FINAL	%	

UNISA

FIN2603/RFI2603

MAY/JUNE 2017

FINANCE FOR NON-FINANCIAL MANAGERS

STUDENT NUMBER									

IDENTITY NUMBER												

FOR USE BY EXAMINATION INVIGILATOR

Questions	Marks					
	Examiners					
	1			2		
SECTION A						
1						
SECTION B						
1						
2						
3						
4						
5						
Total						

Subject

Number of paper

Date of examination

Examination centre

WARNING

1 A candidate who without authorisation takes into the examination venue any book, document or object which could assist him in the examination and does not hand over such material to the invigilator before the official commencement of the examination will be guilty of infringing the University's examination regulations and will be liable to punishment as determined by Council

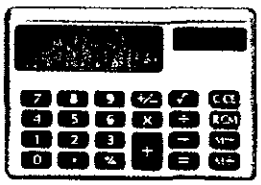
2 Rough work may be done only on the examination question paper and must be labelled as such

3 No notes may be made on any part of the body such as the hands or on any garment

4 This page/paper is the property of the University and under no circumstances may the candidate retain it or take it out of the examination venue

NB PLEASE COMPLETE THE ATTENDANCE REGISTER ON THE BACK PAGE, TEAR OFF AND HAND TO THE INVIGILATOR

UNIVERSITY EXAMINATIONS



UNIVERSITEITSEKSAMENS

UNISA university of south africa

FIN2603 (495029) May/June 2017

FINANCE FOR NON-FINANCIAL MANAGERS

Duration 2 Hours 70 Marks

EXAMINERS

FIRST	MR GPM GREBE
SECOND	MR MV NXUMALO
EXTERNAL	MS ME DELPORT

Use of a non-programmable pocket calculator is permissible.

Closed book examination.

This examination question paper remains the property of the University of South Africa and may not be removed from the examination venue

This paper consists of 20 pages, including two pages for rough work (p19-20) plus interest tables (p i-iv)

SECTION A counts 45 marks and **SECTION B** counts 25 marks
ANSWER ALL THE QUESTIONS IN BOTH SECTIONS.
NO ROUGH WORK WILL BE MARKED.

SECTION A: MULTIPLE-CHOICE QUESTIONS **(45 MARKS)**

1 The long-term financial goal of the firm may be achieved by .

1 maximising revenue and minimising expenses
2 minimising the cost of capital and maximising return (IRR)
3 maximising assets relative to liabilities
4 accelerating cash inflows

2 The primary short-term financial goal of the firm may be best achieved by

1 maximising revenue and minimising expenses
2 minimising the cost of capital and maximising return (IRR)
3 increasing expenses in order to reduce the firm's tax liability
4 accelerating cash inflows and delaying cash outflows

3. The statement of comprehensive income measures and it is also known as

1 revenue and gross profit, earnings-after-tax trial balance
2 gross profit, earnings before income and tax (EBIT) and net profit,Statement of financial performance
3 cost of goods sold and operating expenses, balance sheet
4 sales, EBIT and earnings-after-tax, cash flow statement

4 A decrease in sales revenue as a result of a strike is recorded by

1 crediting cash
2 crediting sales
3 debiting cash
4 debiting sales

5 One method often used by companies to ensure that management decisions are in the best interest of the shareholders is to

1 remove prerequisites
2 threaten to fire managers who do not performing adequately
3 tie management compensation to the performance of the company share price
4 tie management compensation to the level of earnings per share

6. ABC Manufacturers Ltd has to raise an additional R1 000 000 in equity The firm should ideally finance itself by means of

    1 R300 000 in cash, R100 000 in accounts receivable and R600 000 of inventory
    2 R900 000 in debentures, 10 000 ordinary shares at a par value of 100 cents each and R10 000 in retained earnings
    3 500 000 ordinary shares at a par value of 200 cents each
    4 R300 000 in debentures and 700 000 non-voting preference shares at 100 cents each

7 A firm's cash flow becomes more predictable as the

    1 current ratio increases
    2 return on owners' equity increases
    3 current liabilities decrease
    4 current assets decrease

Use the following information to answer questions 8 to 10
Capital Cup Ltd is a newly listed company on the JSE Limited

Sales	R650 000
Earnings after interest	R150 000
Tax	35%
Preference dividends due	R7 500
Preference shares issued	5 000
Ordinary shares issued	10 000

8 Calculate the earnings after tax for Capital Cup Ltd

    1 R 92 000
    2 R 97 500
    3 R119 000
    4 R120 000

9 Calculate the earnings per share (EPS) for Capital Cup Ltd

1 R5,20
2 R7,50
3 R9,00
4 R12,00

10 Calculate the net profit margin for Capital Cup Ltd

1. 10,40%
2 11,56%
3 12,67%
4 13,85%

11 If accounts receivable increase by R100, inventory increases by R200 and accounts payable increase by R400, net working capital would ..

1 decrease by R300
2 increase by R300
3 decrease by R100
4 increase by R100

12 At the operating breakeven point, .. equals zero.

1 variable cost
2. fixed cost
3 net profit after tax
4 earnings before interest and tax (EBIT)

Use the following information for Wembley Limited to answer questions 13 to 18

Opening inventory	R 70 000
Closing inventory	R 50 000
Cash	R 30 000
Accounts receivable	R 40 000
Long-term assets	R500 000
Accounts payable	R 50 000
Long-term debt	R300 000
Equity	R270 000
Sales	R400 000
Cost of goods sold	R200 000
Profit before tax	R 80 000
Tax	35%

13 The gross profit margin for Wembley Limited is closest to

1 20%
2 50%
3 100%
4 200%

14 The net profit margin for Wembley Limited is closest to

1 9%
2 11%
3 13%
4 20%

15 The current ratio for Wembley Limited is closest to

1 1,2
2 1,8
3 2,0
4 2,4

16 The inventory turnover for Wembley Limited is closest to

1 2,86 times p a
2 3,33 times p a
3 4,00 times p a
4 6,23 times p a

17 The average collection period for Wembley Limited is closest to (Assume 360 days per year)

1 36 days
2 80 days
3 180 days
4 360 days

18 The return on investment (ROI) for Wembley Limited is closest to

1 8,39%
2 16,77%
3 55,00%
4 none of the above

19 A firm can best improve its return on equity (ROE) by increasing its

1 sales and decreasing expenditure
2 asset turnover and financial leverage
3 net profit margin
4 net profit margin, asset turnover and financial leverage

20. Calculate the growth rate of the following stream of cash flows

2013 4 600

2012 3 000

2011 1 900

2010. 1 800

1 23%
2 36%
3. 43%
4 53%

21 Calculate the future value (FV) of R15 000 invested for six years at an interest rate of 8%, compounded semi-annually

1 R14 026
2 R14 106
3 R24 015
4 R26 734

22 Calculate the present value (PV) of R100 000 received nine years from today at an interest rate of 12% Interest is compounded monthly

1. R27 895
2 R34 142
3 R37 980
4 R43 998

23 How much should Alfred invest today at 9% interest per annum, compounded quarterly, to be able to buy a house worth R2 500 000 six years from today?

1 R 672 971,33
2 R1 115 564,17
3 R1 465 616,71
4 R1 954 322,19

24 Find the present value of the following stream of cash flows by assuming that the organisation has an opportunity cost of 11%

Years	**Amount (R)**
1–3	25 000
4–7	50 000

1 R 71 203,41
2 R100 268,41
3 R155 268,41
4 R174 516,94

25 If John invests R50 000 in a unit trust offering a rate of return of 17% per annum, calculate how long it will take for the investment to reach R200 000

1 9 years
2 10 years
3 11 years
4 13 years

26 If Gerard invests R8 000 at the beginning of each year at an interest rate of 8% over a six-year period, the future value of the investment would be

1 R58 687,43
2 R60 000,00
3 R63 382,42
4 R81 000,00

27. Bovest Ltd has determined its optimal capital structure, which comprises the following

Form of capital	Weight	After-tax cost
Long-term debt	60%	4%
Preference shares	20%	13%
Ordinary shares	20%	10%

The weighted average cost of capital is

1 5,3%
2. 7,0%
3 8,4%
4 9,1%

28 The after-tax cost of debt for a firm, which has a marginal tax rate of 35%, is 6% Calculate the before-tax cost of debt

1 6,0%
2 8,1%
3 9,2%
4 17,1%

29. The best way in which a firm may improve its profitability would involve

1 reducing expenditure on non-core business activities
2 employing fewer permanent staff and using contract workers during peak periods
3 increasing sales by means of improved marketing
4 selling all its non-core assets

33 Green Oak Ltd has made an initial investment of R500 000 in a new project The firm's cost of capital is 12% The investment is expected to generate the following cash inflows over the next five years

Year 1	R 50 000
Year 2	R 60 000
Year 3	R150 000
Year 4	R140 000
Year 5	R300 000

The profitability index (PI) is , therefore, the investment should

1 0,92, be undertaken
2 0,92, not be undertaken
3 1,09, be undertaken
4 1,09, not be undertaken

34 The present value of the cash flows of an investment is expected to total R180 000 The profitability index is calculated at 1,50. Calculate the initial investment

1 R120 000
2 R130 000
3 R140 000
4 R150 000

35 A firm with a cash conversion cycle of 50 days can stretch its average payment period from 15 days to 30 days. This will result in a/an

1 decrease of 15 days in the cash conversion cycle
2 increase of 10 days in the cash conversion cycle
3 decrease of 30 days in the cash conversion cycle
4 increase of 15 days in the cash conversion cycle

30 Which of the following statements are not true with *regards to* management accounting

1. Management accounting is internally focused.
2 Management accounting is future-orientated
3 Management accounting is more self-contained
4 Management accounting is multidisciplinary

31 William, the export manager of an international company, wishes to replace a machine five years from now with a new machine that will cost R1 000 000 in five years' time If equal end-of-year deposits are made into an account paying an interest of 9% per annum, calculate the size of each deposit

1 R 23 535,24
2 R 89 382,38
3 R123 546,23
4 R167 092,45

32. The financial manager is evaluating a proposal for a new project with the following cash flows

Year	Net cash flows
0	–R1 000 000
1	R 550 000
2	R 350 000
3	R 90 000

The payback period is

1 two years
2 between one and two years
3 three years
4 more than three years

41 Ben Johnson has arranged for a 60-day loan at an annual interest rate of 7,5% per annum If the loan amount is R1 000 000, how much interest will Mr Johnson pay in rand terms? (Assume a 360-day year)

1 R0
2 R12 500
3 R25 000
4 R75 000

42. Calculate the EOQ given the following information

18 506 units used annually, purchased at R55 per unit
Order cost is R336 per order
Carrying cost is 9% of inventory value

1 1 585 units
2 1 599 units
3 1 614 units
4 1 633 units

43 Credit terms of 3/10 net 30 are set for a business. These terms imply

1 a 3% discount if paid within 30 days, otherwise, the balance is due in 30 days
2 that the bond must be amortised before 3 October 2030
3 that the lease agreement expires on 10 March 2030
4 a 3% discount if paid within 10 days, otherwise, the balance is due in 30 days

44 Which one of the following statements is incorrect?

1 Relaxation of credit standards will cause an increase in sales volume
2 Relaxation of credit standards will cause an increase in accounts receivable
3 Relaxation of credit standards will cause a decrease in bad debt costs
4 Tightening of credit standards will cause a decrease in bad debt costs

45 Which stakeholders have the first claim on assets when a firm enters bankruptcy?

1 Creditors
2 Top management
3 Debtors
4 Shareholders

36 A company has a cash conversion cycle of 50 days. Annual outlays are R9 million and the cost of negotiated financing is 9% Calculate its annual savings if the company reduces its average age of inventory by 15 days Assume 360 days per year

1 R15 679
2 R37 778
3 R87 750
4 R99 500

37 The cost of a giving up a cash discount under the terms of sale 4/10 net 30 is (Assume a 360-day year)

1 37,11%
2 55,67%
3 75,00%
4 111,34%

38 Calculate the difference between the following two investment proposals.
(a) R1 401, 82 invested annually for five successive years at 9% per annum compound interest
(b) R5 209,22 invested for a period five years at 10% per annum compound interest

1 R0
2 R36,10
3 R80,25
4 R100,35

39 A firm has annual sales of 120 000 units Carrying costs as a percentage of inventory value is 13% The purchase price per unit is R200, while the fixed costs of placing an order is R20 per order The economic order quantity (EOQ) is units

1 245
2 320
3 430
4 897

40 Assume the sales of the above-mentioned firm are expected to increase by 25% and the purchase price per unit increases to R250 Calculate the new EOQ

1 160 units
2 430 units
3 580 units
4 660 units

REQUIRED

Prepare a cash budget for the months of February, March and April

	February (R)	March (R)	April (R)
Cash receipts			
Total cash receipts			
Cash payments			
Total cash payments			
Cash surplus/ (Deficit)			
Beginning cash balance			
Closing cash balance			

SECTION B: LONG QUESTIONS **[25 MARKS]**

QUESTION 1 **(10 MARKS)**

The forecasted sales for GVP Metals Limited for January to April 2016 appear in the table below.

Month	January	February	March	April
Sales (R)	200 000	250 000	300 000	350 000

- The company receives 50% of all sales in the month of sale, 30% one month later, and 15% two months later Five per cent of the company's sales are written off as bad debts
- Purchases are valued at 60% of each month's projected sales and are paid for in the month of purchase
- The following cash receipts and cash disbursements should also be taken into account
  - Rental income for January and February amounted to R12 000 per month, while a 20% increase for March and April are forecasted
  - Additional office space will be rented by the company from the 1st of March 2016, in order to accommodate future expansions. This will cost the company R20 000 per month
  - Depreciation on the company's vehicles amounts to R10 000 per month.
  - In April, the company made a cash contribution of R15 000 to a local charity
  - Telephone expenses vary each month The telephone costs for February, March and April are expected to be to R2 000, R1 800 and R1 900, respectively
  - Salaries are paid as commission, which is calculated at 11% of each month's sales value
  - In March, payment for delivery vehicles becomes due and the company needs to pay R15 000 to its supplier
  - The retrenchment of two employees in March cost the company R33 000
  - The closing cash balance on 31 January 2015 is R25 000

QUESTION 2 **(10 MARKS)**

Marx & Sons Inc considers investing in a new project The outlay of the project will cost R3 000 000 The financial manager of the company has estimated the cash inflows associated with this new project as follows

Year	Cash inflow
1	R 100 000
2	R 500 000
3	R 800 000
4	R 800 000
5	R1 500 000

The firm's cost of capital is 11%

2 1 Calculate the net present value (NPV) of the proposed project (4)

ROUGH WORK

QUESTION 3 **(5 MARKS)**

Use the following information for B&B Limited in order to answer the following questions

Expected sales (units)	1 500
Selling price per unit	R3 000
Variable cost per unit	R1 400
Total fixed cost	R600 000

3 1 Calculate the breakeven volume (3)

3 2 Calculate the breakeven value (R) (2)

Total [70 marks]

2 2 Calculate the internal rate of return (IRR) of the proposed project, rounded off to the nearest whole percentage (4)

2 3 Evaluate the acceptability of the proposed project based on your calculations of the NPV and IRR What recommendation would you make regarding the implementation of the project? (2)

ROUGH WORK (Will not be marked)

ROUGH WORK (Will not be marked)

Table 2: Future-value interest factors for a R1 annuity compounded at k per cent for n periods

$$FVIFA_{k,n} = \sum_{t=1}^{n} (1+k)^{t-1}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	25%	30%	35%
1	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
2	2 010	2 020	2 030	2 040	2 050	2 060	2 070	2 080	2 090	2 100	2 110	2 120	2 130	2 140	2 150	2 160	2 200	2 250	2 300	2 350
3	3 030	3 060	3 091	3 122	3 153	3 184	3 215	3 246	3 278	3 310	3 342	3 374	3 407	3 440	3 473	3 506	3 640	3 813	3 990	4 173
4	4 060	4 122	4 184	4 246	4 310	4 375	4 440	4 506	4 573	4 641	4 710	4 779	4 850	4 921	4 993	5 066	5 368	5 766	6 187	6 633
5	5 101	5 204	5 309	5 416	5 526	5 637	5 751	5 867	5 985	6 105	6 228	6 353	6 480	6 610	6 742	6 877	7 442	8 207	9 043	9 954
6	6 152	6 308	6 468	6 633	6 802	6 975	7 153	7 336	7 523	7 716	7 913	8 115	8 323	8 536	8 754	8 977	9 930	11 259	12 756	14 438
7	7 214	7 434	7 662	7 898	8 142	8 394	8 654	8 923	9 200	9 487	9 783	10 089	10 405	10 730	11 067	11 414	12 916	15 073	17 583	20 492
8	8 286	8 583	8 892	9 214	9 549	9 897	10 26	10 64	11 03	11 44	11 86	12 30	12 76	13 23	13 73	14 24	16 50	19 84	23 86	28 66
9	9 369	9 755	10 16	10 58	11 03	11 49	11 98	12 49	13 02	13 58	14 16	14 78	15 42	16 09	16 79	17 52	20 80	25 80	32 01	39 70
10	10 46	10 95	11 46	12 01	12 58	13 18	13 82	14 49	15 19	15 94	16 72	17 55	18 42	19 34	20 30	21 32	25 96	33 25	42 62	54 59
11	11 57	12 17	12 81	13 49	14 21	14 97	15 78	16 65	17 56	18 53	19 56	20 65	21 81	23 04	24 35	25 73	32 15	42 57	56 41	74 70
12	12 68	13 41	14 19	15 03	15 92	16 87	17 89	18 98	20 14	21 38	22 71	24 13	25 65	27 27	29 00	30 85	39 58	54 21	74 33	101 8
13	13 81	14 68	15 62	16 63	17 71	18 88	20 14	21 50	22 95	24 52	26 21	28 03	29 98	32 09	34 35	36 79	48 50	68 76	97 63	138 5
14	14 95	15 97	17 09	18 29	19 60	21 02	22 55	24 21	26 02	27 97	30 09	32 39	34 88	37 58	40 50	43 67	59 20	86 95	127 9	188 0
15	16 10	17 29	18 60	20 02	21 58	23 28	25 13	27 15	29 36	31 77	34 41	37 28	40 42	43 84	47 58	51 66	72 04	109 7	167 3	254 7
16	17 26	18 64	20 16	21 82	23 66	25 67	27 89	30 32	33 00	35 95	39 19	42 75	46 67	50.98	55 72	60 93	87 44	138 1	218 5	344 9
17	18 43	20 01	21 76	23 70	25 84	28 21	30 84	33 75	36 97	40 54	44 50	48 88	53 74	59 12	65 08	71 67	105 9	173 6	285 0	466 6
18	19 61	21 41	23 41	25 65	28 13	30 91	34 00	37 45	41 30	45 60	50 40	55 75	61 73	68 39	75 84	84 14	128 1	218 0	371 5	630.9
19	20 81	22 84	25 12	27 67	30 54	33 76	37 38	41 45	46 02	51 16	56 94	63 44	70 75	78 97	88 21	98 60	154 7	273 6	484 0	852 7
20	22 02	24 30	26 87	29 78	33 07	36 79	41 00	45 76	51 16	57 27	64 20	72 05	80 95	91 02	102 4	115 4	186 7	342 9	630 2	1152
21	23 24	25 78	28 68	31 97	35 72	39 99	44 87	50 42	56 76	64 00	72 27	81 70	92 47	104 8	118 8	134 8	225 0	429 7	820 2	1556
22	24 47	27 30	30 54	34 25	38 51	43 39	49 01	55 46	62 87	71 40	81 21	92 50	105 5	120 4	137 6	157 4	271 0	538 1	1067	2102
23	25 72	28 84	32 45	36 62	41 43	47 00	53 44	60 89	69 53	79 54	91 15	104 6	120 2	138 3	159 3	183 6	326 2	673 6	1388	2839
24	26 97	30 42	34 43	39 08	44 50	50 82	58 18	66 76	76 79	88 50	102 2	118 2	136 8	158 7	184 2	214 0	392 5	843 0	1806	3834
25	28 24	32 03	36 46	41 65	47 73	54 86	63 25	73 11	84 70	98 35	114 4	133 3	155 6	181 9	212 8	249 2	472 0	1055	2349	5177
30	34 78	40 57	47 58	56 08	66 44	79 06	94 46	113 3	136 3	164 5	199 0	241 3	293 2	356 8	434 7	530 3	1182	3227	8730	23222
35	41 66	49 99	60 46	73 65	90 32	111 4	138 2	172 3	215 7	271 0	341 6	431 7	546 7	693 6	881 2	1121	2948	9857	32423	*
40	48 89	60 40	75 40	95 03	120 8	154 8	199 6	259 1	337 9	442 6	581 8	767 1	1014	1342	1779	2361	7344	30089	*	*
45	56 48	71 89	92 72	121 0	159 7	212 7	285 7	386 5	525 9	718 9	986 6	1358	1874	2591	3585	4965	18281	91831	*	*
50	64 46	84 58	112 8	152 7	209 3	290 3	406 5	573 8	815 1	1164	1669	2400	3460	4995	7218	10436	45497	*	*	*

*FVIFA > 99999

Appendix A: Interest tables

Table 1: Future-value interest factors for R1 compounded at k per cent for n periods

$$FVIF_{k,n} = (1+k)^n$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	25%	30%	35%
1	1 010	1 020	1 030	1 040	1 050	1 060	1 070	1 080	1 090	1 100	1 110	1 120	1 130	1 140	1 150	1 160	1 200	1 250	1 300	1 350
2	1 020	1 040	1 061	1 082	1 103	1 124	1 145	1 166	1 188	1 210	1 232	1 254	1 277	1 300	1 323	1 346	1 440	1 563	1 690	1 823
3	1 030	1 061	1 093	1 125	1 158	1 191	1 225	1 260	1 295	1 331	1 368	1 405	1 443	1 482	1 521	1 561	1 728	1 953	2 197	2 460
4	1 041	1 082	1 126	1 170	1 216	1 262	1 311	1 360	1 412	1 464	1 518	1 574	1 630	1 689	1 749	1 811	2 074	2 441	2 856	3 322
5	1 051	1 104	1 159	1 217	1 276	1 338	1 403	1 469	1 539	1 611	1 685	1 762	1 842	1 925	2 011	2 100	2 488	3 052	3 713	4 484
6	1 062	1 126	1 194	1 265	1 340	1 419	1 501	1 587	1 677	1 772	1 870	1 974	2 082	2 195	2 313	2 436	2 986	3 815	4 827	6 053
7	1 072	1 149	1 230	1 316	1 407	1 504	1 606	1 714	1 828	1 949	2 076	2 211	2 353	2 502	2 660	2 826	3 583	4 768	6 275	8 172
8	1 083	1 172	1 267	1 369	1 477	1 594	1 718	1 851	1 993	2 144	2 305	2 476	2 658	2 853	3 059	3 278	4 300	5 960	8 157	11 03
9	1 094	1 195	1 305	1 423	1 551	1 689	1 838	1 999	2 172	2 358	2 558	2 773	3 004	3 252	3 518	3 803	5 160	7 451	10 60	14 89
10	1 105	1 219	1 344	1 480	1 629	1 791	1 967	2 159	2 367	2 594	2 839	3 106	3 395	3 707	4 046	4 411	6 192	9 313	13 79	20 11
11	1 116	1 243	1 384	1 539	1 710	1 898	2 105	2 332	2 580	2 853	3 152	3 479	3 836	4 226	4 652	5 117	7 430	11 64	17 92	27 14
12	1 127	1 268	1 426	1 601	1 796	2 012	2 252	2 518	2 813	3 138	3 498	3 896	4 335	4 818	5 350	5 936	8 916	14 55	23 30	36 64
13	1 138	1 294	1 469	1 665	1 886	2 133	2 410	2 720	3 066	3 452	3 883	4 363	4 898	5 492	6 153	6 886	10 70	18 19	30 29	49 47
14	1 149	1 319	1 513	1 732	1 980	2 261	2 579	2 937	3 342	3 797	4 310	4 887	5 535	6 261	7 076	7 988	12 84	22 74	39 37	66 78
15	1 161	1 346	1 558	1 801	2 079	2 397	2 759	3 172	3 642	4 177	4 785	5 474	6 254	7 138	8 137	9 266	15 41	28 42	51 19	90 16
16	1 173	1 373	1 605	1 873	2 183	2 540	2 952	3 426	3 970	4 595	5 311	6 130	7 067	8 137	9 358	10 75	18 49	35 53	66 54	121 7
17	1 184	1 400	1 653	1 948	2 292	2 693	3 159	3 700	4 328	5 054	5 895	6 866	7 986	9 276	10 76	12 47	22 19	44 41	86 50	164 3
18	1 196	1 428	1 702	2 026	2 407	2 854	3 380	3 996	4 717	5 560	6 544	7 690	9 024	10 58	12 38	14 46	26 62	55 51	112 5	221 8
19	1 208	1 457	1 754	2 107	2 527	3 026	3 617	4 316	5 142	6 116	7 263	8 613	10 20	12 06	14 23	16 78	31 95	69 39	146 2	299 5
20	1 220	1 486	1 806	2 191	2 653	3 207	3 870	4 661	5 604	6 727	8 062	9 646	11 52	13 74	16 37	19 46	38 34	86 74	190 0	404 3
21	1 232	1 516	1 860	2 279	2 786	3 400	4 141	5 034	6 109	7 400	8 949	10 80	13 02	15 67	18 82	22 57	46 01	108 4	247 1	545 8
22	1 245	1 546	1 916	2 370	2 925	3 604	4 430	5 437	6 659	8 140	9 934	12 10	14 71	17 86	21 64	26 19	55 21	135 5	321 2	736 8
23	1 257	1 577	1 974	2 465	3 072	3 820	4 741	5 871	7 258	8 954	11 03	13 55	16 63	20 36	24 89	30 38	66 25	169 4	417 5	994 7
24	1 270	1 608	2 033	2 563	3 225	4 049	5 072	6 341	7 911	9 850	12 24	15 18	18 79	23 21	28 63	35 24	79 50	211 8	542 8	1343
25	1 282	1 641	2 094	2 666	3 386	4 292	5 427	6 848	8 623	10 83	13 59	17 00	21 23	26 46	32 92	40 87	95 40	264 7	705 6	1813
30	1 348	1 811	2 427	3 243	4 322	5 743	7 612	10 06	13 27	17 45	22 89	29 96	39 12	50 95	66 21	85 85	237 4	807 8	2620	8129
35	1 417	2 000	2 814	3 946	5 516	7 686	10 68	14 79	20 41	28 10	38 57	52 80	72 07	98 10	133 2	180 3	590 7	2465	9728	36449
40	1 489	2 208	3 262	4 801	7 040	10 29	14 97	21 72	31 41	45 26	65 00	93 05	132 8	188 9	267 9	378 7	1470	7523	36119	*
45	1 565	2 438	3 782	5 841	8 985	13 76	21 00	31 92	48 33	72 89	109 5	164 0	244 6	363 7	538 8	795 4	3657	22959	*	*
50	1 645	2 692	4 384	7 107	11 47	18 42	29 46	46 90	74 36	117 4	184 6	289 0	450 7	700 2	1084	1671	9100	70065	*	*

FVIF > 99999

Table 4 Present-value interest factors for a R1 annuity discounted at k per cent for n periods

$$PVIFA_{kn} = \sum_{t=1}^{n} \frac{1}{(1+k)^t}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	25%	30%	35%
1	0 990	0 980	0 971	0 962	0 952	0.943	0 935	0 926	0 917	0 909	0 901	0 893	0.885	0 877	0.870	0 862	0 833	0 800	0.769	0 741
2	1 970	1 942	1 913	1 886	1 859	1 833	1 808	1 783	1 759	1 736	1 713	1 690	1 668	1 647	1 626	1 605	1 528	1 440	1 361	1 289
3	2 941	2 884	2 829	2 775	2 723	2 673	2 624	2 577	2 531	2 487	2 444	2 402	2 361	2 322	2 283	2 246	2 106	1 952	1 816	1 696
4	3 902	3 808	3 717	3 630	3 546	3 465	3 387	3 312	3 240	3 170	3 102	3 037	2 974	2 914	2 855	2 798	2 589	2 362	2 166	1 997
5	4 853	4 713	4 580	4 452	4 329	4 212	4 100	3 993	3 890	3 791	3 696	3 605	3 517	3 433	3 352	3 274	2 991	2 689	2 436	2 220
6	5 795	5 601	5 417	5 242	5 076	4 917	4 767	4 623	4 486	4 355	4 231	4 111	3 998	3 889	3 784	3 685	3 326	2 951	2 643	2 385
7	6 728	6 472	6 230	6 002	5 786	5 582	5 389	5 206	5 033	4 868	4 712	4 564	4 423	4 288	4 160	4 039	3 605	3 161	2 802	2 508
8	7 652	7 325	7 020	6 733	6 463	6 210	5 971	5 747	5 535	5 335	5 146	4 968	4 799	4 639	4 487	4 344	3 837	3 329	2 925	2 598
9	8 566	8 162	7 786	7 435	7 108	6 802	6 515	6 247	5 995	5 759	5 537	5 328	5 132	4 946	4 772	4 607	4 031	3 463	3 019	2 665
10	9 471	8 983	8 530	8 111	7 722	7 360	7 024	6 710	6 418	6 145	5 889	5 650	5 426	5 216	5 019	4 833	4 192	3 571	3 092	2 715
11	10 37	9 787	9 253	8 760	8 306	7 887	7 499	7 139	6 805	6 495	6 207	5 938	5 687	5 453	5 234	5 029	4 327	3 656	3 147	2 752
12	11 26	10 58	9 954	9 385	8 863	8 384	7 943	7 536	7 161	6 814	6 492	6 194	5 918	5 660	5 421	5 197	4 439	3 725	3 190	2 779
13	12 13	11 35	10 63	9 986	9 394	8 853	8 358	7 904	7 487	7 103	6 750	6 424	6 122	5 842	5 583	5 342	4 533	3 780	3 223	2 799
14	13 00	12 11	11 30	10 56	9 899	9 295	8 745	8 244	7 786	7 367	6 982	6 628	6 302	6 002	5 724	5 468	4 611	3 824	3 249	2 814
15	13 87	12 85	11 94	11 12	10 38	9 712	9 108	8 559	8 061	7 606	7 191	6 811	6 462	6 142	5 847	5 575	4 675	3 859	3 268	2 825
16	14 72	13 58	12 56	11 65	10 84	10 11	9 447	8 851	8 313	7 824	7 379	6 974	6 604	6 265	5 954	5 668	4 730	3 887	3 283	2 834
17	15 56	14 29	13 17	12 17	11 27	10 48	9 763	9 122	8 544	8 022	7 549	7 120	6 729	6 373	6 047	5 749	4 775	3 910	3 295	2 840
18	16 40	14 99	13 75	12 66	11 69	10 83	10 06	9 372	8 756	8 201	7 702	7 250	6 840	6 467	6 128	5 818	4 812	3 928	3 304	2 844
19	17 23	15 68	14 32	13 13	12 09	11 16	10 34	9 604	8 950	8 365	7 839	7 366	6 938	6 550	6 198	5 877	4 843	3 942	3 311	2 848
20	18 05	16 35	14 88	13 59	12 46	11 47	10 59	9 818	9 129	8 514	7 963	7 469	7 025	6 623	6 259	5 929	4 870	3 954	3 316	2 850
21	18 86	17 01	15 42	14 03	12 82	11 76	10 84	10 02	9 292	8 649	8 075	7 562	7 102	6 687	6 312	5 973	4 891	3 963	3 320	2 852
22	19 66	17 66	15 94	14 45	13 16	12 04	11 06	10 20	9 442	8 772	8 176	7 645	7 170	6 743	6 359	6 011	4 909	3 970	3 323	2 853
23	20 46	18 29	16 44	14 86	13 49	12 30	11 27	10 37	9 580	8 883	8 266	7 718	7 230	6 792	6 399	6 044	4 925	3 976	3 325	2 854
24	21 24	18 91	16 94	15 25	13 80	12 55	11 47	10 53	9 707	8 985	8 348	7 784	7 283	6 835	6 434	6 073	4 937	3 981	3 327	2 855
25	22 02	19 52	17 41	15 62	14 09	12 78	11 65	10 67	9 823	9 077	8 422	7 843	7 330	6 873	6 464	6 097	4 948	3 985	3 329	2 856
30	25 81	22 40	19 60	17 29	15 37	13 76	12 41	11 26	10 27	9 427	8 694	8 055	7 496	7 003	6 566	6 177	4 979	3 995	3 332	2 857
35	29 41	25 00	21 49	18 66	16 37	14 50	12 95	11 65	10 57	9 644	8 855	8 176	7 586	7 070	6 617	6 215	4 992	3 998	3 333	2 857
40	32 83	27 36	23 11	19 79	17 16	15 05	13 33	11 92	10 76	9 779	8 951	8 244	7 634	7 105	6 642	6 233	4 997	3 999	3 333	2 857
45	36 09	29 49	24 52	20 72	17 77	15 46	13 61	12 11	10 88	9 863	9 008	8 283	7 661	7 123	6 654	6 242	4 999	4 000	3 333	2 857
50	39 20	31 42	25 73	21 48	18 26	15 76	13 80	12 23	10 96	9 915	9 042	8 304	7 675	7 133	6 661	6 246	4 999	4 000	3 333	2 857

Table 3 Present-value interest factors for R1 discounted at k per cent for n periods

$$PVIF_{kn} = \frac{1}{(1+k)^n}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	25%	30%	35%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.833	0.800	0.769	0.741
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783	0.769	0.756	0.743	0.694	0.640	0.592	0.549
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693	0.675	0.658	0.641	0.579	0.512	0.455	0.406
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613	0.592	0.572	0.552	0.482	0.410	0.350	0.301
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.543	0.519	0.497	0.476	0.402	0.328	0.269	0.223
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480	0.456	0.432	0.410	0.335	0.262	0.207	0.165
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.425	0.400	0.376	0.354	0.279	0.210	0.159	0.122
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.376	0.351	0.327	0.305	0.233	0.168	0.123	0.091
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.333	0.308	0.284	0.263	0.194	0.134	0.094	0.067
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295	0.270	0.247	0.227	0.162	0.107	0.073	0.050
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350	0.317	0.287	0.261	0.237	0.215	0.195	0.135	0.086	0.056	0.037
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	0.286	0.257	0.231	0.208	0.187	0.168	0.112	0.069	0.043	0.027
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	0.258	0.229	0.204	0.182	0.163	0.145	0.093	0.055	0.033	0.020
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263	0.232	0.205	0.181	0.160	0.141	0.125	0.078	0.044	0.025	0.015
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	0.209	0.183	0.160	0.140	0.123	0.108	0.065	0.035	0.020	0.011
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218	0.188	0.163	0.141	0.123	0.107	0.093	0.054	0.028	0.015	0.008
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198	0.170	0.146	0.125	0.108	0.093	0.080	0.045	0.023	0.012	0.006
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180	0.153	0.130	0.111	0.095	0.081	0.069	0.038	0.018	0.009	0.005
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164	0.138	0.116	0.098	0.083	0.070	0.060	0.031	0.014	0.007	0.003
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149	0.124	0.104	0.087	0.073	0.061	0.051	0.026	0.012	0.005	0.002
21	0.811	0.660	0.538	0.439	0.359	0.294	0.242	0.199	0.164	0.135	0.112	0.093	0.077	0.064	0.053	0.044	0.022	0.009	0.004	0.002
22	0.803	0.647	0.522	0.422	0.342	0.278	0.226	0.184	0.150	0.123	0.101	0.083	0.068	0.056	0.046	0.038	0.018	0.007	0.003	0.001
23	0.795	0.634	0.507	0.406	0.326	0.262	0.211	0.170	0.138	0.112	0.091	0.074	0.060	0.049	0.040	0.033	0.015	0.006	0.002	0.001
24	0.788	0.622	0.492	0.390	0.310	0.247	0.197	0.158	0.126	0.102	0.082	0.066	0.053	0.043	0.035	0.028	0.013	0.005	0.002	0.001
25	0.780	0.610	0.478	0.375	0.295	0.233	0.184	0.146	0.116	0.092	0.074	0.059	0.047	0.038	0.030	0.024	0.010	0.004	0.001	0.001
30	0.742	0.552	0.412	0.308	0.231	0.174	0.131	0.099	0.075	0.057	0.044	0.033	0.026	0.020	0.015	0.012	0.004	0.001	*	*
35	0.706	0.500	0.355	0.253	0.181	0.130	0.094	0.068	0.049	0.036	0.026	0.019	0.014	0.010	0.008	0.006	0.002	*	*	*
40	0.672	0.453	0.307	0.208	0.142	0.097	0.067	0.046	0.032	0.022	0.015	0.011	0.008	0.005	0.004	0.003	0.001	*	*	*
45	0.639	0.410	0.264	0.171	0.111	0.073	0.048	0.031	0.021	0.014	0.009	0.006	0.004	0.003	0.002	0.001	0.000	*	*	*
50	0.608	0.372	0.228	0.141	0.087	0.054	0.034	0.021	0.013	0.009	0.005	0.003	0.002	0.001	0.001	0.001	*	*	*	*

* PVIF = 000 when rounded off to three decimal places

Tear

attendance register (university copy) UNISA

Fill-in/MCQ

Examination period

Student number

Surname

First Names

Subject

Code of paper — Number of paper

Centre Date

This is to certify that I have read the rules governing the examinations as set out on the inside cover of this examination answer book and in the examination instructions

That the information supplied by me in this answer book is correct and valid

I undertake to adhere to the procedures, rules and regulations of the University of South Africa as published in the official brochures

Signature of candidate

ID Number

Batch No
28092015MCQ

Signature of invigilator

UNISA invigilator's personnel number

NOTE Not a valid document if not completed by the Invigilator

Tear

attendance register (student copy) UNISA

Fill-in/MCQ

Examination period

Student number

Surname

First Names

Subject

Code of paper — Number of paper

Centre Date

This is to certify that I have read the rules governing the examinations as set out on the inside cover of this examination answer book and in the examination instructions

That the information supplied by me in this answer book is correct and valid

I undertake to adhere to the procedures, rules and regulations of the University of South Africa as published in the official brochures

Signature of candidate

ID Number

Batch No
28092015MCQ

Signature of invigilator

UNISA invigilator s personnel number

NOTE Not a valid document if not completed by the Invigilator

UNIVERSITY OF SOUTH AFRICA UNISA university of south africa **UNIVERSITEIT VAN SUID-AFRIKA**

EXAMINATION MARK READING SHEET — EKSAMEN-MERKLEESBLAD

PART 1 (GENERAL/ALGEMEEN) DEEL 1

1 STUDY UNIT e g PSY100-X / STUDIE-EENHEID bv PSY100-X

3 INITIALS AND SURNAME / VOORLETTERS EN VAN

4 DATE OF EXAMINATION / DATUM VAN EKSAMEN

2 PAPER NUMBER / VRAESTELNOMMER

5 EXAMINATION CENTRE (E G PRETORIA) / EKSAMENSENTRUM (BV PRETORIA)

6 STUDENT NUMBER / STUDENTENOMMER

8 UNIQUE PAPER NO / UNIEKE VRAESTEL NR

7 9

For use by examination invigilator

Vir gebruik deur eksamenopsiener

IMPORTANT

1 USE ONLY AN HB PENCIL TO COMPLETE THIS SHEET
2 MARK LIKE THIS
3 CHECK THAT YOUR INITIALS AND SURNAME HAS BEEN FILLED IN CORRECTLY
4 ENTER YOUR STUDENT NUMBER FROM LEFT TO RIGHT
5 CHECK THAT YOUR STUDENT NUMBER HAS BEEN FILLED IN CORRECTLY
6 CHECK THAT THE UNIQUE NUMBER HAS BEEN FILLED IN CORRECTLY
7 CHECK THAT ONLY ONE ANSWER PER QUESTION HAS BEEN MARKED
8 DO NOT FOLD

BELANGRIK

1 GEBRUIK SLEGS N HB POTLOOD OM HIERDIE BLAD TE VOLTOOI
2 MERK AS VOLG
3 KONTROLEER DAT U VOORLETTERS EN VAN REG INGEVUL IS
4 VUL U STUDENTENOMMER VAN LINKS NA REGS IN
5 KONTROLEER DAT U DIE KORRFKTE STUDENTENOMMER VERSTREK HET
6 KONTROLEER DAT DIE UNIEKE NOMMER REG INGEVUL IS
7 MAAK SEKER DAT NET EEN ALTERNATIEF PER VRAAG GEMERK IS
8 MOENIE VOU,NIE

PART 2 (ANSWERS/ANTWOORDE) DEEL 2

10

1	c1 c2 c3 c4 c5	36	c1 c2 c3 c4 c5	71	c1 c2 c3 c4 c5	106	c1 c2 c3 c4 c5
2	c1 c2 c3 c4 c5	37	c1 c2 c3 c4 c5	72	c1 c2 c3 c4 c5	107	c1 c2 c3 c4 c5
3	c1 c2 c3 c4 c5	38	c1 c2 c3 c4 c5	73	c1 c2 c3 c4 c5	108	c1 c2 c3 c4 c5
4	c1 c2 c3 c4 c5	39	c1 c2 c3 c4 c5	74	c1 c2 c3 c4 c5	109	c1 c2 c3 c4 c5
5	c1 c2 c3 c4 c5	40	c1 c2 c3 c4 c5	75	c1 c2 c3 c4 c5	110	c1 c2 c3 c4 c5
6	c1 c2 c3 c4 c5	41	c1 c2 c3 c4 c5	76	c1 c2 c3 c4 c5	111	c1 c2 c3 c4 c5
7	c1 c2 c3 c4 c5	42	c1 c2 c3 c4 c5	77	c1 c2 c3 c4 c5	112	c1 2 c3 c4 c5
8	c1 c2 c3 c4 c5	43	c1 c2 c3 c4 c5	78	c1 c2 c3 c4 c5	113	c1 c2 c3 c4 c5
9	c1 c2 c3 c4 c5	44	c1 c2 c3 c4 c5	79	c1 c2 c3 c4 c5	114	c1 c2 c3 c4 c5
10	c1 c2 c3 c4 c5	45	c1 c2 c3 c4 c5	80	c1 c2 c3 c4 c5	115	c1 2 c3 c4 c5
11	c1 c2 c3 c4 c5	46	c1 c2 c3 c4 c5	81	c1 c2 c3 c4 c5	116	c1 2 c3 c4 c5
12	c1 c2 c3 c4 c5	47	c1 c2 c3 c4 c5	82	c1 c2 c3 c4 c5	117	c1 c2 c3 c4 c5
13	c1 c2 c3 c4 c5	48	c1 c2 c3 c4 c5	83	c1 c2 c3 c4 c5	118	c1 c2 c3 c4 c5
14	c1 c2 c3 c4 c5	49	c1 c2 c3 c4 c5	84	c1 c2 c3 c4 c5	119	c1 c2 c3 c4 c5
15	c1 c2 c3 c4 c5	50	c1 c2 c3 c4 c5	85	c1 c2 c3 c4 c5	120	c1 2 c3 c4 c5
16	c1 c2 c3 c4 c5	51	c1 c2 c3 c4 c5	86	c1 c2 c3 c4 c5	121	c1 c2 c3 c4 c5
17	c1 c2 c3 c4 c5	52	c1 c2 c3 c4 c5	87	c1 c2 c3 c4 c5	122	c1 2 c3 c4 c5
18	c1 c2 c3 c4 c5	53	c1 c2 c3 c4 c5	88	c1 c2 c3 c4 c5	123	c1 c2 c3 c4 c5
19	c1 c2 c3 c4 c5	54	c1 c2 c3 c4 c5	89	c1 c2 c3 c4 c5	124	c1 c2 c3 c4 c5
20	c1 c2 c3 c4 c5	55	c1 c2 c3 c4 c5	90	c1 c2 c3 c4 c5	125	c1 c2 c3 c4 c5
21	c1 c2 c3 c4 c5	56	c1 c2 c3 c4 c5	91	c1 c2 c3 c4 c5	126	c1 c2 c3 c4 c5
22	c1 c2 c3 c4 c5	57	c1 c2 c3 c4 c5	92	c1 c2 c3 c4 c5	127	c1 c2 c3 c4 c5
23	c1 c2 c3 c4 c5	58	c1 c2 c3 c4 c5	93	c1 c2 c3 c4 c5	128	c1 c2 c3 c4 c5
24	c1 c2 c3 c4 c5	59	c1 c2 c3 c4 c5	94	c1 c2 c3 c4 c5	129	c1 c2 c3 c4 c5
25	c1 c2 c3 c4 c5	60	c1 c2 c3 c4 c5	95	c1 c2 c3 c4 c5	130	c1 c2 c3 c4 c5
26	c1 c2 c3 c4 c5	61	c1 c2 c3 c4 c5	96	c1 c2 c3 c4 c5	131	c1 c2 c3 c4 c5
27	c1 c2 c3 c4 c5	62	c1 c2 c3 c4 c5	97	c1 c2 c3 c4 c5	132	c1 c2 c3 c4 c5
28	c1 c2 c3 c4 c5	63	c1 c2 c3 c4 c5	98	c1 c2 c3 c4 c5	133	c1 2 c3 c4 c5
29	c1 c2 c3 c4 c5	64	c1 c2 c3 c4 c5	99	c1 c2 c3 c4 c5	134	c1 c2 c3 c4 c5
30	c1 c2 c3 c4 c5	65	c1 c2 c3 c4 c5	100	c1 c2 c3 c4 c5	135	c1 c2 c3 c4 c5
31	c1 c2 c3 c4 c5	66	c1 c2 c3 c4 c5	101	c1 c2 c3 c4 c5	136	c1 c2 c3 c4 c5
32	c1 c2 c3 c4 c5	67	c1 c2 c3 c4 c5	102	c1 c2 c3 c4 c5	137	c1 c2 c3 c4 c5
33	c1 c2 c3 c4 c5	68	c1 c2 c3 c4 c5	103	c1 c2 c3 c4 c5	138	c1 c2 c3 c4 c5
34	c1 c2 c3 c4 c5	69	c1 c2 c3 c4 c5	104	c1 c2 c3 c4 c5	139	c1 c2 c3 c4 c5
35	c1 c2 c3 c4 c5	70	c1 c2 c3 c4 c5	105	c1 c2 c3 c4 c5	140	c1 c2 c3 c4 c5

MARK READING SHEET INSTRUCTIONS

Your mark reading sheet is marked by computer and should therefore be filled in thoroughly and correctly

USE ONLY AN HB PENCIL TO COMPLETE YOUR MARK READING SHEET

PLEASE DO NOT FOLD OR DAMAGE YOUR MARK READING SHEET

Consult the illustration of a mark reading sheet on the reverse of this page and follow the instructions step by step when working on your sheet

Instruction numbers ❶ to ❿ refer to spaces on your mark reading sheet which you should fill in as follows

❶ Write your paper code in these eight squares, for instance

P	S	Y	1	0	0	-	X

❷ The paper number pertains only to first-level courses consisting of two papers

WRITE | 0 | 1 | for the first paper and | 0 | 2 | for the second If only one paper, then leave blank

❸ Fill in your initials and surname

❹ Fill in the date of the examination

❺ Fill in the name of the examination centre

❻ WRITE the digits of your student number HORIZONTALLY (from left to right) Begin by filling in the first digit of your student number in the first square on the left, then fill in the other digits, each one in a separate square

❼ In each vertical column mark the digit that corresponds to the digit in your student number as follows [-]

❽ WRITE your unique paper number HORIZONTALLY
NB Your unique paper number appears at the top of your examination paper and consists only of digits (e g 403326)

❾ In each vertical column mark the digit that corresponds to the digit number in your unique paper number as follows [-]

❿ Question numbers 1 to 140 indicate corresponding question numbers in your examination paper The five spaces with digits 1 to 5 next to each question number indicate an alternative answer to each question The spaces of which the number correspond to the answer you have chosen for each question and should be marked as follows [-]

♦ For official use by the invigilator Do not fill in any information here