CERTIFIED PUBLIC ACCOUNTANTS

OPERATIONAL LEVEL EXAMINATIONS

FM2.3 FINANCIAL MANAGEMENT

DATE: THURSDAY 26, FEBRUARY 2026

INSTRUCTIONS:

1. Time allowed: **3 hours and 15 minutes**
2. The examination has three sections: A, B and C
3. Section **A** has **15 compulsory multiple-choice questions** equal to 2 marks each.
4. Section **B** has **3 compulsory multiple-task questions** equal to 10 marks each.
5. Section **C** has **2 compulsory questions** equal to 20 marks each.
6. Questions marked **"select all that apply**" have multiple correct answers. Candidates must choose all correct options in order to be awarded 2 marks.
7. The question paper should not be taken out of the examination room.

SECTION A

QUESTION ONE

Which of the following best describes the concept of shareholder wealth maximization as a corporate objective?

A Maximizing short-term profits regardless of long-term consequences
B Maximizing share price by focusing on quarterly earnings targets
C Maximizing the present value of expected future cash flows to shareholders
D Maximizing dividend payments to current shareholders

(2 Marks)

QUESTION TWO

Which perspective of the Balanced Scorecard focuses on how efficiently internal processes are operating?

A Financial perspective
B Customer perspective
C Internal business process perspective
D Learning and growth perspective

(2 Marks)

QUESTION THREE

If a company's return on capital employed (ROCE) is 15% and its weighted average cost of capital (WACC) is 12%, **which of the following statements is correct?**

A The company is destroying shareholder value
B The company is creating shareholder value
C The company's performance is neutral in terms of value creation
D No conclusion about value creation can be drawn from this information

(2 Marks)

QUESTION FOUR

Which of the following is a characteristic of an expansionary fiscal policy?

A Increasing taxation to reduce government deficit
B Reducing government spending to control inflation
C Increasing interest rates to reduce borrowing
D Increasing government spending to stimulate aggregate demand

(2 Marks)

QUESTION FIVE

In a perfectly competitive market, **firms are:**

A Price makers with significant market power
B Price takers with differentiated products
C Price takers with homogeneous products
D Price makers with homogeneous products

(2 Marks)

QUESTION SIX

If a central bank reduces interest rates, **which of the following is most likely to occur in the short term?**

A Decreased consumer spending
B Reduced business investment
C Appreciation of the domestic currency
D Increased borrowing and consumption

(2 Marks)

QUESTION SEVEN

A project requires an initial investment of FRW500,000 and will generate annual cash inflows of FRW120,000 for 6 years. Using a discount rate of 9%, **what is the project's net present value (NPV)?**

A FRW1,220,000
B FRW38,320
C FRW428,480
D FRW220,000

(2 Marks)

QUESTION EIGHT

Which of the following statements about real options in capital budgeting is true?

A Real options typically reduce the theoretical value of investment projects
B The option to delay an investment has no economic value
C Standard NPV analysis fully accounts for the value of managerial flexibility
D The option to abandon a project can significantly enhance its strategic value

(2 Marks)

QUESTION NINE

A company has two mutually exclusive projects with the following NPVs and IRRs:

Project A: NPV = FRW50,000, IRR = 22%
Project B: NPV = FRW45,000, IRR = 25%

The company's cost of capital is 15%. **Which project should be selected?**

A Project A, because it has the higher NPV
B Project B, because it has the higher IRR
C Either project, as both have positive NPVs and IRRs above the cost of capital
D Neither project, as they are mutually contradictory

(2 Marks)

QUESTION 10

A company issues 5% bonds with a par value of FRW1,000 and 10 years to maturity. If the market required yield is 6%, **the bonds will be priced:**

A At par (FRW1,000)
B At a premium (above FRW1,000)
C At a discount (below FRW1,000)
D Cannot be determined without more information

(2 Marks)

QUESTION 11

Which of the following statements about preference shares is correct?

A They typically give holders voting rights equal to ordinary shareholders
B They represent ownership in the company similar to ordinary shares
C Dividends on preference shares are tax-deductible expenses for the company
D Preference shareholders have priority over ordinary shareholders in liquidation

(2 Marks)

QUESTION 12

According to the traditional theory of capital structure, **which of the following statements is correct?**

A The cost of equity remains constant regardless of the level of gearing
B The optimal capital structure is one with no debt
C The WACC initially decreases as gearing increases, then increases beyond an optimal point
D Firm value is independent of capital structure in the presence of corporate taxes

(2 Marks)

QUESTION 13

A company has the following working capital information:
- Annual credit sales: FRW15 million
- Cost of goods sold: FRW9 million
- Average inventory: FRW1.5 million
- Average accounts receivable: FRW2.5 million
- Average accounts payable: FRW1 million

What is the company's cash operating cycle in days?

A 122 days
B 81 days
C 149 days
D 61 days

(2 Marks)

QUESTION 14

Which of the following is a sign that a company may be experiencing overtrading?

A Decreasing sales with stable working capital
B High levels of cash with low inventory turnover
C Rapidly increasing sales with inadequate working capital
D Decreasing inventory levels with increasing accounts payable

(2 Marks)

QUESTION 15

Under a residual dividend policy, **which of the following statements is correct?**

A Dividends are set at a fixed percentage of earnings regardless of investment opportunities
B Dividends are increased by a fixed percentage each year
C Dividends are paid only after all acceptable investment opportunities have been funded
D Dividends are set at the industry average regardless of company performance

(2 Marks)

SECTION B

QUESTION 16

Omiko Electronics Ltd is currently evaluating a proposed new product development project. The project requires an initial capital investment of FRW 3,600,000 at the start of the project. In addition, the project will require an initial working capital investment of FRW 400,000, which will be fully recovered at the end of the project's life.

The project is expected to generate annual revenues of FRW 3,200,000, while annual operating costs are estimated at FRW 1,100,000. The project has an expected economic life of five years, at the end of which the assets will have an estimated salvage value of FRW 600,000.

For tax purposes, depreciation will be calculated using the straight-line method over the life of the project. The company's weighted average cost of capital is 12 percent, and it is subject to a corporate tax rate of 30 percent. These assumptions will be used in evaluating the financial viability of the proposed investment.

Q16 a) What is the Net Present Value of the project?

A FRW2,300,000
B FRW2,500,000
C FRW1,900,000
D FRW2,700,000

(2 Marks)

Q16 b) What is the payback period of the project?

A 2.7 years
B 3.8 years
C 2.4 years
D 3 years 1 month

(2 Marks)

Q16 c) What is the Internal Rate of Return (IRR) of the project?

A 32%
B 33%
C 28%
D 38%

(2 Marks)

Q16 d) Based on your analysis, **what should be Omiko's decision regarding this project?**

A Reject the project as it fails to meet the minimum IRR requirement
B Accept the project as it has positive NPV under both scenarios and exceeds IRR requirements
C Defer the project pending further market research
D Accept the project but reduce the initial investment to improve returns

(2 Marks)

Q16 e) What is the Modified Internal Rate of Return (MIRR) of the project?

A 33%
B 21.2.%
C 23.5%
D 18%

(2 Marks)

QUESTION 17

Arita Industries Plc is currently evaluating alternative financing options to fund a major expansion project that requires an investment of FRW 40 million. The company's existing capital structure consists of equity with a market value of FRW 100 million, represented by 20 million ordinary shares trading at FRW 5.00 per share, and debt with a market value of FRW 40 million bearing an interest rate of 5 percent. The firm's equity beta *is 1.6,* reflecting its level of systematic risk. The prevailing risk-free rate in the market is 2.5 percent, the expected market risk premium is 6 percent, and the applicable corporate tax rate is 30 percent.

To finance the proposed expansion, Arita Industries Plc is considering three alternative funding strategies. The first option involves financing the entire FRW 40 million through debt at an interest rate of 7 percent. The second option entails raising the full amount through equity issuance at a price of FRW 4.80 per share. The third option is a mixed financing approach, under which 50 percent of the required funds would be raised through debt at an interest rate of 6 percent, while the remaining 50 percent would be financed through the issuance of new equity at FRW 4.90 per share.

Q17 a) What is Arita Industries' current Weighted Average Cost of Capital (WACC)?

A 10.07%
B 13.5%
C 9.64%
D 7.07%

(2 Marks)

Q17 b) If the company chooses the 100% debt financing option, **what would be the approximate new equity beta?**

A 1.25
B 1.95
C 2.25
D 1.75

(2 Marks)

Q17 c) How would the 100% debt financing option affect the company's financial position?

A The debt financing option would increase the company's financial risk
B The debt financing option would increase the company's WACC
C The debt financing option would reduce the company's equity beta
D The debt financing option would have no impact on the company's cost of equity

(2 Marks)

Q17 d) How would the three proposed financing options likely impact Earnings Per Share (EPS)?

A The all-equity option would increase EPS compared to the all-debt option
B The all-debt option would increase EPS compared to the all-equity option
C The mixed financing option would produce the highest EPS
D All three options would produce approximately the same EPS

(2 Marks)

Q17 e) Which approach should Arita Industries take in selecting the optimal financing option?

A The all-debt option is optimal as it minimizes WACC
B The all-equity option is optimal as it minimizes financial risk
C The mixed financing option is optimal as it balances risk and return
D The optimal choice depends on the company's existing capital structure and risk tolerance

(2 Marks)

QUESTION 18

Imena Manufacturing Ltd has been experiencing cash flow difficulties despite maintaining consistent profitability. In this context, the Finance Director has presented selected financial information to help assess the company's operating performance and working capital position.

For the year ended 31 December 2024, the company reported sales revenue of FRW 30 million and cost of goods sold of FRW 18 million, resulting in a gross profit of FRW 12 million. Operating expenses for the year amounted to FRW 7 million, leaving an operating profit of FRW 5 million.

As at 31 December 2024, the statement of financial position shows total current assets comprising inventory of FRW 6 million, trade receivables of FRW 8 million, and cash and cash equivalents of FRW 0.5 million. In comparison with the previous year, inventory increased from FRW 4.5 million, trade receivables rose from FRW 5.5 million, and cash balances declined from FRW 1.2 million. Current liabilities consist of trade payables of FRW 4 million, up from FRW 3.2 million in the prior year, and a bank overdraft of FRW 2.5 million, compared with FRW 1 million previously.

Additional information indicates that all sales are made on credit, with standard credit terms of 75 days. Industry benchmarks show average inventory holding periods of 80 days, receivables collection periods of 60 days, and payables settlement periods of 60 days. Looking ahead, the company plans to increase its sales by 15 percent in the forthcoming year, a strategy that may place further pressure on working capital if current cash flow issues are not addressed.

Q18 a) What are Imena Manufacturing's current working capital ratios?

A Inventory days: 122; Receivables days: 97; Payables days: 81
B Inventory days: 92; Receivables days: 67; Payables days: 65
C Inventory days: 92; Receivables days: 67; Payables days: 75
D Inventory days: 80; Receivables days: 60; Payables days: 60

(2 Marks)

Q18 b) What is Imena Manufacturing's cash operating cycle?

A 84 days
B 138 days
C 80 days
D 300 days

(2 Marks)

Q18 c) Is Imena Manufacturing experiencing overtrading?

A The company is not overtrading as it is profitable
B The company is overtrading as evidenced by its working capital ratios
C The company is not overtrading but has inefficient working capital management
D The evidence is insufficient to determine if the company is overtrading

(2 Marks)

Q18 d) Based on your calculations, **what is the primary cause of Imena's cash flow problems?**

A Excessive inventory levels and poor receivables collection
B Inadequate profit margins and high operating costs
C Over-reliance on trade credit and supplier financing
D Seasonal fluctuations and cyclical demand patterns

(2 Marks)

Q18 e) If Imena proceeds with the planned 15% sales increase without improving working capital efficiency, **what would be the most likely outcome?**

A Improved cash position due to higher profit margins
B Worsened cash flow problems requiring additional external financing
C Neutral impact as increased sales will offset working capital needs
D Reduced working capital requirements due to economies of scale

(2 Marks)

SECTION C

QUESTION 19

Satuni Technologies is considering investing in a new manufacturing facility to produce advanced electronic components. The project requires an initial investment of FRW6,500,000 in machinery and equipment. The facility would be leased for 7 years at an annual cost of FRW750,000, payable at the beginning of each year.

The project is expected to generate sales of 50,000 units in year 1, increasing by 10% annually for years 2 and 3, then remaining constant from year 4 to year 7. The selling price is expected to be FRW200 per unit initially, increasing by 3% per annum due to product enhancements.

Variable production costs are estimated at FRW120 per unit in year 1, increasing by 4% per annum thereafter. Fixed operating costs (excluding lease payments) are expected to be FRW1,200,000 per annum.

The project would require an initial investment in working capital of FRW900,000, with additional investments of FRW150,000 in year 2 and FRW100,000 in year 3. All working capital would be fully recoverable at the end of year 7.

The equipment is expected to have a salvage value of FRW800,000 at the end of year 7. The company can claim capital allowances on the equipment at 25% on a reducing balance basis. The corporate tax rate is 30%, and tax is paid in the year in which profits arise.

Satuni Technologies has a cost of capital of 11%.

Required:

As a financial analyst, you are required to:

a) **Prepare a detailed cash flow forecast for the project, clearly showing the expected cash flows for each year and calculate the project's net present value (NPV) and advise whether Satuni Technologies should proceed with the investment.** (14 Marks)

b) **Calculate the project's internal rate of return (IRR) and explain its significance as an investment appraisal technique. How does your IRR calculation support or contradict your recommendation in part (a)?** (6 Marks)

(Total: 20 Marks)

QUESTION 20

Porari Pharmaceuticals Plc is currently reviewing its capital structure with the objective of optimizing its financing mix. The company's existing financial position shows a market value of equity of FRW 120 million, represented by 40 million ordinary shares trading at FRW 3.00 per share. In addition, the company has outstanding debt of FRW 30 million in the form of 5 percent bonds, which are currently trading at par. The most recent annual profit before interest and tax amounts to FRW 18 million, and the company is subject to a corporate tax rate of 30 percent. The firm's current price–earnings ratio is 8.0, its equity beta is 1.3, the prevailing risk-free rate is 3 percent, and the market risk premium is 5 percent.

To improve its capital structure, Porari Pharmaceuticals Plc is considering two alternative refinancing strategies. Under the first option, the company would issue new debt amounting to FRW 30 million at an interest rate of 6.5 percent and use the proceeds to repurchase existing shares at a price of FRW 3.30 per share. The second option involves issuing 10 million new ordinary shares at FRW 2.80 per share, with the proceeds used to redeem the existing FRW 30 million debt.

The company's overall objective is to maximize shareholder value while maintaining sufficient financial flexibility. In this regard, credit rating agencies have indicated that a debt-to-equity ratio exceeding 0.5 would likely trigger a downgrade in the company's credit rating, which would in turn increase future borrowing costs. This constraint is an important consideration in evaluating the proposed refinancing options.

Required:

a) Calculate the following for Porari Pharmaceuticals' current capital structure:

i) Weighted average cost of capital (WACC) (2 Marks)

ii) Earnings per share (EPS) (2 Marks)

iii) Current debt-to-equity ratio (2 Marks)

b) For each of the two refinancing options:

i) Calculate the new debt-to-equity ratio (2 Marks)

ii) Calculate the new WACC (3 Marks)

iii) Calculate the new EPS (3 Marks)

iv) Discuss the potential impact on the company's credit rating (2 Marks)

c) Based on your analysis, **recommend which option Porari Pharmaceuticals should pursue, providing clear justification for your recommendation.** (4 Marks)

(Total: 20 Marks)

End of question paper

Present Value Table

Present value of £1, that is (1 + r)^-n
where r = interest rate; n = number of periods until payment or receipt.

Periods		Interest rates (r)								
(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
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239
Periods		**Interest rates (r)**								
(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
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065

Annuity Table

Present value of an annuity of 1, ie [1-(1+r)^-n]/r
Where r = discount rate; n = number of periods.

Periods		Interest rates (r)								
(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
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606
Periods		**Interest rates (r)**								
(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
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675