higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

INFORMATION PROCESSING N4

17 May 2021

This marking guideline consists of 29 pages.

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GENERAL REMARKS

ACCURACY ERRORS must be indicated with a RED /. REPETITIVE accuracy errors must be indicated with a RED CIRCLE.

DISPLAY ERRORS must be indicated with a BLUE X. REPETITIVE display errors must be indicated with a BLUE CIRCLE.

Candidates cannot fail because they could not complete or pass the timed accuracy test.

At the end of the timed accuracy test indicate the speed obtained with pass 35 wpm/pass 40 wpm/fail where applicable in the following way:

Pass 35 wpm/Pass 40 wpm/Fail; Errors; Mark

On the front of the folder, directly next to the mark obtained for QUESTION 1, indicate as follows:

Pass 35 wpm/Pass 40 wpm/Fail

If the candidate did not hand in QUESTION 1, on the cover of the folder, indicate by drawing a line through the block for the mark next to QUESTION 1 and writing Fail in the appropriate positions.

On the cover of the folder, just below the circle for the marks obtained, indicate:

Pass 35 wpm/Pass 40 wpm/Fail

Should a candidate fail the examination (less than 40%) and pass the timed accuracy test, the word Fail replaces the Pass 35 wpm/Pass 40 wpm, as a candidate cannot fail the question paper as a whole and get recognition for the wpm.

The mark for typing technique (200) is added to the word processing mark (100) to obtain a mark out of 300, which is converted to a mark out of 100 (percentage). This mark must be sent to the National Department.

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SECTION A: TYPING TECHNIQUE

QUESTION 1 – MARKING SCHEDULE – TIMED ACCURACY TEST						
WPM	**35**	**40**		**WPM**	**35**	**40**
ERRORS				**ERRORS**		
1	**19**	**19**		**29**		**3**
2	**19**	**19**		**30**		**2**
3	**18**	**18**		**31**		**1**
4	**17**	**18**		**32**		**0**
5	**17**	**17**				
6	**16**	**16**				
7	**15**	**16**				
8	**15**	**15**				
9	**14**	**15**				
10	**13**	**14**				
11	**12**	**13**				
12	**12**	**13**				
13	**11**	**12**				
14	**10**	**12**				
15	**10**	**11**				
16	**9**	**10**				
17	**8**	**10**				
18	**8**	**9**				
19	**7**	**9**				
20	**6**	**8**				
21	**6**	**7**				
22	**5**	**7**				
23	**4**	**6**				
24	**4**	**6**				
25	**3**	**5**				
26	**2**	**4**				
27	**1**	**4**				
28	**0**	**3**				

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QUESTION 1 (CONTINUED)

MARK ACCURACY ERRORS ONLY. MARK WITH CARE AS IT MAKES A DIFFERENCE TO THE RESULTS. USE THE ENCLOSED DEPARTMENTAL SCHEDULE.

Indicate accuracy errors with a red slash (/).

One or more incorrect characters in a word – 1 error.

Do not penalise for incorrect margins.

Do not penalise for incorrect line spacing.

Do not penalise for incorrect hyphenation.

Do not penalise for incorrect capital/small letters.

Do not penalise for incorrect letter spaces.

Do not penalise for incorrect alignment.

Do not penalise for display errors.

Do not penalise if a whole line or paragraph is left out and keyed in in a different position.

When the exact same word is repeatedly keyed in incorrectly, it is penalised once only per question. Thereafter, it is encircled as a repetitive error.

Omission of words: Count the first 5 strokes and thereafter every 10 strokes as 1 error each. If the last few strokes at the end are five or more, count as another error. If the last few strokes at the end are fewer than five, ignore.

If 35 wpm is not completed, count back as indicated in the marking guideline.

The highest mark obtained must be indicated. The highest speed passed must be indicated.

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QUESTION 1 (CONTINUED)

The fourth industrial revolution heralds a series of social, political, cultural and economic upheavals that will unfold over the twenty-first century. Building on the widespread availability of digital technologies that were the result of the third industrial or digital revolution, the fourth industrial revolution will be driven largely by the convergence of digital, biological and physical innovations.

Like the first industrial revolution, which lead to steam-powered factories, the second industrial revolution, which had to do with mass production and manufacturing, and the third industrial revolution was the beginning of the digitisation, the fourth industrial revolution technologies has to do with artificial intelligence, genome editing, augmented reality, robotics and three-D printing are rapidly changing the way humans create, exchange and distribute value.

As occurred in the previous revolutions, this will profoundly transform institutions, industries and individuals. More importantly, this revolution will be guided by the choices that people make today. The world in fifty to hundred years from now will owe a lot of its character to how we think about investing in and deploying these powerful new technologies.

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QUESTION 1 (CONTINUED)

It is important to appreciate that the fourth industrial revolution involves a systemic change across many sectors and aspects of human life. The crosscutting impacts of emerging technologies are even more important than the exc|iting capa|bilities t|hey repres|ent. The |result of |all this i|s societal| transform|ation on a| global sc|ale. By a|ffecting t|he incenti|ves, rules| and norms| of econom|ic life, i|t transfor|ms how we |communicat|e, learn, |entertain |ourselves |and relate| to one ano|ther and h|ow we unde|rstand

28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

35 wpm

QUESTION 1 (CONTINUED)

It is important to appreciate that the fourth industrial revolution involves a systemic change across many sectors and aspects of human life. The crosscutting impacts of emerging technologies are even more important than the exciting capabilities they represent. The result of all this is societal transformation on a global scale. By affecting the incentives, rules and norms of economic life, it transforms

32 31 30 29
how we communicate, learn, |entertain |ourselves |and relate|
28 27 26 25 24
to one an|other and |how we und|erstand ou|rselves as| human
23
bei|ngs.

22 21 20 19 18 17
Fur|thermore, |the sense |that new t|echnologie|s are bein|g
16 15 14 13 12
develope|d and impl|emented at| an increa|singly rap|id pace
11 10 9 8 7
ha|s an impac|t on human| identitie|s, communi|ties and
6 5 4 3 2 1
p|olitical s|tructures.| As a res|ult our re|sponsibili|ties → **40 wpm**

20	-	20

[20]

TYPING TECHNIQUE				
SCHEDULE – ACCURACY – QUESTIONS 2-5				
-4 MARKS DEDUCTED PER ERROR – ACCURACY – RED				
MARKS	**22**	**48**	**45**	**20**
RED ERRORS	**Q2**	**Q3**	**Q4**	**Q5**
0	**22**	**48**	**45**	**20**
1	**18**	**44**	**41**	**16**
2	**14**	**40**	**37**	**12**
3	**10**	**36**	**33**	**8**
4	**6**	**32**	**29**	**4**
5	**2**	**28**	**25**	**0**
6	**0**	**24**	**21**	
7		**20**	**17**	
8		**16**	**13**	
9		**12**	**9**	
10		**8**	**5**	
11		**4**	**1**	
12		**0**	**0**	

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TYPING TECHNIQUE			
SCHEDULE – DISPLAY – QUESTIONS 2-4			
-2 MARKS DEDUCTED PER ERROR – DISPLAY – BLUE			
MARKS	**22**	**12**	**11**
BLUE ERRORS	**Q2**	**Q3**	**Q4**
0	**22**	**12**	**11**
1	**20**	**10**	**9**
2	**18**	**8**	**7**
3	**16**	**6**	**5**
4	**14**	**4**	**3**
5	**12**	**2**	**1**
6	**10**	**0**	**0**
7	**8**		
8	**6**		
9	**4**		
10	**2**		
11	**0**		

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QUESTION 2

	22 MARKS – ACCURACY: -4 MARKS PER ERROR
ERROR NO	**22 MARKS – DISPLAY ERRORS: -2 MARKS PER ERROR**
1	Margins (1,27 cm/0,5") incorrect and/or Alignment (left, centred, right, justified) incorrect and/or Line spacing (as indicated) incorrect
2	Paper size (A4 landscape) incorrect and/or Tabular stops/indentation incorrect and/or Hyphenation incorrect
3	Font/font size (CN 12 pt) incorrect and/or Capital letters/small letters incorrect and/or Letter spaces incorrect
4	/ – [the] not replaced and/or incorrect and/or [Fourth] not replaced with [4th] and/or incorrect
5	Trs – [91%] and [12%] not transposed and/or incorrect and/or Stet – [believe] not retained and/or incorrect and/or Sp – [foresee] spelling incorrect
6	Bold – not changed and/or incorrect and/or Italics – not changed and/or incorrect
7	Merge – columns not merged and/or incorrect
8	Runs on – incorrect and/or In figures – [5] not in figures and/or incorrect and/or In words – [Percentage] not in words and/or incorrect and/or NL – new lines not inserted and/or incorrect
9	Headings incorrect and/or Column headings incorrect and/or Columns incorrect
10	Vertical lines omitted and/or incorrect
11	Horizontal lines omitted and/or incorrect
12	Figures – incorrect
13	Footnote incorrect – not aligned on margin or footnote sign not used and/or incorrect
14	[EXAMINATION NUMBER] left-aligned and [QUESTION 2] right-aligned not inserted as a header and/or incorrect
	Incomplete table – as per schedule

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QUESTION 2 (CONTINUED)

1 margins, alignment, line spacing 2 A4 L, tab/indented, hyphenation 3 CN 12 pt, uc/lc, letter spaces 9 headings, column headings, columns

EXAMINATION NUMBER 14 header, left 14 header, right, uc QUESTION 2

1 centre 3 uc 4 replaced 6 bold

THE 4TH INDUSTRIAL REVOLUTION IS IN FULL SWING

5 sp

HIRING MANAGERS FORESEE TECH-DRIVEN WORKFORCE TRANSFORMATION 3 uc 6 ital

3 uc 8 NL 3 uc 8 in figures 7 merged 8 NL

ALREADY TRANSFORMED 3 uc 8 NL	ACTIVELY TRANSFORMING		WILL TRANSFORM WITHIN 5 YEARS		SUM OF ALL TRANSFORMING 3 uc 8 NL	¼
Cyber security	20%	44%	87%	82%	Big data processing	57%
Artificial intelligence	14%	24%	78%	83%	Artificial intelligence	99%
Internet of things	22%	25%	88%	84%	Internet of things	88% ←½
Cloud computing 8 runs on	29%	27%	89%	85%	Robotics	77%
Voice-activated personal assistants	27%	23%	90%	86%	3D printing	66%
Virtual/augmented reality 8 runs on	15%	91%	5 trs 12%	87%	Augmented reality	55%
Chartbots	25%	21%	92%	88%	Virtual reality	44% ←¾
Blockchain	28%	20%	93%	67%	Blockchain	33%
Crypto currencies	20%	29%	94%	77%	Crypto currencies	22%

10 vertical lines 11 horizontal lines 12 figures 13 footnote 5 stet 4 the

Percentage of customers and hiring managers who believe the following technologies.

8 in words

¼

A	D	T	
6	5	11	44

½

A	D	T	
11	11	22	44

¾

A	D	T	
17	16	33	44

Errors	Marks
0	22
1	18
2	14
3	10
4	6
5	2
6	0

A	D	T
22	22	44

[44]

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QUESTION 3

48 MARKS – ACCURACY: -4 MARKS PER ERROR **Incomplete – as per schedule**	
ERROR NO	**12 MARKS – DISPLAY ERRORS: -2 MARKS PER ERROR**
1	Left-hand margin not 3,81 cm/1,5" and right-hand margin not 2,54 cm/1" and/or incorrect and/or Alignment (left, centre, right, justify) incorrect and/or Line spacing (as indicated) incorrect
2	Letterhead not retrieved and/or incorrect and/or Tabular stops/indentation incorrect and/or Hyphenation incorrect
3	Font/font size (CN 12 pt) incorrect and/or Capital letters/small letters incorrect and/or Letter spaces incorrect
4	Insert – date not inserted in descending order and/or salutation not displayed correctly and/or conclusion incorrect and/or / not changed to [the] and/or incorrect and/or Insert – [been] not inserted and/or incorrect
5	Trs – [striking and shocking] not transposed and/or incorrect and/or Sp – [especially] spelling incorrect and/or Stet – [notion] not retained and/or incorrect
6	Bold – not changed and/or incorrect and/or Italics – not changed and/or incorrect
7	Move – [Circular … 2021] not moved and/or incorrect and/or [Circular … 2021] not spaced capital letters and/or incorrect and/or [2021] not replaced to current year and/or incorrect
8	New paragraphs incorrect and/or In full – [five] not in full and/or incorrect
9	Paragraphs not arranged in numerical order and/or incorrect
10	[EXAMINATION NUMBER] not inserted as a footer left-aligned and/or incorrect and/or Page break not inserted and/or incorrect and/or Page number not inserted top centred and/or incorrect
	Incomplete as per schedule

¼

A	D	T	
12	3	15	60

½

A	D	T	
24	6	30	60

¾

A	D	T	
36	9	45	60

Errors	Marks
0	48
1	44
2	40
3	36
4	32
5	28
6	24
7	20
8	16
9	12
10	8
11	4
12	0

A	D	T
48	12	60

QUESTION 3

1 margins, alignment, line spacing 2 letterhead, tab stop/indent, hyphenation 3 CN 12 pt, uc/lc, letter spaces

FOURTH INDUSTRIAL REVOLUTION

PO Box 345
Tel: 0800 556 876
E-mail: fourthindustrialrevolution.com



10 Union Building
BLOEMFONTEIN
2660

2021-05-17 4 date in descending order

7 sp caps, move current year

C I R C U L A R N U M B E R 2 8 O F 2 0 2 1

TO: MINISTER OF PUBLIC ENTERPRISES 3 uc 4 display
MINISTER OF FINANCE

8 in full 4 the 3 uc 6 bold

FIVE PROBLEMS WITH THE FOURTH INDUSTRIAL REVOLUTION

3 uc 6 bold 9 numerical order 3 uc 6 ital

1. **PROBLEM 1:** *A BELIEF THAT TECHNOLOGY HAS CHANGED AND IS CHANGING THE WORLD* 4 the

   8 NP 4 the

   All so-called industrial revolutions are based on the fundamentally incorrect assumption that technology is changing the world. 4 the ¼

   3 uc 6 bold

2. **PROBLEM 2:** *A REVOLUTIONARY VIEW OF HISTORY* 3 uc 6 ital

   8 NP 5 sp

   Academics, especially historians and geographers, have long argued as to whether human society changes in an evolutionary or a revolutionary way. There have thus been numerous debates as to how many agricultural revolutions there were that preceded or were associated with the so-called first industrial revolution. ½

   4 the 3 uc 6 bold

3. **PROBLEM 3:** *AN ELITIST VIEW OF HISTORY* 3 uc 6 ital

   8 NP 5 stet 4 the

   The notion of industrial revolutions is also largely an expression of an elitist view of history. It is about, and written by the elites who shape them and enable them. It is about the owners of the factories rather than the labourers, it is about innovative geniuses rather than the peasants labouring to produce food for them and it is about the wise politicians who see the potential of these technologies to transform the world in their own image. 4 the ¾

EXAMINATION NUMBER 10 footer left

10 page break

QUESTION 3 (CONTINUED)

10 page number top centred
2

3 uc 6 bold 4 the

4. **PROBLEM 4:** *MALE HEROES OF THE REVOLUTION* 3 uc 6 ital

8 NP 4 the 5 trs

One of the most striking and shocking features of the Huawei video that prompted this critique was that almost all of the people illustrated as the heroes of the industrial revolutions were men.

3 uc 6 bold

5. **PROBLEM 5:** *THE FOURTH INDUSTRIAL REVOLUTION AS A SELF-FULFILLING PROPHECY* 3 uc 6 ital

8 NP 4 the 4 insert

Finally, the idea of a heroic male industrial revolution has been promoted in large part as a self-fulfilling prophecy.

1 line spacing

DEPUTY DIRECTOR 3 uc 4 conclusion 6 bold

[60]

EXAMINATION NUMBER

QUESTION 4

45 MARKS – ACCURACY: -4 MARKS PER ERROR **Incomplete – as per schedule**	
ERROR NO	**11 MARKS – DISPLAY ERRORS: -2 MARKS PER ERROR**
1	Margins not 2,54 cm/1" and/or incorrect and/or Alignment (left, centred, right, justified) incorrect and/or Line spacing incorrect and/or Vertically centring incorrect
2	Paper size (A4 portrait) incorrect and/or Tabular stops/indentation incorrect and/or Hyphenation incorrect
3	Font/font size (CN 12 pt, Arial 10 pt and 14 pt) incorrect and/or Capital letters/small letters incorrect and/or Letter spaces incorrect
4	/ not changed to [the] and/or incorrect and/or Symbol not inserted and/or incorrect
5	Trs – [needs across] not transposed and/or incorrect and/or Sp – [focus] spelling incorrect and/or Stet – [received] not retained and/or incorrect
6	Bold – not changed and/or incorrect and/or Italics – not changed and/or incorrect and/or Underline – not underlined and/or incorrect
7	[3 Ways … Revolution] not moved and/or incorrect and/or [three] not replaced with [3] and/or incorrect and/or [technology] not joined and/or incorrect
8	New paragraphs incorrect and/or [&] not changed to [and] and/or incorrect
9	[EXAMINATION NUMBER] left-aligned and [QUESTION 4] right-aligned not inserted as header and/or incorrect

¼

A	D	T	
11	3	14	56

½

A	D	T	
22	6	28	56

¾

A	D	T	
34	8	42	56

A	D	T
45	11	56

Errors	Marks
1	45
2	41
3	37
4	33
5	29
6	25
7	21
8	17
9	13
10	9
11	5
12	1
13	0

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QUESTION 4 (CONTINUED)

1 margins, line spacing, alignment 2 A4 portrait, tab stops/indentation, hyphenation 3 font, uc/lc, letter spaces 9 Exam number left and QUESTION 4 right as header

EXAMINATION NUMBER 9 header, left 9 header, right, uc QUESTION 4

1 centre vertically

3 Arial 14 pt, uc 6 bold 7 move 1 centre 4 the

3 WAYS TO BE A GOOD LEADER IN THE FOURTH INDUSTRIAL REVOLUTION

4 the 1 centre 3 uc 6 u/line 8 in full

THE WORLD IS SEEING REVOLUTIONARY ADVANCES IN SCIENCE AND TECHNOLOGY 7 join

WHAT WE DID: 3 BIG IDEAS 3 uc 6 bold 7 in figures

1. *BOTTOM-UP STRATEGY DEVELOPMENT* 3 uc 6 ital

8 NP 4 the 8 in full 5 stet ¼

Firstly, we built a refreshed strategy up from input received across the firm and from our clients rather than from a set of top-down pronouncements. We asked our people what they thought via a set of surveys and face-to-face conversations. 8 in full

2. *HOLISTIC MEASUREMENT OF CONTRIBUTION* 3 uc 6 ital

8 NP 5 trs

Knowledgeable workers are specialists, but our clients have many needs across many different specialisations. Our ½ clients are also often multinational: they need to be able to talk to people in many countries to solve their problems. However good the strategy is on paper, it will not succeed in a partnership environment if there is insufficient support for what is proposed. 4 the

3. *SERVANT LEADERSHIP* 3 uc 6 ital ¾

8 NP 8 in full 5 sp

Knowledgeable workers are experts in their area of focus and they are also highly motivated. People like this don't need management to tell them what to do.

4 symbol 3 letter space 1 align right 3 Arial 10 pt

- They need their leadership team to create a working environment that is supportive of achieving their ambitions.

[56]

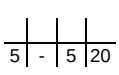
QUESTION 5

20 MARKS – ACCURACY: -4 marks per error
– Every keying-in error
0 MARKS – DISPLAY: no marks

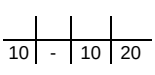
NO MARKS WILL BE DEDUCTED FOR DISPLAY ERRORS

1. One or more incorrect characters in a word – 1 error.
2. Do not penalise for incorrect margins.
3. Do not penalise for incorrect line spacing.
4. Do not penalise for incorrect hyphenation.
5. Do not penalise for incorrect capital/small letters.
6. Do not penalise for incorrect letter spaces.
7. Do not penalise for incorrect alignment.
8. Do not penalise for any display errors.
9. Do not penalise if a whole line or paragraph has been left out and keyed in at different position.
10. When the exact same word is repeatedly keyed in incorrectly, it is penalised once only per question. Thereafter, it is encircled as a repetitive error.
11. Omission of words: Count the first five strokes and thereafter every 10 strokes as 1 error each. If the last few strokes at the end are five or more, count as another error. If the last few strokes at the end are fewer than five, ignore.

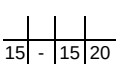
¼



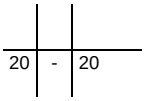
½



¾



Errors	Marks
0	20
1	16
2	12
3	8
4	4
5	0



QUESTION 5 (CONTINUED)

EXAMINATION NUMBER QUESTION 5

Re dire eng go fedisa baporofeta le baruti ba maaka mo nageng ya rena? O kare rena ma Afurika borwa re golofetxe. Re nyaka mehlolo yeo eka fetolago lego kaonafatja seemo sa maphelo. ¼

Nkane re dumela kudu mo go mehlolo le phediso ya mathata a rena ka tshoganetso? Gona go swarwa lebaka ke gore ba dira gore batho ba tshepe maaka ao a bona le motho o tseba bophelo bja gagwe go feta motho yo mongwe. ½ ¾

¼

5	-	5	20

½

10	-	10	20

¾

15	-	15	20

Errors	Marks
0	20
1	16
2	12
3	8
4	4
5	0

20	-	20

[20]

SECTION B

1. The total of this section is 100 marks. Part A of each question is 80% accuracy and 20% display. Part B is 80% processing and 20% accuracy.

2. Part A of each question must be keyed in correctly, except for Q6A that has been copied to the candidates' diskettes/hard drives.

3. Part B of each question must be processed according to the processing instructions.

4. ONE mark per error deducted – accuracy as well as display and processing.

Accuracy errors	= All keying-in errors
Display errors	= Display errors
Processing errors	= All processing instructions

5. Questions not completed (only part A) are marked accordingly. In part B the candidate is penalised for each processing not done.

   If only ¼ of a question is completed, only ¼ of the original mark is used for the marking of the question. If only ½ of a question is completed, only ½ of the original mark is used. If only ¾ of a question is completed, only ¾ of the original mark is used.

   Example:

   Total marks = 20: Accuracy = 16; Display = 4

   ½ of the question is completed, mark as follows:

   ½ of 16 = 8 marks
   ½ of 4 = 2 marks

   The question will be marked out of 10 but the mark will be out of 20:

   6 1 = 7 = 7
   8 2 = 10 = 20
   2 1 errors

WORD PROCESSING										
SCHEDULE – QUESTIONS 6B, 7A, 7B, 8A AND 8B										
-1 MARK PER ERROR DEDUCTED – ACCURACY – RED -1 MARK PER ERROR DEDUCTED – DISPLAY – BLUE -1 MARK PER ERROR DEDUCTED – PROCESSING – BLUE										
MARKS:	**20**	**18**	**18**	**13**	**11**	**5**	**5**	**4**	**3**	**3**
QUESTION: ERRORS:	**Q6B**	**Q7B**	**Q8B**	**Q7A**	**Q8A**	**Q7B**	**Q6B**	**Q8B**	**Q8A**	**Q7A**
0	**20**	**18**	**18**	**13**	**11**	**5**	**5**	**4**	**3**	**3**
1	**19**	**17**	**17**	**12**	**10**	**4**	**4**	**3**	**2**	**2**
2	**18**	**16**	**16**	**11**	**9**	**3**	**3**	**2**	**1**	**1**
3	**17**	**15**	**15**	**10**	**8**	**2**	**2**	**1**	**0**	**0**
4	**16**	**14**	**14**	**9**	**7**	**1**	**1**	**0**		
5	**15**	**13**	**13**	**8**	**6**	**0**	**0**			
6	**14**	**12**	**12**	**7**	**5**					
7	**13**	**11**	**11**	**6**	**4**					
8	**12**	**10**	**10**	**5**	**3**					
9	**11**	**9**	**9**	**4**	**2**					
10	**10**	**8**	**8**	**3**	**1**					
11	**9**	**7**	**7**	**2**	**0**					
12	**8**	**6**	**6**	**1**						
13	**7**	**5**	**5**	**0**						
14	**6**	**4**	**4**							
15	**5**	**3**	**3**							
16	**4**	**2**	**2**							
17	**3**	**1**	**1**							
18	**2**	**0**	**0**							
19	**1**									
20	**0**									

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QUESTION 6B

PROCESSING: 20 marks -1 mark per error **ACCURACY: 5 marks -1 mark per error**	
1	Margins incorrect and/or alignment (left, centre, right, justify) incorrect and/or line spacing (as indicated) incorrect
2	Paper size (A4 portrait) incorrect and/or tabular stops/indentation incorrect and/or hyphenation incorrect
3	Font/font size (CN 12 pt) incorrect and/or capital/small letters incorrect and/or letter spaces incorrect
4	Bold – bold incorrect and/or Italics – italics incorrect and/or Double underline – double underline incorrect
5	[What … revolution?] not inserted in WordArt 18 pt, capital letters and bold and/or incorrect plus one accuracy error
6	New paragraphs not created and/or incorrect
7	[1. Where … from?] not inserted and/or incorrect plus one accuracy error
8	[(sometimes … 4.0)] not deleted and/or incorrect
9	[Eighteenth] not in words and/or incorrect and/or [AI] not replaced with [Artificial Intelligence] in capital letters and double underlined and/or incorrect and/or [5] not in figures and/or incorrect and/or [Per cent] not in words and/or incorrect
10	[easiest way] not transposed and/or incorrect
11	[2. What … change?] not inserted and/or incorrect plus one accuracy error
12	[2.1] and [2.2 Blockchain … more.] not inserted and/or incorrect plus one accuracy error
13	[3. How will … business?] not inserted and/or incorrect plus one accuracy error
14	[possible] spelling incorrect and/or [immense] not retained and/or incorrect
15	Page break not inserted and/or incorrect
16	Page number not inserted at the top left and/or incorrect and/or [✓] not inserted and/or incorrect
17	[4. How … work?] not inserted and/or incorrect plus one accuracy error
18	[5. What should … workforces?] not inserted and/or incorrect plus one accuracy error
19	[Many … achieved.] not inserted and/or incorrect plus one accuracy error
20	[6. How do … everyone?] not inserted and/or incorrect plus one accuracy error
21	[EXAMINATION NUMBER] left-aligned and [QUESTION 6B] right-aligned in capital letters not inserted as a header and/or incorrect

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QUESTION 6B (CONTINUED)

EXAMINATION NUMBER 21 header, left 21 header, right, uc QUESTION 6B

1 margins, align, l/s 2 A4 portrait, tab stop/indent, hyphenation 3 CN 12 pt, uc/lc, letter spaces

5 insert, WordArt 18 pt, uc, bold

WHAT IS THE FOURTH INDUSTRIAL REVOLUTION?

3 uc 4 ital 1 centre

WHAT EXACTLY IS THE FOURTH INDUSTRIAL REVOLUTION AND WHY SHOULD YOU CARE?

6 NP 3 uc 4 bold

The **FOURTH INDUSTRIAL REVOLUTION** is a way of describing the blurring of boundaries between the physical, digital and biological worlds.

7 insert 3 uc 4 ital

1. *WHERE DID THE TERM FOURTH INDUSTRIAL REVOLUTION COME FROM?*

16 insert ✓ 3 uc 4 bold 8 del [(sometimes … 4.0)]

✓ While the **FOURTH INDUSTRIAL REVOLUTION** is set to change society like never before, it builds on foundations laid by the first three industrial revolutions. The advent of the steam engine in the eighteenth century led to the first industrial revolution allowing production to be mechanised for the first time and driving social change as people became increasingly urbanised. 9 in words

11 insert

2. *WHAT ARE THE TECHNOLOGIES DRIVING CHANGE?* 3 uc 4 ital

16 insert 10 trs 3 uc 4 bold

✓ The easiest way to understand the **FOURTH INDUSTRIAL REVOLUTION** is to focus on the technologies driving it.

THESE INCLUDE THE FOLLOWING: 6 NP 3 uc

12 insert 9 replace in uc, double u/line

2.1 ARTIFICIAL INTELLIGENCE describes computers that can think like humans – recognising complex patterns, processing information, drawing conclusions and making recommendations.

12 insert 6 NP

2.2 Blockchain is a secure, decentralised and transparent way of recording shared data and many more.

13 insert 3 uc 4 ital

3. *HOW WILL THE FOURTH INDUSTRIAL REVOLUTION AFFECT BUSINESS?*

14 sp

✓ As these technologies change, it is possible that they are also transforming customers' expectations. A global survey from Sales Force Research shows that a majority of those believe that these technologies and the experiences they enable will transform their interactions with companies within 5 years. 9 in figures

15 page break

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QUESTION 6B (CONTINUED)

EXAMINATION NUMBER 21 header, left 21 header, right, uc QUESTION 6B
16 page number top left
2

17 insert 3 uc 4 ital
4. *HOW WILL THE FOURTH INDUSTRIAL REVOLUTION AFFECT THE FUTURE OF WORK?*

3 uc 4 bold
✓ Nowhere is the upheaval of the **FOURTH INDUSTRIAL REVOLUTION** more likely to be felt than in the workplace. As with previous industrial revolutions, the **FOURTH INDUSTRIAL REVOLUTION** will profoundly affect people's lives as ARTIFICIAL INTELLIGENCE and increased automation see many types of jobs disappear. At the same time entirely new categories of jobs are emerging. 9 replace in uc, double u/line

18 insert 3 uc 4 ital
5. *WHAT SHOULD BUSINESSES DO TO IMPROVE THEIR WORKFORCES?*

9 in words 9 replace in uc, double u/line
✓ Businesses will need to ensure that they have the right mix of skills in their workforce to keep pace with the changing technology. Another study shows that 59 per cent of hiring managers believe that ARTIFICIAL INTELLIGENCE will impact the types of skills their companies need. Workers will, more than likely, need to update their skills not just once but many times throughout their careers. Many senior executives are already asking how all this will be achieved. 19 insert

20 insert 3 uc 4 ital
6. *HOW DO WE ENSURE THAT THE FOURTH INDUSTRIAL REVOLUTION IS GOOD FOR EVERYONE?*

14 stet 3 uc 4 bold
✓ With the **FOURTH INDUSTRIAL REVOLUTION** presenting both immense opportunities and challenges, it is up to all of us to work together to ensure that it benefits everyone.

6 NP
Humans must be proactive in shaping this technology and disruption. This requires global cooperation and a shared view of how technology is reshaping our economic, social, cultural and individual lives.

6 NP 3 uc 4 bold
With businesses at the forefront of the **FOURTH INDUSTRIAL REVOLUTION** driving both innovation and social disruption, they must also play a pivotal role in ensuring that the needs of all stakeholders are met and not just those of shareholders.

[25]

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QUESTION 7A

EXAMINATION NUMBER 4 header, left 4 header, right, uc QUESTION 7A

The Fourth Industrial Revolution is characterised by making systems as well as machines intelligent & connected. The
¼ underlying technologies of the Fourth Industrial Revolution include artificial intelligence (AI) as well as blockchain.
½ Artificial intelligence is a paradigm where pysical & social phenomena are programmed to solve complex problems. AI enables
¾ machines to learn, adapt, evolve & optimise and has had a profound impact in diverse fields such as engineering, medical sciences & social sciences.

¼

A	D	T	
3	1	4	6

½

A	D	T	
6	2	8	16

¾

A	D	T	A
10	2	12	16

ERROR NO	DISPLAY ERRORS
1	Margins, alignment, line spacing
2	A4 paper, tab stops/indentation, hyphenation
3	Courier New 12 pt, uc/lc, letter spaces
4	EXAMINATION NUMBER left and QUESTION 7A right as header

A	D	T
13	3	16

(16)

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QUESTION 7B

PROCESSING: 18 marks -1 mark per error ACCURACY: 5 marks -1 mark per error	
1	Margins incorrect and/or alignment (left, centre, right, justified) incorrect and/or line spacing (as indicated) incorrect
2	Paper size (A4 portrait) incorrect and/or tabular stops/indentation incorrect and/or hyphenation incorrect
3	Font/font size (CN12 pt and CN 10 pt) incorrect and/or capital/small letters incorrect and/or letter spaces incorrect
4	Bold – not in bold and/or incorrect and/or Sp – [physical] spelling incorrect and/or NP – New paragraphs not created and/or incorrect
5	[Memorandum] not inserted in spaced capital letters and/or incorrect plus one accuracy error
6	[To: … Johannesburg] not inserted and/or incorrect plus one accuracy error
7	[From: … Marwala] not inserted and/or incorrect plus one accuracy error
8	[Date:] not inserted in descending order and/or incorrect plus one accuracy error
9	Horizontal lines not inserted and/or incorrect
10	[The … Revolution] not inserted and/or incorrect plus one accuracy error
11	Stet – [systems] not retained and/or incorrect
12	[(AI)] and [had] not deleted and/or incorrect
13	[Artificial Intelligence] not replaced and/or incorrect and/or [&] not changed to [and] and/or incorrect
14	Bullet not inserted and/or incorrect and/or Runs on – incorrect
15	[The implications … explored.] not inserted and/or incorrect plus one accuracy
16	[For more … 0860 99 88 55] not inserted and/or incorrect plus one accuracy
17	[or visit … com.] not inserted and/or incorrect plus one accuracy error
18	[QUESTION 7A] not changed to [QUESTION 7B] in the header and/or incorrect

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QUESTION 7B (CONTINUED)

1 margins, align, l/s 2 A4 portrait, indent, hyphenation 3 Courier New 12 pt, uc/lc, letter spaces

EXAMINATION NUMBER 18 header changed to 7B QUESTION 7B

M E M O R A N D U M 5 insert, sp caps 4 bold 9 horizontal lines

---

TO: UNIVERSITY OF JOHANNESBURG 6 insert

FROM: PROF. TSHILIDZI MARWALA 7 insert 1 d/s 3 uc

DATE: 2021-05-17 8 insert date in descending order

THE FOURTH INDUSTRIAL REVOLUTION 10 insert 3 uc 4 bold

11 stet 3 uc

The FOURTH INDUSTRIAL REVOLUTION is characterised by making systems as well as machines intelligent and connected.

5 NP 13 in full 3 uc

The underlying technologies of the FOURTH INDUSTRIAL REVOLUTION include artificial intelligence as well as blockchain. 12 del (AI)

5 NP 5 sp 13 in full

Artificial Intelligence is a paradigm where physical and social phenomena are programmed to solve complex problems. Artificial Intelligence enables machines to learn, adapt, evolve and optimise and has a profound impact in diverse fields such as engineering, medical sciences and social sciences. 13 replace 12 delete [had]

14 bullet 15 insert

- The implications of these on society as well as the underlying costs are also explored. 3 CN 10 pt

16 insert 14 runs on

For more information about the Fourth Industrial Revolution call 0860 99 88 55 or visit www.fourthindustrialrevolution.com. 3 CN 10 pt

17 insert

(23)
[39]

QUESTION 8A

EXAMINATION NUMBER 4 header, left 4 header, right, uc QUESTION 8A

The Network for Global Technology Governance

- How can we maximise the benefits of science and technology for society? ¼
- We partner with governments, leading companies, civil society and experts from around the world to co-design and pilot innovative new approaches to policy and governance in the Fourth Industrial Revolution. ½
- We're not just developing new ideas – we're implementing them across the globe at the pace demanded by technological change.
- As a leader (expert or innovator) you may have great ideas for the Fourth Industrial Revolution governance. ¾
- From intelligence to artificial precision medicine, we aim to unlock the potential of cutting-edge technologies to transform society.

¼

A	D	T	
3	1	4	14

½

A	D	T	
6	1	7	14

¾

A	D	T	A
9	2	11	14

A	D	T
11	3	14

ERROR NO	DISPLAY ERRORS
1	Margins, alignment, line spacing
2	A4 paper, tab stops/indentation, hyphenation
3	Arial 12 pt, uc/lc, letter spaces
4	[EXAMINATION NUMBER] left and [QUESTION 8A] right as header

(14)

QUESTION 8B

PROCESSING: 18 marks -1 mark per error ACCURACY: 4 marks -1 mark per error	
1	Margins incorrect and/or alignment (left, centre, right, justify) incorrect and/or line spacing (as indicated) incorrect
2	Paper size (A4 portrait) incorrect and/or tabular stops/indentation incorrect and/or hyphenation incorrect
3	Font/font size (Arial 12 pt and 16 pt) incorrect and/or capital/small letters incorrect and/or letter spaces incorrect
4	[Centre … Revolution] not inserted and/or incorrect plus one accuracy error
5	Bold – not changed and/or incorrect and/or Double underline – not changed and/or incorrect and/or Delete – bullets not deleted and/or incorrect
6	Tables not created and/or incorrect
7	[Our portfolios] not inserted and/or incorrect plus one accuracy error
8	[That's our mission] not inserted and/or incorrect plus one accuracy error
9	[governments] not retained and/or incorrect
10	[Brochure … Revolution] not inserted and/or incorrect plus one accuracy error
11	[The forum's … dialogue.] not inserted and/or incorrect plus one accuracy error
12	[Real … now] not inserted and/or incorrect plus one accuracy error
13	[Our approach] not inserted and/or incorrect plus one accuracy error
14	[But … alone.] not inserted and/or incorrect plus one accuracy error
15	[The most … generation] not inserted and/or incorrect plus one accuracy error
16	New paragraph not created and/or incorrect and/or Trs – [artificial to intelligence] not transposed and/or incorrect and/or Column 1 and 2 not transposed and/or incorrect
17	Page border not inserted and/or incorrect
18	[QUESTION 8A] not changed to [QUESTION 8B] in the header and/or incorrect

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QUESTION 8B (CONTINUED)

1 margins, align, l/s 2 A4 portrait, tab stops/indent, hyphenation 3 Arial 12 pt and 16 pt, uc/lc, letter spaces

EXAMINATION NUMBER 18 change to 8B QUESTION 8B

1 centre 3 Arial 16 pt, uc 4 insert 5 bold

CENTRE FOR THE FOURTH INDUSTRIAL REVOLUTION

THE NETWORK FOR GLOBAL TECHNOLOGY GOVERNMENT 3 uc

16 trs columns 6 table

OUR PORTFOLIOS 3 uc 7 insert 5 del bullet How can we maximise the benefits of science and technology for society? THAT'S OUR MISSION 3 uc 8 insert 5 del bullet 9 stet We partner with governments, leading companies, civil society and experts from around the world to co-design and pilot innovative new approaches to policy and governance in the **Fourth Industrial Revolution**. 5 bold 10 insert BROCHURE: CENTRE FOR THE FOURTH INDUSTRIAL REVOLUTION 3 uc 11 insert The forum's centre for the Fourth Industrial Revolution is a newly established focal point within the international community for multi stakeholder dialogue.	REAL WORLD IMPACT AT THE SPEED OF NOW 3 uc 12 insert 5 del bullet We're not just developing new ideas – we're implementing them across the globe at the pace demanded by technological change. OUR APPROACH 3 uc 13 insert 5 del bullet, double u/line As a leader (expert or innovator) you may have great ideas for the Fourth Industrial Revolution governance. 14 insert 16 NP But you can't make global change alone. 15 insert THE MOST DAUNTING CHALLENGES OF OUR GENERATION 3 uc 5 del bullet 16 trs From artificial to intelligence precision medicine, we aim to unlock the potential of cutting-edge technologies to transform society.

17 page border

(22)
[36]

TOTAL SECTION B: 100
GRAND TOTAL: 300

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