ACCOUNTING FOR DECISION MAKING

Professional 2
Examination

MARKING SCHEME

CIPFA

Question 1

(a) The benefits of such a system of decentalisation may include:

- Senior management at head office being able to concentrate on strategy.
- It provides a training ground for managers.
- Local environments can be taken into consideration better by managers nearer that environment.
- There is a faster response time by managers in dealing with problems in their own location.
- Senior managers may be dealing with less detailed information with summarised data being provided by the divisions. This reduction in information may assist senior managers in being more effective.
- Managers in the local situation may become more motivated by the added responsibility.
- Where profit is the driving force of the entity then managers can have profit targets set for them against which they will be judged. This allows for goal congruence.

1 mark for each valid point made up to a maximum of 4 marks

Disadvantages may include:

- Central management may not receive all of the information they require.
- Information asymmetry may occur with managers in location withholding/distorting local data as outlined in agency theory.
- This lack of appropriate data may hinder planning and decision making.
- Some autonomy and control may be lost to senior management.
- Senior managers may lose touch with local managers.
- Danger of a lack of goal congruence with divisional managers looking after their own interests rather than the company as a whole.
- There may be an increase in the costs of the organisation due to the loss of economies of scale eg where each division makes purchases they may not have the bargaining power of the company as a whole.
- Time may be taken up with the negotiation of transfer prices and recharging of central costs to divisions.
- Appropriate performance measures may be difficult to establish and control.

1 mark for each valid point made up to a maximum of 4 marks

NB Whilst the maximum number of marks that can be given for either benefits or disadvantages is 4 marks the maximum for the question is limited to 7 marks

(7)

(b) The ROCE and RI calculations are as follows:

		B/ham	London	Aberdeen
1	ROCE (full cost)	8.92%	3.80%	-2.38%
		107/1,200		
	RI			
	Net profit	107	38	-19
	Notional interest @ 10%	120	100	80
	RI	-13	-62	-99
2	ROCE (controlled costs) Net profit	107	38	-19
	Add head office costs	210	210	210
	Controllable profit	317	248	191
	ROCE	0.317 (317/(1,200-200))	0.31 (248/800)	0.318333 (191/600)
	RI (Controllable costs)			
	Controllable profit	317	248	191
	Notional interest	100	80	60
	B/ham: 10% x (1,200 -200)			
	RI	217	168	131

Comments:

- Using full cost and capital employed within the ROI and RI calculations all divisions show no added value to the organisation.
- Using controllable costs and capital employed within the ROI and RI calculations they all make significant contributions to added value.
- The premises could also have been seen as a non-controllable cost.
- There is a danger in looking only at the controllable costs and capital in that the central costs could be ignored and not recovered.
- The two performance measures differ as RI shows absolute values whilst ROI compares the return to the amount invested.
- Using controllable costs and capital employed RI shows Birmingham to be far superior to Aberdeen (due to the concentration on this measure on absolute values and the fact that Birmingham appears to be much larger than Aberdeen) whilst in relation to ROI Aberdeen is superior.

Calculations: Full costs 2 marks
For controllable costs 3 marks
Comments: 1 mark per point made up to a maximum of 3

(8)

(c) The table attached shows a mixture of performance measures that could have been calculated for DDP.

	Performance measures for DDP	DBB 1998	DBB 1999	DBB 2000	B/ham 2001	London 2001	Aberdeen 2001	DBB 2001
	A: Financial measures							
1	Increase in mainstream income	N/A	0.333	0.100	N/A	N/A	N/A	0.045
			2,000/1,500	2,200/2,000				
2	Increase in other income	N/A	0.250	0.200	N/A	N/A	N/A	0.167
			250/200	300/250				
3	Increase in total income	N/A	0.324	0.111	N/A	N/A	N/A	1.060
			2,250/1,700	2,500/2,250				
4	Contribution/sales on mainstream	0.233	0.363	0.396	0.365	0.359	0.337	0.355
			725/2,000					
5	Contribution/sales for other	0.500	0.552	0.557	0.545	0.470	0.440	0.509
			138/250					
6	Net profit/sales	0.006	0.081	0.098	0.102	0.042	-0.027	0.048
			183/2,250					
7	ROCE	0.010	0.092	0.098	0.089	0.038	-0.024	0.042
			183/2,000					
	B: Customer measures							
8	% increase in customers	N/A	0.287	0.041	N/A	N/A	N/A	-0.013
			1,480/1,150					
9	Pass rate % above/below average	+8%	+8%	+5%	-1%	+4%	+13%	+4%
10	Complaints/total students	0.032	0.027 40/1,480	0.027	0.047	0.030	0.014	0.032

	C: Internal processes							
11	Average class size	35	33	31	35	34	24	32
12	Square metres/total students	1.043	1.081	1.039	1.000	1.200	0.952	1.053
			1,600/1,480					
13	Occupancy rates of rooms	0.650	0.750	0.800	0.840	0.780	0.840	0.830
	D: Innovation							
14	New courses introduced	7	5	3	4	3	1	8
15	IT infrastructure and maintenance	0.012	0.013	0.012	0.019	0.022	0.000	0.015
	Per £ of sales		30/2,250					
16	Staff turnover	0.150	0.130	0.140	0.220	0.150	0.100	0.170

1 mark per appropriate performance indicator calculation, up to a maximum of 10
1 mark deducted if the different balanced scorecard categories not covered
1 mark deducted if the organisation's targets not included
(10)

(d)

(i) Comments relating to the results pre and post decentralisation:

In relation to key targets:

- Overall sales growth has been achieved at 6%. However this has been due to the increase in new courses (up 16.7%) whilst the mainstream courses have not achieved the target increase (4.5%). The sales were increasing at a faster rate before decentralising.
- The pass rates overall for the company are above the national averages (4%) but not by the target figure of 5%. This shows a deterioration from the pre decentralised structure.
- The ROCE target (10%) is not being achieved at present (only 4.2%). This shows a marked decline from the pre-decentralised structure where the company verged on 10%.
- The investment in IT target (2% of income) has not been achieved with a ratio of only 1.5%. This may present problems in the future in terms of competitiveness. However the IT investment prior to the restructure was below the current rate.

Other factors:

- There has been a reduction in the number of customers (-1.3%).
- However the number of new courses introduced locally has increased significantly.
- Staff turnover which, may be equated with satisfaction amongst staff, has increased as there are greater numbers leaving.

Conclusion: The improvement that might have been expected by the decentralising the decision making has not yet come to fruition.

1 mark for each point up to a maximum of 5

(ii) Comments relating to the performance of Aberdeen:

- In relation to key targets:
  - Sales growth cannot be calculated by area as the previous years figures are not shown.
  - The pass rates overall for Aberdeen are well above the national averages (+13%) as well as the target set of 5% and the average for the company of 4%.

- The ROCE target (10%) is not being achieved at present (showing a loss of -2.4%). This may be explained by the volume of throughput not being large enough (as compared to the other divisions) to be spread over high fixed costs which are similar by division.
- The investment in IT target (2% of income) has not been achieved with no investment having been made. This may have been forced on the centre as with a loss being made this may have caused cash flow problems. However it may render the centre incapable of competing on the marketplace.

Other factors:

- It should be noted that Aberdeen is the youngest of the divisions and this should be borne in mind when comparing to the more established centres.
- Aberdeen should feel aggrieved that they have been charged the same central administration charge as the other centres and question the method of allocation. It should be noted that the contribution rates are only slightly lower than other centres.
- The quality of education given is higher as shown by the pass rates and also the lower class sizes. However this may show a poor use of our staffing resources as the same tuition time is being spread over fewer students.
- The rooms that have been leased are being used more often than other centres per the occupancy rate. There would be seen to be more students in the rooms as shown by the square metres per students.
- Student complaints are lower and staff would appear to be happier.

Aberdeen appears to suffer from a lack of volume of students which causes the fixed costs and resources (staff and buildings) to be spread over a lower number of students than other centres. Also the high central costs seems an unfair allocation.

1 mark for each point up to a maximum of 5

(iii) The way forward

- It would seem shortsighted to alter the system after only one period of operation.
- Senior management should consider the likely negative motivational impact on the centre managers should they revert to their original system.
- It may take several years for the benefits of autonomy to be embedded within the organisation. The managers themselves will have a learning curve in relation to their new level of control and influence.
- Senior management should alert the managers to those areas of concern and constructively assist the centre managers to seek to turn around their areas of perceived weakness eg training courses.

- Appropriate reporting systems should be constructed to report regularly (eg quarterly) on the key aspects of each centre as identified in the balanced scorecard.
- The performance measures should be compared with external benchmarks to the organisation e.g. the drop in sales may be due to a general reduction in the level demand in the marketplace.
- Senior management will also be in a learning curve as they seek to focus more on strategic issues. Procedures should also be in place to assess whether the senior management are effective in their new role.
- The method of recharging the central overheads should be reconsidered as they are unfair at present. Also the overheads themselves have risen and should be reviewed e.g. using an ABM approach.
- A system of performance related pay may motivate the managers towards achieving the company wide targets.

1 mark for each point up to a maximum of 5

(15)

(NB Kaplan and Norton have refined their scorecard recently. The above solution was based on the earlier version which was covered in the learning materials. Students should not be penalised if they refer to the new model).

(40)

Question 2

(a) Weighted Average Cost of Capital

	Value £	Cost	Weighting	Weighted Cost
Consolidated loans fund	2,300,000	6.5%	2.3/5.8	2.58%
Other existing loans	3,000,000	8%	3/5.8	4.14%
Additional borrowing	500,000	9%	.5/5.8	0.78%
Total	5,800,000			7.50%

The effect of inflation should either be included in the cost of capital as it is now and the cash flows inflated or the inflation effect taken out of the cost of capital and excluded from the cash flows.

The effect of excluding inflation from the cost of capital and the cash flows would give a cost of capital as follows:

$$\text{Real Kc} = \frac{1 + \text{Market Kc}}{1 + \text{inflation rate}} - 1 = 1.075/1.0225 - 1 = 5.1\% \text{ (round to 5\%)}$$

Use of market values for each type of capital 1 mark
Weighting calculation 1 mark
Inflation adjustment 2 marks

(4)

(NB if the candidate decides to include inflation in Kc and the cash flows (per part c) of the question the above marks for inflation should be awarded)

(b) Three alternative ways of choosing a discount rate have been suggested.

The **test discount rate** is the rate set by the Treasury for appraising central government investments. It does not represent the actual cost of borrowing for government. It is set on the basis of an economic analysis of the social cost of the public sector's use of capital. It is not really appropriate in this case since it is generic across the public sector and not specific to the actual situation being faced here. Thus we would want to apply a methodology that will allow us to find out is whether the savings resulting from the new unit will cover the interest charges and loan re-payments that Hammel will actually face.

The **marginal cost of capital** will be 9% which would seem on the face of it to be the appropriate basis for appraisal. However, it is generally argued that an investor's capital should be seen as a single pool of money; it is therefore inappropriate to identify a specific lump of capital with a specific investment.

One reason for this is that although we would need to borrow at 9% now to fund the new unit, we may be in a position to repay debt during the life of the project. If so, we would presumably repay this debt before the other less expensive debt. So it is not possible to say that this particular loan will actually be funding the unit over the full project period.

For this reason it is generally believed that the **weighted average cost of capital** is the best figure to use. This rate may change over ten years but it is accepted as the best calculation that can be made of the cost of capital over the full period of the investment, given the information currently available.

Therefore the use of the weighted average cost of capital as a discount rate is recommended.

1 mark available for each of the 3 methods
1 mark for rationale for method adopted
(4)

(c) Net present value of the project

	Supplier A			Supplier B			Supplier C		
	Cash flow	Discount	NPV	Cash flow	Discount	NPV	Cash flow	Discount	NPV
		Factor			Factor			Factor	
	£	5%	£	£	5%	£	£	5%	£
Purchase of PC's	-70,000	1.0000	-70,000	-80,000	1.0000	-80,000	-54,000	1.0000	-54,000
Installation costs	-10,000	1.0000	-10,000	-12,000	1.0000	-12,000	-6,000	1.0000	-6,000
Annual maintenance	-8,000	3.5460	-28,368	-10,000	4.3290	-43,290	-11,000	2.7230	-29,953
Residual value	4,000	0.8227	3,291	5,000	0.7835	3,918	4,000	0.8638	3,455
			-105,077			-131,372			-86,498
Annual equivalent cost									
-105,077/3.546			-29,633						
-131,372/4.329						-30,347			
-86,498/2.723									-31,766

Decision rule (on financial terms) : Select that project with the lowest negative NPV ie supplier A.

Identification of 4 different cash flows 5 marks each = 2 marks
Discounting 1½ mark
Annual equivalent cost calculation 1½ marks
Selection of project 1 mark

(6)

(d) Supplier B:

(i) The difference in the annual equivalent NPV from the project selected is £714 per annum (£30,347 - £29,633). Thus if the annual maintenance costs for supplier B were to fall by £714 per annum the NPV would be the same as with supplier A.

(ii) The disposal value would have to increase in order to compete with supplier A. Note that the residual value is in year 5 for supplier B. For supplier B to equate with A then the total NPV of its costs would have to be:

£29,633 x 4.329 = £128,281.

At present the NPV of supplier B is £131,372. Therefore a change in NPV of £3,091 is necessary. However the cash flow is received in year 5 and therefore the change in value would require to be discounted as: 3,091/.7835 = £3,945. Thus if the residual value rose to £8,945 we would be ambivalent between the two suppliers.

This is proven by the following table (this table is shown below for explanation purposes only and was not required in the examination):

	Supplier A			Supplier B, revised maintenance			Supplier B, revised disposal value		
	Cash flow	Discount Factor	NPV	Cash flow	Discount Factor	NPV	Cash flow	Discount factor	NPV
	£	5%	£	£	5%	£	£	5%	£
Purchase of PC's	-70,000	1.0000	-70,000	-80,000	1.0000	-80,000	-80,000	1.0000	-80,000
Installation costs	-10,000	1.0000	-10,000	-12,000	1.0000	-12,000	-12,000	1.0000	-12,000
Annual maintenance	-8,000	3.5460	-28,368	-10,000 + 714 = -9,286	4.3290	-40,199	-10,000	4.3290	-43,290
Residual value	4,000	0.8227	3,291	5,000	0.7835	3,918	5,000 + 3,945	.7835	7,008
			-105,077			-128,281			-128,282
Annual equivalent cost									
-105,077/3.546			-29,633						
-128,281/4.329						-29,633			
-128,282/4,329									-29,633

Recognition of value by which NPV's would have to change 1 mark
Consideration of Discounting of disposal cost 2 mark
Calculations for both changes to disposal and maintenance values 1½ mark each

(6)

(20)

Question 3

(a) The answer should be attempted in report style. The financial calculations are attached in an appendix.

Recognition of all possible outcomes 2 marks
Calculation of joint probabilities 2 marks
Recognition of the relevant cash flows of each possible outcome 2 marks
Calculation of EMV 2 marks
Decision based on EMV to select Co. B 1 mark
Presentation 1 mark
(10)

(b) The analysis should consider the following in relation to uncertainty:

- The expected monetary value decision model would suggest that we use Biotech company 2 as the EMV is lower in costs terms.
- The EMV is a weighted average technique taking into consideration all possible alternative outcomes with their related cash flows.
- The solution does not relate to any single event that has been identified as being a possibility but is an average.
- Before making a decision the decision maker should look at all of the possible outcomes with their related probabilities.
- For example in comparing the two companies the following can be noted.

	Probability for Biotech company 1	Probability for Biotech company 2
Costs being < £170,000	0%	0%
Costs being < £180,000	8%	6%
Costs being < £190,000	34%	29%
Costs being < £200,000	46%	64%
Costs being < £210,000	67%	91%
Costs being < £220,000	91%	100%

- A risk taker may opt for Biotech company 1 as the lowest cost outcome is found under this option with costs of £170,700 and related probability of 8%. The lowest that the other company could offer was £174,250. The risk taker would keep this lowest cost in focus even although there is a possibility that costs for this company could be as high as £235,700.
- A risk averse decision maker on the other hand would focus on the worst outcomes and will wish to stay well away from alternatives with high negative returns. Thus in this case they will see the high potential costs of Biotech company 1 of £235,700 and decide for the other company. These decision takers would pay little attention to the optimistic returns.

- Risk neutral decision makers may well adopt that alternative with the lowest EMV

1 mark per point made up to a maximum of 5
(5)

(c) Other non-financial factors:

- Reliability of the suppliers re maintenance.
- Availability of chemicals required for the differing methods.
- Other potential developments in this type of blood testing which may suggest deferring the decision until the development is publicised.
- Are there any moral/ethical dilemmas that might face the staff in relation to using either of the techniques.
- Retraining costs.
- The impact on suppliers of the existing process. If we change supplier we may lose a bulk buying discount that has been earned for the Trust due to the volume of work across the Trust. The supplier may then reconsider the discounts offered as a result of losing out on this contract.
- The certainties around other factors such as the staffing requirements that have been suggested eg how confident that it will only take one staff member for Biotech company 1's equip ment.

1 mark per point made up to a maximum of 5
(5)

(20)

Appendix: Financial calculations

BIO tech company 1									
I	Ii	Iii	Iv	v	Vi	Vii	Viii	ix	x
Number	Probability	Variable	Probability	Variable	Staff	Leasing	Total	Joint	EMV
of tests	of volume	Costs	of variable	costs	Costs	Costs	Costs	probability	
			Costs	I x iii			v + vi + vii	ii x iv	viii x ix
40,000	0.3	2.5	0.4	100,000	20,700	75,000	195,700	0.12	23,484
					(1x18kx1.15)				
40,000	0.3	3	0.3	120,000	20,700	75,000	215,700	0.09	19,413
		(2.5 x 1.2)							
40,000	0.3	3.5	0.3	140,000	20,700	75,000	235,700	0.09	21,213
35,000	0.5	2.5	0.4	87,500	20,700	75,000	183,200	0.2	36,640
35,000	0.5	3	0.3	105,000	20,700	75,000	200,700	0.15	30,105
35,000	0.5	3.5	0.3	122,500	20,700	75,000	218,200	0.15	32,730
30,000	0.2	2.5	0.4	75,000	20,700	75,000	170,700	0.08	13,656
30,000	0.2	3	0.3	90,000	20,700	75,000	185,700	0.06	11,142
30,000	0.2	3.5	0.3	105,000	20,700	75,000	200,700	0.06	12,042
									200,425

BIO tech company 2									
I Number	Ii Probability	Iii Variable	Iv Probability	v Variable	Vi Staff	vii Leasing	Viii Total	ix Joint	X EMV
of tests	of volume	Costs	of variable	costs	Costs	costs	Costs	probability	
			Costs	I x iii			v + vi + vii	ii x iv	viii x ix
40,000	0.3	1.75	0.3	70,000	51,750	70,000	191,750	0.09	17,257
					(2.5x18kx1.15)				
40,000	0.3	2.1	0.4	84,000	51,750	70,000	205,750	0.12	24,690
		(1.75 x 1.2)							
40,000	0.3	2.45	0.3	98,000	51,750	70,000	219,750	0.09	19,777
35,000	0.5	1.75	0.3	61,250	51,750	70,000	183,000	0.15	27,450
35,000	0.5	2.1	0.4	73,500	51,750	70,000	195,250	0.2	39,050
35,000	0.5	2.45	0.3	85,750	51,750	70,000	207,500	0.15	31,125
30,000	0.2	1.75	0.3	52,500	51,750	70,000	174,250	0.06	10,455
30,000	0.2	2.1	0.4	63,000	51,750	70,000	184,750	0.08	14,780
30,000	0.2	2.45	0.3	73,500	51,750	70,000	195,250	0.06	11,716
									196,300

Question 4

(a) The table below shows the budget prepared under ABC

Personnel department activity budget	Payroll	Office Supplies	Premises	IT Support	Other	Total
	£	£	£	£	£	£
Pay negotiations	90,000	9,000	20,000	15,000	0	134,000
	20%	15%	20%	30%	0%	
Recruitment	135,000	30,000	30,000	5,000	36,000	236,000
	30%	50%	30%	10%	80%	
Second phase recruitment	45,000	3,000	10,000	2,500	4,500	65,000
	10%	5%	10%	5%	10%	
Advice to managers	45,000	0	10,000	5,000	0	60,000
	10%	0%	10%	10%	0%	
Mediation in disputes	22,500	3,000	5,000	2,500	0	33,000
	5%	5%	5%	5%	0%	
Maintenance of records	90,000	12,000	20,000	15,000	4,500	141,500
	20%	20%	20%	30%	10%	
Staff development	22,500	3,000	5,000	5,000	0	35,500
	5%	5%	5%	10%	0%	
Total cost	450,000	60,000	100,000	50,000	45,000	705,000

Recognition of activities 1 mark
Calculation of activity budgets 2 marks
(3)

(b) Primary or value added activities are features for which the customers (internal and external to the organisation) are likely to pay. In this example these activities are:

- Pay negotiations
- Recruitment
- Advice to departmental managers
- Mediation in disputes

- The "secondary" activities not directly adding value to the organisation (ie internal customers would not be willing directly to pay for them) but which are necessary in order that the department provides the primary activities include:
  - The maintenance of staff records
  - Staff development activities

- Remedial, this cost would not be necessary in a total quality environment where the philosophy is to get it right first time. The existence of a budget for this cost indicates that the company acknowledge a problem here. The only activity fitting this category would be the second phase recruitment.

½ mark each for the definition of each of the three categories and ½ mark for the allocation of activities to each of the three correct categorisations

(3)

(c) Revised budget control report based on activity based costing principles:

Personnel department activity budget	Budget	Actual	Variance	Variance as % of budget
	£	£	£	
Pay negotiations	134,000	120,000	14,000F	10.4%F
Recruitment	236,000	220,000	16,000F	6.8%F
Second phase recruitment	65,000	90,000	25,000A	38.5%A
Advice to managers	60,000	30,000	30,000F	50%F
Mediation in disputes	33,000	50,000	17,000A	51.5%A
Maintenance of records	141,500	200,000	58,500A	41.3%A
Staff development	35,500	25,000	10,500F	29.6%F
Total cost	705,000	735,000	30,000A	4.3%A

Presentation of report of budget v actual 1 mark
Calculation of variances 1 mark
Significance calculations 1 mark
(3)

(d) The following points could be made:

- The report in (c) above shows a number of significant variances. Whilst the net effect of all the variances together may be seen to be not particularly significant the significance of individual variances require that the organisation investigates these differences.

- Double loop feedback may be necessary here:
  - The original budget assumptions may be invalid.
  - The operational efficiency may not be what it should be.

- Attention should be drawn to the remedial (or diversionary) activities which we should always be seeking to minimise/eradicate. Thus the second phase recruitment should be investigated. In the first place we would not wish this type of expense to be incurred. Given that we see that it is an unwanted reality such that a budget allocation is given against it, attention should be drawn to the fact that our performance is considerably poorer than budgeted.

- The secondary activities, for which the departments utilising the personnel department would not be willing to pay for directly, should also be questioned for effectiveness and efficiency. The manager may well be surprised to see what level of an overspend there is in the filing of documents. Perhaps the organisation needs to consider electronic forms of communication and filing.

- The primary activities of the organisation show a mixed performance. The mediation in disputes causes some concern being 51.5% above budgeted cost.

- The root causes should be sought for the adverse variances. These may include:
  - Second phase recruitment: Inappropriate job descriptions having been drawn up.
  - Filing: Inappropriate electronic communication systems.

- Attention could also be drawn to the fact that not all favourable variances may be beneficial to the organisation. For example the favourable variance in the staff development activity may be detrimental in the long term as the personnel function may be less effective due to poor training. The filing costs may be caused by the fact that staff are inadequately trained in electronic communication.

1 mark per point made up to a maximum of 4

(e) Marks should be awarded based on the following comments being made:

- The understanding that these activity costs represent only the departmental costs and not the full costs of the organisation.
- There will also be costs related to personnel functions being incurred in the departments which they serve eg managers having to attend recruitment interviews.
- To arrive at the full costs of the activities one would have to cross charge all services that the personnel department use in order that they may operate. Additionally the personnel related costs incurred within other departments would have to be collected.

- Danger at present would be to assume that the department is efficient by benchmarking it's functionally based unit costs with an external provider's full costs.
- The importance under ABM to consider the full costs of activities and processes which cross functional and departmental boundaries.
- Also no mention has been made of the effectiveness of the outputs of the department compared with external providers.
- The external providers may also have profit elements and VAT included within the charges being compared with.

1 mark per point up to a maximum of 3

(f) Trading accounts

- Trading Accounts (TACs) present the income and expenditure of support services provided within the 'internal market' of public service organisations (the 'client-contractor' split).

- TACs are a key part of the mechanism for monitoring support service performance over time for discrete areas of activity, and are to be covered by individual TACs.

- TACs will show on the income side charges to users for work done at the rates agreed, and on the expenditure side the full cost of the support services provided.

- They will therefore show whether support service providers are keeping within agreed charges, hence exerting pressure on them to control costs.

- Charges could be set here for the costs of recruitment as well as hourly rates for advice to managers and involvement in disputes.

- The value of the service to the user can then be gauged in relation to whether they are willing to contract for different forms of work given the charges set.

- The level of detail depends largely on the needs of the service deliverers. Decisions have to be made about the headings for which separate income and expenditure information is required. Clearly, for income it will be easy to set up separate income codes for each TAC (and there may be a number of users, and hence TACs, for a single support service). It may be then easy to code expenditure directly to similar levels of detail with a time recording system, given that staff is likely to be the major cost item.

- It may, however, be useful to set up a detailed time recording system to identify if any individual services or elements of work are under / over recovering materially; this may help inform future charge setting.

1 mark per point made up to a maximum of 4
(4)

(20)

Question 5

(a) Cost control/cost reduction and lean enterprise.

- *Lean enterprise* is the concept of attempting to run an organisation where it is able achieve its objectives whilst doing so at minimum cost. The terminology alludes to the cutting out of any needless "fat" in the organisation to make it as fit as possible to achieve its objectives effectively.

- *Cost control* is concerned with keeping the costs of operating a business within acceptable limits.

- *Cost reduction* is a planned and positive approach to reducing expenditure.

Planning for cost reduction.

- Approaches.

  - Crash programmes to cut spending levels in times of crisis.

  - Planned (continuous, long-term) programmes to reduce costs.

- Scope can embrace the activities of the entire organisation with both long-term and short-term objectives.

Techniques and methods of cost reduction.

Efficiency can be improved.

- Eg Improve materials usage by reducing waste, Using better quality materials and introducing new equipment and work methods.

- Eg Improve labour productivity through changed work methods.

Other techniques and methods of cost reduction exist including the control over spending decisions.

The major difficulties with cost reduction programmes include

- Resistance by employees.

Often introduced as rushed, desperate measures

Once costs have been *reduced* by improving efficiency, *cost control* must be applied by management.

- The aim is to keep costs within acceptable agreed limits
- This may utilise such techniques as:
  - Budgeting (including ABB).
  - Standard costing.
  - Performance measurement systems.

1 mark per point made up to a maximum of 5
1 mark for presentation as briefing note

(6)

(b) **JIT (Just – in – time)**

- JIT is a philosophy or approach to management which encompasses a commitment to continuous improvement and the search for excellence in the design and operation of the production management system. It aims to streamline the flow of products through the production process and into the hands of customers.
- *Just-in-time production* is production driven by demand for finished goods: each component is produced only when needed for the next stage.
- *Just-in-time purchasing* is matching receipt of material closely with usage.
- Aims.
  - To minimise warehousing and storage costs (DLO has high storage costs related to high stocks).
  - To eliminate waste by maintaining control over quality of stocks input to a production process (DLO has high wastage due to breakages).
  - To reduce the amount of raw materials and WIP stock carried as working capital through more efficient production planning (DLO has high stocks of windows and doors).
  - To reduce the amount of finished goods stock held as working capital
  - The elimination of non-value-added costs (DLO has large amount of rework).
- JIT aims to eliminate all non-value-added costs, which are the costs of those activities that *can* be eliminated without the customer perceiving a deterioration in the performance, function or other quality of a product.
- Value is only added while a product/service is actually being processed, while a product is waiting for further processing value is not being added.
- Some businesses need to be able to deliver their finished goods or services extremely quickly after an order is placed.

- It makes the organisation far more vulnerable to disruptions in the supply chain.
- Suppliers are likely to charge a premium price for contractually guaranteed small deliveries.

General application to public sector:

- Where stockholding exists it can reduce these stocks and assist working capital management.
- It can focus on the reduction of non-value adding activities and their reduction.
- Where speed of delivery of service is important the JIT philosophy will consider ways of reducing the lead time to delivery.

Explanation of features of JIT 4 marks
Application to the DLO 3 marks

TQM

- TQM is the process of focusing on quality in the management of *all* resources and relationships within the organisation. There are two basic principles.

  - *Getting things right first time*, on the basis that the cost of correcting mistakes is greater than the cost of preventing them from happening in the first place (DLO has high level of complaints, high levels of rework and scrappage).
  - *Continuous improvement* - the belief that it is *always* possible to improve, no matter how high quality may be already (DLO seems to have outdated work practices).

- *Quality assurance* means that the supplier guarantees the quality of goods supplied so that the onus is on the supplier to carry out the necessary quality checks or face cancellation of the contract (DLO has high customer complaints).
- *Inspection of output* occurs at various key stages in the production process (not just when the product is finally completed) and is based on random sampling and other statistical techniques.
- *Monitoring customer reaction* involves monitoring complaints in the form of letters, returned goods, penalty discounts incurred, claims under guarantee and requests for servicing of goods supplied (DLO does not monitor complaints).
- TQM recognises the importance of satisfying the customer. This recognises the all-pervasive nature of the customer-supplier relationship, including internal customers.
- Staff at all levels should be personally responsible for defect-free production in their domain.
- Any level of defects is unacceptable.

- The cost of poor quality should be emphasised.
- Training for quality should be implemented including improving skills and changing attitudes.
- Quality should be designed into the product/service itself, the production method, and the administrative and support processes.
- Quality-related costs should be identified including internal and external failure costs, appraisal costs, prevention relation costs as well as the costs of conformance and non-conformance (DLO should count the cost of the quality inspections, scrappage, wastage etc).

Application to the public sector.

- Seeking a defect free service provision.
- Attempting to get things right the first time.
- TQM applicable to all sectors including administration and support.
- Focus on the customer, internal and external.
- Attempting to cost the effects of poor quality eg repeat treatment in the Health Service where previous treatment has not been effective.

Explanation of features of TQM 4 marks
Application to the DLO 3 marks

(14)

(20)