Part (a) Draft a memo to the financial ma	anager of DN	A in which y	ou –	
• critically discuss, with sup				Montro
the draft budget and relate				Marks
<ul> <li>include any questions you</li> </ul>	may have fo	r the financia	al manager	
	Audit	Tax	DNA	
Average revenue per employee category	R	R	R	2
Directors	2 796 000	4 800 000		
Managers	2 038 750	2 980 000		
Seniors	1 304 857	1 900 000		
Other third-year trainees	1 006 500	NA		
Second-year trainees	978 750	1 190 000		
First-year trainees	794 750	945 000		
Revenue mix	73,3%	26,7%	100,0%	1
Budgeted annual average salary	R	R	R	2
Directors	2 500 000	2 750 000		
Managers	1 200 000	1 500 000		
Seniors	550 000	600 000		
Other third-year trainees	480 000			
Second-year trainees	400 000	400 000		
First-year trainees	300 000	300 000		
Employee costs/expected billings	%	%	%	2
Directors	89	57	75	
Managers	59	50	55	
Seniors	42	32	40	
Other third-year trainees	48	NA	48	
Second-year trainees	41	34	40	
First-year trainees	38	32	37	
Profit per employee	Audit	Tax	Compare	2
Directors	296 000	2 050 000	14%	
Managers	838 750	1 480 000	57%	
Seniors	754 857	1 300 000	58%	
Other third-year trainees	526 500	-	30,7	
Second-year trainees	578 750	790 000	73%	
First-year trainees	494 750	645 000	77%	
,				
Gross profit on revenue	Audit	Tax	Compare	2
Directors	11%	43%	25%	
Managers	41%	50%	83%	
Seniors	58%	68%	85%	
Other third-year trainees	52%			
Second-year trainees	59%	66%	89%	
First-year trainees	62%	68%	91%	
Hours worked (efficiency)	Audit	Тах		2
Cost per employee				
Directors	932	1 200		
Managers	1 165	1 490		
Seniors	1 305	1 520		
OCITIOIS	1 303	1 320		

			Maximum	10
			Available	17
Attempt at a mix of staff consideration.				1
EBITDA/revenue	-1,4	26,5	6,1	1
Other operating costs/revenue	51,6	26,8	45,0	1
Professional employee costs/revenue	49,8	46,7	48,9	1
First-year trainees	1 325	1 350		
Second-year trainees	1 305	1 400		
Other third-year trainees	1 118			

	Critical discussion	
1	Revenue	
1.1	The budgeted revenue per employee category of the tax division is significantly higher than the audit division.	1
	This is due to the <b>higher</b> expected staff <b>utilisation</b> and the higher <b>charge-out rates</b> per hour in the tax division.	1
1.2	The audit division is larger than the tax division (73.3% of total), perhaps consider expanding the <b>more profitable tax division</b> , and reducing the audit division.	1
1.3	The higher charge-out rates in the tax division versus the audit division could be due to the perceived more <b>specialised nature</b> of tax advisory work. Staff may have <b>additional qualifications</b> meriting higher salaries and chargeouts.	1
1.4	The directors in the audit division are budgeted to spend 50% of their time on client-related matters versus <b>more productive</b> 64% in the <b>tax</b> division. This may be due to the audit directors spending time on marketing and client	1
	acquisition activities, which <b>benefit both</b> divisions.  In addition the auditing <b>division is larger</b> , therefore demanding more	1
1.5	management time from directors to manage the larger staff compliment.	1
1.5	The third-year trainees who are not seniors are expected to be the worst performing staff category as far as utilisation rates are concerned. This could be because past experience shows that they missed out on promotion and are demotivated. It may also be that they are reluctant to work under their peers, who were promoted to seniors.  Alternatively perhaps they are performing poorly and therefore not	1
1.6	promoted.  The 3% average increase of hourly charge-out rates in FY2020 is <b>below inflation</b> and forecast <b>salary increases</b> . The result is declining operating profit margins.	1
	Should <b>compare rates</b> to other firms. Question the increase percentages, consider price sensitivity.	1
1.7	Based on the <b>hours worked</b> calculated, it is clear that the main issue with number of hours billed lies in the partners, managers and seniors in the Audit division being <b>under capacity</b> .	1
	The utilisation of the first and second year <b>trainees is similar</b> and adequate.	1
2	Professional staff costs	•
2.1	The budgeted annual salaries for directors, managers and seniors are higher	
	in the tax division compared to the audit division. The audit division staff may feel <b>aggrieved</b> , with a consequent decline in employee morale.  Alt: Tax staff may be <b>more qualified</b> , therefore higher rate.	1

2.2	Furthermore, senior staff may be more <b>inclined to specialise</b> in tax because	1
2.3	of the higher salaries, therefore attracting best staff.	1
2.3	It makes sense that the average annual salaries of trainees, excluding	1
	seniors, are the <b>same for both</b> divisions as trainees have not yet developed	
0.4	additional expertise, and are an execution resource.	
2.4	The budgeted annual increase in average salaries in the tax division (7%) is	
	much higher than that for employees in the audit division (5%).	1
	This may lead to <b>aggrieved staff</b> in the audit division who could attempt to	
	limit referral work to the tax division.	1
2.5	The salary increases above the chargeout rate increases is not sustainable,	1
	and will result in <b>negative growth</b> .	
3	Contribution margins (per hour)	
3.1	The budgeted contribution (revenue minus professional staff costs) per	
	employee category in the Tax division is <b>much higher</b> than that of the Audit	1
	division for all employee categories.	
	DNA obtains the <b>least contribution from the directors</b> in the audit division	1
	(in total and per employee).	-
	The directors in audit appear to be <b>underperforming</b> , unless there is a	
	strategy around this where they have other functions.	
	Profitability arises from the <b>efficient use of their assets</b> , not directly in their	
	hourly billings.	
	Tiourly billings.	1
3.2	The first year and eccond year trainees in the tay division are expected to	
3.2	The first-year and second-year trainees in the tax division are expected to	1
	deliver the <b>highest contribution</b> margin. This may be due to higher charge-	ı
	out rates since both divisions pay trainees identical amounts per employee	
	category.	
3.3	Consideration of the <b>break-even points</b> , or attempt to calculate break even	1
	points. the calculations are difficult as the fixed costs are general, would	
	therefore need to be weighted.	
3.4	The <b>nature</b> of what each division does is <b>different</b> , tax is a value add, and	1
	therefore structure of hours likely to be different. Also revenue models	
	different.	
4	Other operating costs	
4.1	Other operating costs/total revenue is 45%. How does this <b>compare</b> to prior	
	years? Is the increase in line with inflation and revenue growth?	1
4.2	The allocation of other operating costs to the divisions may not be	
	appropriate based on the number of employees.	1
	Audit trainees are likely to spend most of their time at clients' premises and	
	hence not take up as much office space as the tax trainees/employees.	1
5	Budgeted profitability	
5.1	The audit division may in fact be <b>profitable</b> if the allocation of other operating	1
	costs is done on a more accurate basis.	-
5.2	The acquisition of the <b>Pharmasave</b> audit may impact negatively on	
0.2	profitability given that it is going to result in lower average charge-out rates	1
	(R968) compared to the R1 075 charged by the current auditors.	•
	Alt: As the professional staff <b>costs are fixed</b> , the new business should	
	increase profits as the added contribution will be high.	
5.3	Does the firm consider <b>profitability per client</b> to ensure it is not taking	1
5.5	· · · · · · · · · · · · · · · · · · ·	ı
E 4	contracts at reduced fees that in fact result in DNA making a loss?	
5.4	Does the firm assess the <b>cross-sell</b> of services to existing clients and	1
L	determine if it cannot increase revenue from specific clients?	
5.5	Furthermore, given the analysis is up to the EBITDA level, it excludes other	
	below-the-line income/expenses that may be critical (e.g. tax) in the	1
	assessment of net profitability.	

3

5.6	The <b>profit per employee</b> category is quite revealing where tax is materially	1
	better in every category.  Although the profitability at a director level for audit is significantly lower, this	1
	may be due to the audit partners having more of a <b>business development</b>	1
	role, and spending more time selling and managing clients which benefits	
	both divisions, allowing tax to focus on delivery only.	
5.7	The <b>capacity of the staff</b> , available billable time, should be assessed. 56,598	1
	utilised, 82,016 available, 25,418 excess	•
5.8	Could audit have a <b>structural issue</b> ? Mix of staff in division, or allocated to	1
	each job, to ensure efficient staff utilization.	
	Consider ratio of junior staff to senior, and how divisions may have differing	1
	models for delivery, different services may demand this.	
6	Questions for financial manager	
6.1	How do the budgeted billable hours, charge-out rates and staff utilisation	1
	compare with FY2019?	
6.2	Why is the expected utilisation per employee in the tax division so much	1
	higher than the audit division? Or: How was the <b>utlisation</b> determined?	
6.3	Does the budget take into account the potential new client, <b>Pharmasave</b> ?	1
6.4	Is the client that they lost (Zinkwazi) excluded from the budget? Because if	
	the budget does not factor in this loss, the financial loss could potentially be	1
	even higher.	
6.5	How do hourly charge-out rates compare with those of <b>competitors</b> ?	1
6.6	How does the <b>EBITDA/revenue margin</b> for the company as a whole of 6,1%	1
	compare to prior years and benchmarks?	
6.7	How does DNA's staff costs as a % of revenue compare to	1
	competitors/industry?	
6.8	How much of the budgeted revenue is <b>recurring fees</b> from existing clients	4
	versus new clients?	1
6.9	Do the budgeted professional staff costs include <b>potential bonuses</b> ? If not,	1
	what is the profitability of the business once these have been incorporated? If yes, are bonuses payable to the audit division even though it is <b>making a</b>	1
	loss?	•
6.10	Is there an <b>optimal staff utilisation rate</b> ? In other words, at what utilisation	
0.10	rate can professional staff provide high-quality service without compromising	1
	on standards?	•
	What is the <b>expected 'true' idle time</b> included in the budget (excluding the	
	expected CPD hours, sick leave, training and other leave) - to better analyse	
	budgeted staff optimisation rates? How does this compare to prior years?	1
6.11	Could trainees be <b>used in both</b> the audit and tax divisions in order to improve	1
	staff utilisation? Can the company focus on and expand the taxation	
	division?	
6.12	What impact will the mandatory audit firm rotation have on DNA?	1
6.13	Does the FY2020 budget include budgeted <b>legal costs</b> given the Zinkwazi	
	matter? Were the potential legal/compliance costs to defend against existing	1
	and/or potential lawsuits (or proceeds from indemnity insurance) taken into	
	consideration?	_
	Does the company have <b>professional liability insurance</b> for this loss, have	1
6 4 4	attorneys been consulted?	4
6.14	Is there any scope to reduce costs by employing 4IR techniques? This could include automating tasks or outcoursing functions to reduce operational	1
	include automating tasks or outsourcing functions to reduce operational	
6.15	costs.  Why is the audit division budgeting to incur a loss for the first time ever, this	1
0.15	is very concerning. What is the driver of this loss?	ı
6.16	A <b>breakdown of other costs</b> , details, should be obtained and examined.	1
0.10	1 / Dicardown of other costs, details, should be obtained and examined.	

Discussion marks available	56
Discussion marks maximum	30
Communication skills – layout and structure; logical argument	2
Total for part (a)	32

Marks	t (b) Comment on the methods of allocating other operating costs to the audit and tax divisions, and recommend alternatives where appropriate.
1	Effectively, DNA should consider implementing an <b>activity-based costing</b> (ABC) system or more advanced system to track costs and assign them more appropriately to the relevant divisions.
1	Cost drivers should be researched to obtain <b>causal relationships</b> within the divisions.
1	However, DNA should first perform a <b>cost-benefit analysis</b> to see whether it would be worthwhile finding different allocation bases – if the effect on the cost allocation is not significant, this exercise may not warrant the time and cost it will require.
1	If DNA elects to continue with a blanket overhead allocation rate, the rate may still be calculated using a more <b>suitable denominator</b> (e.g. revenue per department or total billable hours).
1	Allocation of other operating costs based on a single factor such as headcount or revenue may not be appropriate. Individual expense items need to be allocated on <b>different bases</b> .
1	Property rental costs should be allocated to divisions based on <b>relative floor space</b> occupied.
1	The audit division may not occupy much floor space given that trainees will spend most of their time at <b>client premises</b> rather than in the DNA office.
1	The cost of support functions should be <b>analysed in more detail</b> . For example, personal assistants can be linked directly to divisions and costs allocated accordingly.
1	The cost of support functions such as finance and HR could be allocated based on relative headcount and <b>number of invoices</b> issued.
1	Information technology costs could be allocated based on more accurate data. The cost of <b>laptops and software</b> can be directly attributable to divisions.
1	<b>Centralised system</b> costs (servers, hardware, CRM, accounting software, etc.) could be allocated based on headcount. This may reflect the 'consumption' of costs.
1	<b>Specific software</b> used by the audit division should be directly allocated to it and not partially allocated to the tax division.
2	Consider allocating marketing and advertising costs based on relative revenue. Direct allocation of marketing spend should be used where specific marketing campaigns have been rolled out for specific services.
1	<b>Training and CPD</b> costs can be tracked to specific divisions and can accordingly be allocated more accurately, as tax has specific specialist CPD requirements.
1	The estimated costs of each division <b>operating autonomously</b> may provide useful insights into how to allocate operating costs to divisions.
16	Available
10	Maximum Maximum
10	Total for part (b)

Part	(c) Critically evaluate the actions proposed by Virat and George to restore the audit division to profitability.	Marks
1	Calculations:	
	Available hours after retrenchments, reduced first-year intake:  Managers 3 728 Seniors 11 184 First-year trainees 18 640	1
	Budgeted billable hours Managers 3 495 Seniors 9 134 First-year trainees 15 895	1
Audi	t managers are going to be close to capacity, 94%!	1
2	Cost savings from <b>retrenchments</b> , reduced first-year intake = R2,35 million	1
3	Retrenchments typically come at <b>immediate cost</b> and impact <b>long-term revenue</b> generation if not linked to investment in technology.	1
	If <b>investment in technology</b> is undertaken, this further reduces immediate profitability.	1
	Considering operating leverage relationships, and high fixed costs, the answer is probably to <b>scale up</b> rather than scale down closer to breakeven.	1
4	DNA will <b>not legally</b> be able to <b>replace retrenched</b> employees immediately – what happens if business picks up?	1
5	Retrenchments may affect overall employee morale and productivity. The more capable and best talent may look for employment opportunities elsewhere.	1
6	In addition to this, firing an audit senior (third-year trainee) could have <b>implications legally</b> due to the nature of the contract (generally fixed term with very specific grounds for dismissal) and trigger complications from a SAICA perspective.	1
7	Will the audit division be able to cope with the <b>reduced headcount</b> and continue to perform audit work at an appropriate standard and quality?	1
	It can be argued that there is <b>sufficient capacity</b> based on current utilisation rates which are currently 71%.	1
8	Reducing first-year trainee intake could send a <b>negative message</b> to future potential trainees.	1
	Retrenchments and a reduced intake of trainees will <b>increase the workload</b> of remaining staff without additional compensation. This can negatively affect morale and/or lead to 'burn-out' of staff	1
9	First-year trainees have good capacity utilisation, and are the lowest cost to the firm of all employees. It might be better to <b>cut positions higher up</b> .	1
10	Encouraging underperforming audit staff to leave may not be ethical. DNA should rather be assisting underperformers through <b>training and mentoring</b> . Alt: HR should be tasked with identifying <b>attributes of underperforming</b> staff to ensure that employment practices employ better staff going forward. Also underperforming staff should perhaps be redeployed or reskilled in more suitable positions.	1
11 12	What is the definition of underperformance? Have <b>KPIs</b> been provided to, and discussed with, all relevant staff?  How will under-performing staff be <b>identified</b> , and how would they be	1
	encouraged to leave?	1

	Total for part (c)	10
	Maximum	10
	Available	34
	at an engagement level. The lack of CPD and reduction in staff might affect the engagement partner's ability to comply with the <b>requirements of ISA 220</b> .	
	ISA 220 requires the firm to implement appropriate quality control procedures	
25	There should be an appropriate, sufficient allocation of costs to CPD, else the firm might be in <b>breach of ISQC 1</b> .	1
25	revenue may be a better option than trying to reduce costs.	
24	On an overall basis, perhaps consider that the trading is currently in a <b>difficult environment</b> , and that <b>trading out</b> of it by focusing on generating more	1
	in the environment.	
23	division, perhaps even only in the <b>short term</b> while the audit division is under pressure	1
22	The audit division is larger than the tax division (73.3% of total), perhaps consider expanding the <b>more profitable tax division</b> , and reducing the audit	ı
22	management help to identify cost drivers?  The audit division is larger than the tax division (73.3% of total), perhaps	1
21	In what other areas, apart from marketing, entertainment, training and CPD, can expenditure be reduced? Would an ABC (activity-based-costing)	1
	<b>competence</b> of staff (which could impact audit/advisory outcomes), may result in legal action.	
20	Furthermore, reducing staff training and CPD-related expenditure can have longer-term consequences relating to the <b>technical and professional</b>	1
00	It is also in contravention of the <b>SAICA rules</b> for training officers.	
13	interests of DNA.	2
19	reduce the cost.  Having no expenditure on <b>training and CPD</b> is not fair to staff or in the best	<u>1</u>
	the cost of wining and dining potential clients, then it may not be sensible to	
18	Reducing expenditure on <b>entertainment</b> would be sensible if this entailed, for instance, free meals to directors. However, if the entertainment cost relates to	
	market share may be lost). Perhaps more should be spent to attract new clients?	
17	Reducing expenditure on marketing may not be sensible (given that long-term	1
16	and which portion is variable (and can be managed more easily)?	1
16	What is the significance of 10%? How was this <b>determined</b> ?  Which <b>portion</b> of other cost is <b>fixed</b> (and likely not avoidable in the short term)	
	admin staff may not be done with as much care)?	
15	A <b>10% cost reduction</b> is significant. Is it feasible in the short term? Will it not affect the quality of the services offered (e.g. printing of financial statements by	2
45	trainees, to encourage an improvement in productivity.	1
14	Instead of cutting costs, consider increasing incentives for other third-year	
	remuneration more flexible and aligned to the level of activity).  Also bonuses are not appropriate where <b>losses</b> are made.	1
	Perhaps DNA could explore moving to a more <b>flexible remuneration</b> scheme, enabling pay for work done (or per hour) to reduce fixed salary costs (making	

Part (d) Describe the business risks faced by DNA, based on the	Marks
information in the scenario.	Marko
1 Litigation risk, such as the Zinkwazi claim for damages.	3
DNA could suffer significant financial loss which could even threaten its	
survival (especially to the extent that DNA does not or may not have	
adequate indemnity insurance).	
The audit firm has <b>JSE listed requirements</b> , which will result in additional	
regulation and risk.	

2	Reputational risk – the audit division could perform work at a sub-standard level and	3
	public knowledge of this could significantly damage its reputation and result	
	in a loss of clients.  Failure to attract trainees due to loss of reputation – without trainees, the	
	audit division would have no ability to perform audits.	
3	Over-reliance on key staff could be a major risk. There are three directors	1
	and the loss of any one of them could negatively affect revenue.	
	The retrenchment of staff may also result in existing staff reconsidering their	1
	options, and therefore creating a skills shortage.	
4	<ul> <li>Loss of accreditation with the IRBA</li> <li>The IRBA regularly conducts practice reviews, and it may find DNA's RAs</li> </ul>	
	to be negligent and withdraw their licence to operate.	1
	Also, should adverse findings be made public, this could influence	
	clients to terminate business relationships, due to the results of IRBA	1
	reviews and firm level findings required to be shared with audit	
_	committees	
5	Engagement risks – DNA could take on new clients which are high risk.	1
6	With the firm <b>reducing training expenses</b> – this could cause trainees to be	1
	ill-equipped, make gross mistakes and expose the company to further risks	
7	and create legal liabilities, which could impact the going concern of the firm.  Tax division issuing <b>inappropriate tax opinions and advice</b> , resulting in	1
′	reputational/financial loss for clients. Therecent examples with local audit	'
	firms bear some examples of this.	
8	Increasing regulation of audit firms poses a risk.	
	For example, audit firms may be forced to focus solely on audit and have	1
	no consulting divisions. If this happened, DNA would be forced to close	
	its tax advisory division.  Mandatory firm rotation would also result in the firm leging their clients	1
	<ul> <li>Mandatory firm rotation would also result in the firm losing their clients every ten years, and if the firm does not replace those clients with new</li> </ul>	
	ones, it will affect its ability to continue as a business.	
9	Technology could disrupt the auditing profession and DNA will need to	
	evolve accordingly.	
	• For example, data analytics and artificial intelligence is set to	1
	transform the way audits are conducted. Data analytics have the potential	4
	to improve risk assessment, substantive procedures and tests of controls.	1
	<ul> <li>DNA will need to ensure that it invests in hardware, software and skills to remain competitive.</li> </ul>	
10	If audit fees continue to increase at less than the inflation rate, DNA would	1
	face going concern problems.	-
11	Cash flow risk: audits sometimes take months to complete (or there is an	1
	interim and final audit), and staff and other costs must be paid throughout the	
	year, whereas client fees are only received once a year, after the audit has	
	been completed (perhaps even only months after the audit having been completed).	
12	Prevailing economic conditions may result in credit risk. This can result	1
-	in undue pressure on DNA to cut costs in order to still make a profit on the	
	audit engagements, at the expense of performing audits of high quality.	
13	Further client losses if it becomes public knowledge that DNA is running the	1
	audit division at a loss (worries about future sustainability), if the lawsuit by	
	Zinkwazi becomes general knowledge, etc.	

## ITC JANUARY 2020 SUGGESTED SOLUTION

14	DNA seems to only be able to maintain / increase its market share through reduced audit fees. This is (i) not sustainable and (ii) might lead to existing	1
	clients insisting on reduced fees as well.	
15	The Inc. status of the firm entails personal liability for directors if the	1
	business does go bankrupt and may cause partners to start looking for other	
	job opportunities.	
16	DNA is limited to KZN companies – this is a <b>smaller market</b> than Cape Town	1
	or Johannesburg: how does this hamper the business?	
17	DNA focuses on smaller businesses: this niche focus may make it difficult to	1
	sign clients with other portfolios / characteristics.	
18	Unhappy staff (due to different pay levels) could result in lower productivity	1
	levels / high staff turnover.	
19	First- and second-year trainees in the tax division may be unhappy about	1
	receiving <b>equal pay</b> when they are more <b>productive</b> .	
20	SAICA may reconsider DNA's status to provide trainee contracts if CPD is	1
	reduced.	
21	By taking on Pharmasave, the audit firm could be overextending	1
	themselves due to the large amount of audit hours required for the job as well	
	as the fact that there are stores across the country. This could lead to the	
	quality of assurance work decreasing across all existing clients.	
	Available	29
	Maximum	10
	Communication skills – appropriate style	1
	Total for part (d)	11
TOT	AL FOR PART I	63