rather than making an immediate purchase.

Required:

(a) Briefly explain the advantages of leasing in general to:

    (i)   The supplier of the equipment;   (1 mark)

    (ii) The lessor;   (2 marks)

    (iii) The lessee.   (3 marks)

    Note: specific reference to either operating or finance leases is not required.

(b) Briefly explain TWO CIRCUMSTANCES when an operating lease would be more suitable to a lessee, than a finance lease.   (4 marks)

(10 marks)

4   D Co makes credit sales of $400,000 per month, every month. These are settled 60 days later. However, D Co is facing a temporary cash flow shortage in June and the company is considering using an invoice discounter to improve cash flow. The discounter has agreed the following terms:

The discounter will advance 75% of the face value of the invoices. Interest charged on amounts advanced will be 8% per annum. The invoice discounter will charge 1·5% of the face value of the invoices as a service charge. The service charge and interest will be payable when D Co receives the final balance in August.

Required:

(a) Assuming that the discounter's services are used in June only, prepare a schedule of the total cash inflows for D Co that will be received from both customers and the discounter in June, July and August. Assume there are 360 days in a year. Work to the nearest $.   (6 marks)

(b) Outline TWO advantages to D Co of using invoice discounting rather than debt factoring.   (4 marks)

(10 marks)

5 Hockey Club

A hockey club (a non profit seeking organisation) is investigating the possibility of laying their own hockey pitch next to the club house, rather than hiring pitches from a local school. If the hockey club decide to go ahead with the new pitch, it can be laid immediately and used the next day. The cost of the new pitch will be $325,000, which is payable when the pitch is laid. The pitch surface will last ten years before it requires replacing.

Benefits

1. The club will save the cost of hiring a pitch which currently costs $450 per week.
2. The club will receive $600 per week from hiring out to other users, such as the local football club.

Running Costs

1. There will be running costs once the pitch is in use, estimated to be $4,000 per year.

Assume there are 52 weeks in a year.

Required:

(a) Calculate the accounting rate of return on the initial investment. (5 marks)

(b) Calculate the payback period of the investment. (3 marks)

(c) Briefly comment on the usefulness TO THE HOCKEY CLUB of your calculations in (a) and (b) for appraising the project. (3 marks)

(d) Briefly explain the difference between capital and revenue expenditure, and how each should be treated within the accounts of an organisation. (4 marks)

(15 marks)

6 I Co is considering changing its supplier of raw materials. The existing and proposed supplier both supply the raw material for $5 per unit, but the proposed supplier will offer a bulk buy discount of 8% on all orders of 7,000 or more units. The following information is available:

I Co estimates that the ordering costs are $200 per order and the holding cost for one item for one year will be 15% of the purchase price. Annual demand for raw materials is 40,000 units.

Required:

(a) Briefly describe THREE costs that are associated with inventory. (3 marks)

(b) Calculate the order size to minimise total costs, and so conclude whether the proposed supplier should be used. Clearly show all workings.

Note: the economic order quantity (EOQ) is given by the formula: $\sqrt{\dfrac{2cd}{h}}$ (12 marks)

(15 marks)

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where   r = discount rate
          n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·914	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·350	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\dfrac{1-(1+r)^{-n}}{r}$

Where   r = discount rate
            n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·368	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·255	10·575	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·134	11·348	10·635	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·004	12·106	11·296	10·563	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·865	12·849	11·938	11·118	10·380	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

End of Question Paper