

**UNIVERSITY OF SWAZILAND**

**DEPARTMENT OF ACCOUNTING**

**SUPPLEMENTARY EXAMINATION PAPER 2006**

**DEGREE/DIPLOMA AND YEAR OF STUDY:** B. COMM V

**TITLE OF PAPER** : BUSINESS FINANCE I

**TIME ALLOWED** : THREE (3) HOURS

- INSTRUCTIONS**
1. TOTAL NUMBER OF QUESTIONS ON THIS PAPER: FOUR (4).
  2. ANSWER ALL QUESTIONS
  3. THE MARKS AWARDED FOR A QUESTION/PART ARE INDICATED AT THE END OF EACH QUESTION/PART OF QUESTION.
  4. ALL CALCULATIONS ARE TO BE MADE TO THE NEAREST LILANGENI
  5. WHERE APPLICABLE, SUBMIT ALL WORKING CALCULATIONS

**NOTE:** YOU ARE REMINDED THAT IN ASSESSING YOUR WORK, ACCOUNT WILL BE TAKEN OF ACCURACY OF THE LANGUAGE AND THE GENERAL QUALITY OF EXPRESSION, TOGETHER WITH THE LAYOUT AND PRESENTATION OF YOUR FINAL ANSWER.

**SPECIAL REQUIREMENTS:** P.V. TABLES

**THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.**

**QUESTION 1**

The Guilios Film Company Ltd is a film distribution which purchases distribution rights on films from small independent producers, and sells the films on to cinema chains for national and international screening. In recent years the company has found it difficult to source sufficient films to maintain profitability. In response to the problem, the Guilios Film Company has decided to invest in commissioning and producing films in its own right. In order to gain the expertise for this venture, the Guilios Film Company is considering purchasing an existing film-making concern, at a cost of E400,000. The main difficulty that is anticipated for the business is the increasing uncertainty as to the potential success/failure rate of independently produced films. Many cinema chains are adopting a policy of only buying films from large international film companies as they believe that the market for independent films is very limited and specialist in nature. The Guilios Film Company is prepared for the fact that they are likely to have more films that fail than that succeed, but believe that the proposed film production business will nonetheless be profitable.

Using data collected from the existing distribution business and discussions with industry experts, they have produced cost and revenue forecasts for the five years of operation of the proposed investment. The company aims to complete the production of three films per year. The after tax cost of capital for the company is estimated to be 14%.

Year 1 sales for the new business are uncertain, but expected to be in the range of E4 - 10 million. Probability estimates for different forecast values are as follows:

<b>Sales (E Million)</b>	<b>Probability</b>
4	0.2
5	0.4
7	0.3
10	0.1

Sales are expected to grow at an annual rate of 5%.

Anticipated costs related to the new business are as follows:

<b>Cost Type</b>	<b>E'000</b>
Purchase of film-making company	400
Annual legal and professional costs	20
Annual lease rental (office equipment)	12
Studio and set hire (per film)	180
Camera/specialist equipment hire (per film)	40
Technical staff wages (per film)	520
Screenplay (per film)	50
Actor's salaries (per film)	700
Costumes and wardrobe hire (per film)	60
Set design and painting (per film)	150
Annual non-production staff wages	60

**Additional Information**

- (i) no capital allowances are available
- (ii) Tax is payable one year in arrears, at a rate of 33% and full use can be made of tax refunds as they fall due.
- (iii) Staff wages (technical and non-production staff) and actor's salaries are expected to rise by 10% per annum.
- (iv) Studio hire costs will be subject to an increase of 30% in Year 3.
- (v) Screenplay costs per film are expected to rise by 15% per annum due to a shortage of skilled writers.
- (vi) The new business will occupy office accommodation which has to date been let out for an annual rent of E20,000. Demand for such accommodation is buoyant and the company anticipates no problems in finding future tenants at the same annual rent.
- (vii) A market research survey into the potential for the film production business cost E25,000.

**REQUIRED:**

Using DCF Analysis, advise if the project is worth undertaking. State all assumptions made.

(Total: 25 Marks)

**QUESTION 2**

- (a) Discuss and give examples of how Governments assist companies in their financing requirements  
(10 Marks)
- (b) The primary financial objective of companies is usually said to be the maximisation of shareholders wealth.  
Discuss whether this objective is realistic in a world where corporate ownership and control are often separate and environmental and social factors are increasingly affecting business decision.  
(15 Marks)

(Total: 25 Marks)

**QUESTION 3**

- (a) Creditors are commonly used as a major source of short term finance.

You are required to explain what factors might be taken into account by an enterprise in deciding the extent to which it should make use of credit from suppliers.

(15 Marks)

- (b) A company offers standard credit terms of 60 days net. Its cost of short term borrowing is 16% per annum. Determine whether a 2.5% discount should be offered for payment within 7 days to customers who would normally pay after:
- (i) 60 days
  - (ii) 80 days
  - (iii) 105 days
  - (iv) 90 days

(10 Marks)

(Total: 25 Marks)

**QUESTION 4**

Khanyi Ltd has an opportunity to invest in a project lasting one year. Khabo Ltd has three projects, each lasting one year, but in different industries. The net cash flows (arising at the end of the year) and the beta factors for each of the projects are as follows:

	<b>E'000</b>	
Khanyi Ltd	500	1.20
Khabo Ltd	200	1.25
	100	0.80
	200	1.35

The market return is 12% and the risk free rate of interest is 7%.

**REQUIRED:**

- (a) Calculate the total present value of the projects that can be undertaken by:  
(i) Khanyi Ltd  
(ii) Khabo Ltd  
(6 Marks)
- (b) Calculate the overall Beta factor for Khabo Ltd projects assuming that all three are undertaken.  
(4 Marks)
- (c) Describe the major difficulties in the practical applications of the Capital Asset Pricing Model (CAPM) in capital budgeting.  
(15 Marks)
- (Total: 25 Marks)

### Present Value Table

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

where  $r$  = discount rate

$n$  = number of periods until payment

*Discount rates (r)*

<i>Periods</i> (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
	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.  $\frac{1 - (1 + r)^{-n}}{r}$

where  $r$  = interest rate  
 $n$  = number of periods

Periods (n)	Interest rates (r)										
	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	10.37	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	11
12	11.26	10.58	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814	12
13	12.13	11.35	10.63	9.986	9.394	8.853	8.358	7.904	7.487	7.103	13
14	13.00	12.11	11.30	10.56	9.899	9.295	8.745	8.244	7.786	7.367	14
15	13.87	12.85	11.94	11.12	10.38	9.712	9.108	8.559	8.061	7.606	15
	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	4.586	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