

QUESTIONS

CHAPTER 1: ACCOUNTING FOR MANAGEMENT

This information is to be used for the following THREE questions.

The Board of Directors of Henderson Ltd, which operates solely in the UK, has recently made the following decisions:

- 1 To move the company's operations within five years from the manufacture of goods to the manufacture and distribution of goods.
 - 2 To carry out repairs to the car park surrounding the head office following a recent flood.
 - 3 To begin a sales drive in France, following the success of a recent sales drive in the north of the UK.
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1 Which of the decisions would you classify as a strategic objective?

- A Decision 1 only
- B Decision 1 and 2
- C Decision 2 and 3
- D Decision 3 only

2 Which of the decisions would you classify as an operational matter?

- A Decision 1 and 3
- B Decision 2 only
- C Decision 3 only
- D Decision 2 and 3

3 Which of the decisions would you classify as being a tactical plan?

- A Decision 1 and 2
- B Decision 2 and 3
- C Decision 3 only
- D Decision 1 and 3

4 What is the name of the part of an organisation which generates revenues and for which costs are also collected?

- A A cost centre
- B A revenue centre
- C A profit centre
- D An investment centre

- 5 What is a support department in an organisation for which costs are collected called?**
- A A cost centre
 - B A revenue centre
 - C A profit centre
 - D An investment centre
- 6 Monthly variance reports are an example of which one of the following types of management information?**
- A Tactical
 - B Strategic
 - C Planning
 - D Operational
- 7 Which of the following is an investment centre manager is responsible for?**
- (i) costs
 - (ii) revenues
 - (iii) expenditure on non-current assets.
- A (i) only
 - B (i) and (ii)
 - C (ii) and (iii)
 - D (i), (ii) and (iii)
- 8 Which of the following qualities is not necessarily a quality of good information?**
- A It should be relevant
 - B It should be understandable
 - C It should be worth more than it costs to produce
 - D It should be available quickly
- 9 Which of the following describes information?**
- A data that consists of facts and statistics before they have been processed
 - B data that consists of numbers, letters, symbols, events and transactions which have been recorded but not yet processed into a form that is suitable for making decisions
 - C facts that have been summarised but not yet processed into a form that is suitable for making decisions
 - D data that has been processed in such a way that it has a meaning to the person who receives it, who may then use it to improve the quality of decision making

- 10 Which of the following is not a purpose of management information in a company?**
- A To provide records of current and actual performance
 - B To compare actual performance with planned performance
 - C To help management with decision making
 - D To inform customers about the company's products
- 11 Which one of the following statements is correct?**
- A Data is held on computer in digital form whereas information is in a form that is readable to human beings
 - B Information is obtained by processing data
 - C Data and information mean the same thing
 - D Data consists of numerical or statistical items of information
- 12 Which of the following would be classified as data?**
- A Number of purchase requisitions
 - B Analysis of wages into direct and indirect costs
 - C Table showing variances from budget
 - D Graph showing the number of labour hours worked

CHAPTER 2: SOURCES OF DATA AND ANALYSING DATA

- 13 Which of the following is an example of external information that could be used in a management accounting system?**
- A Consumer price index statistics
 - B Price list for the products sold by the business
 - C Production volume achieved by the production department
 - D Discounts given to customers
- 14 Which one of the following is an example of internal information for the wages department of a large company?**
- A A Code of Practice issued by the Institute of Directors
 - B A new national minimum wage
 - C Changes to tax coding arrangements issued by the tax authorities
 - D The company's employees' schedule of hours worked
- 15 Which TWO of the following are advantages of big data analysis?**
- A Demand forecasts based on big data analysis can be in terms of predicted volume demands but not the type of products required
 - B Big data analysis can help to more accurately predict customer demand
 - C Big data analysis allows companies to gain a variety of insights into customer behaviour
 - D Companies cannot use the information to understand which products and features are most popular with customers.

The next TWO questions use the following data:

Some details from a frequency distribution of time taken in seconds to produce a particular product are given:

Time taken (mid-point)	f	fx	fx ²
215	4	860	184,900
225	10	2,250	506,250
235	8	1,880	441,800
245	16	3,920	960,400
255	20	5,100	1,300,500
265	10	2,650	702,250
275	8	2,200	605,000
285	4	1,140	324,900

- 16 What is the mean of this frequency distribution (to the nearest second)?**

17 What is the standard deviation of this frequency distribution (to 2 decimal places)?

The next TWO questions are based on the following data:

A group of workers have a weekly wage which is normally distributed with a mean of \$1,080 per week and a standard deviation of \$145.

18 What is the probability that a worker earns less than \$800?

- A 1.9%
- B 2.7%
- C 3.5%
- D 4.9%

19 What is the probability that a worker earns between \$800 and \$900?

- A 1%
- B 2%
- C 8%
- D 12%

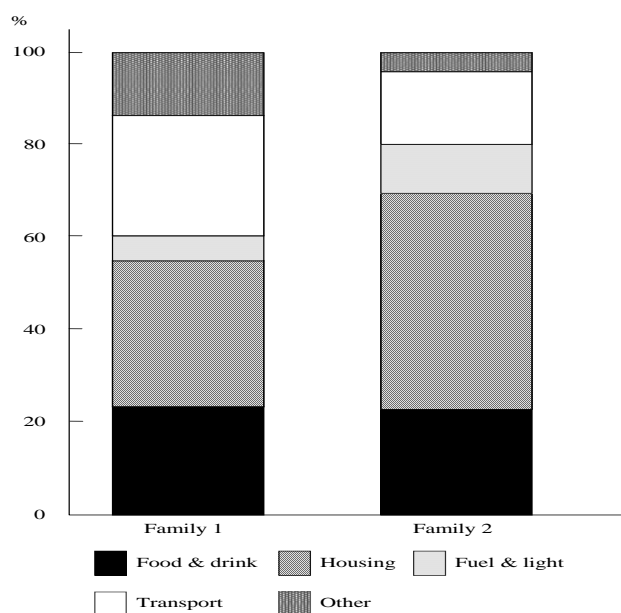
20 The manager of a local theatre is forecasting demand for tickets over the forthcoming period. The number of tickets sold will depend on the weather. If it is rainy the manager expects to sell 29,000 tickets. If it is sunny then demand will be for only 16,400 tickets. The probability of sunny weather is 0.3.

What is the expected value for the number of tickets to be sold next period?

- A 15,380
- B 20,180
- C 20,300
- D 25,220

CHAPTER 3: PRESENTING INFORMATION

21 What type of graph is this?



- A Component
- B Compound
- C Percentage Component
- D Percentage Compound

This information is to be used for the next TWO questions

Item	Expenditure	
	Family 1	Family 2
	\$	\$
Food and drink	540	180
Housing	730	370
Fuel and light	125	84
Transport	600	124
Other	315	32
	<hr/>	<hr/>
Net monthly income	2,310	790
	<hr/>	<hr/>

22 What is the angle of the segment on a pie chart that Family 1 Transport cost would be represented by?

- A 60.0°
- B 19.3°
- C 93.5°
- D 49.1°

- 23** What is the angle of the segment on a pie chart that Family 2 Food and drink cost would be represented by?

A 168.6°
B 82.0°
C 246.1°
D 14.6°

- 24** What type of graph would best represent the following data?

Quarterly sales (thousand units)									
Brand	20X0				20X1				20X2
	Q ₁	Q ₂	Q ₃	Q ₄	Q ₁	Q ₂	Q ₃	Q ₄	Q ₁
A	40	33	60	104	56	45	80	136	72
B	78	63	101	158	81	59	98	162	80
C	400	290	460	700	335	240	380	575	270

- A Compound line graph
B Multiple line graph
C Scatter graph
D Pie chart
- 25** A company manufactures three products and wants to show how sales of each product have changed from 20X1 to 20X8.

Which of the following charts or diagrams would be most suitable for showing this information?

A Pie chart
B Component bar chart
C Simple bar chart
D Multiple bar chart

- 26** XYZ produces three main products.

Which would be the most appropriate chart or diagram for showing total turnover and its product analysis month by month?

A Z chart
B Line graph
C Pie chart
D Component bar chart

- 27 Which of the following is not an advantage of component bar charts?**
- A The relative importance of each component can be assessed
 - B The information can be interpreted quickly
 - C More than one component can be displayed at a time
 - D The total value can be easily assessed and determined
- 28 Which of the following graphs would best be used to identify trends in data?**
- A A bar chart
 - B A pie chart
 - C A line graph
 - D A scatter graph
- 29 Which of the following graphs would best be used to illustrate that two variables are unrelated?**
- A A bar chart
 - B A pie chart
 - C A line graph
 - D A scatter graph

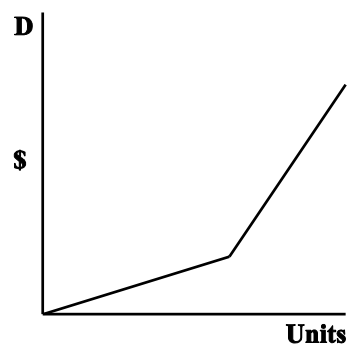
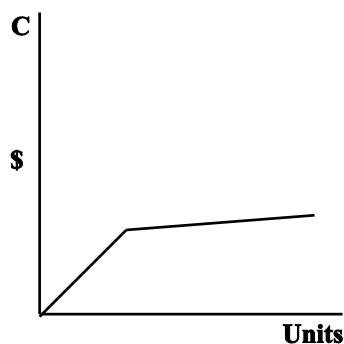
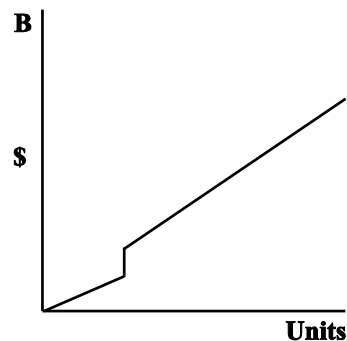
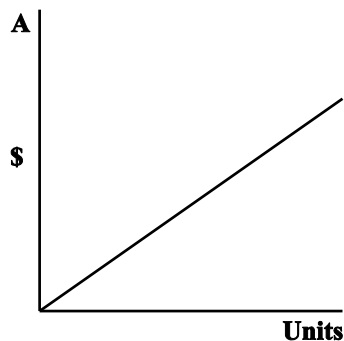
CHAPTER 4: COST CLASSIFICATION

- 30** Welham plc manufactures two types of tractor: the Rugged and the Terrain. It buys in most components for assembly, but it does manufacture crankshafts for the Rugged, and cockpits for both the Rugged and the Terrain. There is no external market for the crankshafts or the cockpits.

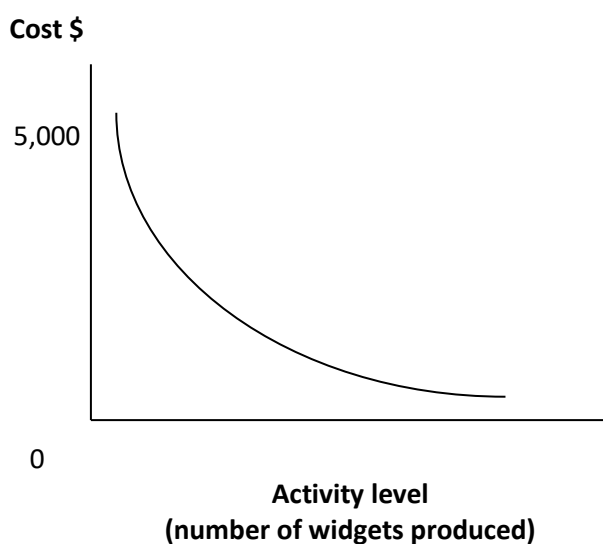
Which of the following would be appropriate cost units for Welham plc?

- A The Rugged and the Terrain
 - B Crankshafts and cockpits
 - C The Rugged, the Terrain and the cockpits
 - D The Rugged, the Terrain, the cockpits and the crankshafts
- 31** A company achieves bulk buying discounts on quantities of raw material above a certain level. These discounts are only available for the units above the specified level and not on all the units purchased.

Which of the following graphs of total purchase cost against units best illustrates the above situation?



32 Which of the descriptions best suits the graph?



- A Total fixed costs
- B Total variable costs
- C Variable costs/unit
- D Fixed costs/unit

33 Tan Products Ltd makes one highly desirable fashion item, the Croissant handbag. The following cost information is available.

	<i>Per handbag</i>
	\$
Direct materials (leather, thread, fastenings, linings)	100
Direct labour	75
Direct expenses	40
Workroom expenses – fixed	10
Workroom expenses – variable	15
Administration costs – fixed	20
Administration costs – variable	30
	<hr/>
	290
	<hr/>

What is the prime cost for each handbag?

- A \$290
- B \$260
- C \$240
- D \$215

34 Direct costs are:

- A costs which can be identified with a cost centre but not identified to a single cost unit
- B costs which can be economically identified with a single cost unit
- C costs which can be identified with a single cost unit, but it is not economic to do so
- D costs incurred as a direct result of a particular decision

This information is to be used for questions 29 to 31.

Bowen plc provides a call centre service to a number of utility and financial services customers. It has four separate call centre buildings plus a head office. Many of the telephone staff are students and casual employees who are paid weekly, on an hourly basis. Their contracts state that Bowen plc has no duty to provide them with work. The telephone staff are managed by permanent supervisors and managers. Although there are no direct material costs as such, the company incurs telephone charges which are directly related to the number of calls it handles. There is a central computerised exchange which routes the calls received.

35 Which of the following costs would you classify as fixed costs?

- (1) Lease charges for the buildings
 - (2) Telephone staff costs
 - (3) Supervisor and management costs
 - (4) Telephone charges
 - (5) Computer exchange lease costs
- A (1), (3) and (4)
 - B (2) and (4)
 - C (1), (3) and (5)
 - D All of them

36 Which of the costs would you classify as variable costs?

- A (1), (3) and (4)
- B (2) and (4)
- C All of them
- D None of them

37 Bowen plc has estimated that its overheads will be \$250,000 next year if it handles 1,000,000 calls, and \$280,000 if it handles 1,250,000 calls.

What will its overheads be if it handles 1,100,000 calls?

- A \$275,000
- B \$268,000
- C \$262,000
- D \$246,400

38 In accounting systems, data is usually organised using codes.

Which one of the following statements about codes is *incorrect*?

- A Using codes helps to improve the speed and accuracy of data processing
- B Using codes allows more data validation checks to be carried out
- C A hierarchical code structure makes it easier to find items on a code list, since similar items are grouped
- D Codes in accounting reduce the need for accountants to understand the principles of accounting

39 What does a prime cost comprise of?

- A all variable costs
- B direct labour and material only
- C direct labour, direct material and direct expense
- D direct labour, direct material and production overhead

40 What is the definition of a semi-variable cost?

- A It increases in direct proportion to output
- B It remains constant irrespective of the level of output
- C It contains an element of both fixed and variable cost
- D It increases throughout the year

41 Which of the costs listed below is not a fixed cost?

- A Insurance
- B Business rates
- C Depreciation – based on straight-line method
- D Materials used in production

42 What do production overheads comprise of?

- A variable overheads only
- B indirect labour, indirect material and indirect expenses related to production activity
- C indirect expenses only
- D indirect labour and material related to the production activity

43 What is a direct cost?

- A a cost which cannot be influenced by its budget holder
- B expenditure which can be economically identified with a specific cost unit
- C cost which needs to be apportioned to a cost centre
- D the highest proportion of the total cost of a product

- 44** The following data relate to the overhead expenditure of contract cleaners at two activity levels:

Square metres cleaned	12,750	15,100
Total overheads	\$73,950	\$83,585

If fixed overheads are estimated to cost \$21,675, what is the estimated total overhead cost if 16,200 square metres are to be cleaned?

- A \$88,095
 - B \$89,674
 - C \$93,960
 - D \$98,095
- 45** The following data relate to two output levels of a department:

Machine hours	17,000	18,500
Overheads	\$246,500	\$251,750

The variable overhead rate per hour is \$3.50.

What is the amount of fixed overheads?

- A \$5,250
 - B \$59,500
 - C \$187,000
 - D \$246,500
- 46** Which of the following is a direct expense?
- A Materials used on production
 - B Special tools for job 721
 - C Power
 - D Depreciation

- 47** Hockey Skill manufactures hockey sticks. A summary of some cost headings include:

- (a) wood used as raw material
- (b) rubber covers for handles
- (c) depreciation
- (d) power
- (e) sales manager's salary
- (f) labour in assembly department
- (g) oils and greases
- (h) telephone and postage
- (i) insurance of plant
- (j) supervisory labour.

Which of the items would be classified as production overheads?

- A (a), (f), (d) and (e)
- B (c), (d), (g), (i) and (j)
- C (e), (h), (i) and (j)
- D (a), (b), (c), (d) and (f)

48 What is a cost centre?

- A a unit of product or service for which costs are calculated
- B an amount of profit attributable to an activity
- C a function or location within an organisation for which costs are accumulated
- D a section of the organisation for which budgets are prepared and control is exercised

49 What is the full production cost per unit of a manufactured product?

- A Direct material cost plus direct labour cost per unit
- B Prime cost plus production overhead cost per unit
- C Prime cost plus variable production overhead per unit
- D Production overhead cost per unit

50 A company produces electronic circuit boards. Each circuit board has a raw material input of \$60 and labour input that costs \$20. The company intends to produce 1,000 circuit boards per week. The company must also pay the rent of the factory totalling \$20,000 per annum, business rates of \$4,000 per annum and the production director's salary of \$24,000 per annum.

What is the fixed cost of the business?

- A \$20,000
- B \$24,000
- C \$48,000
- D \$80,000

CHAPTER 5: ACCOUNTING FOR MATERIAL

51 Which department would normally be responsible for completing a standard purchase requisition for goods in a service organisation?

- A The buying (purchasing) department
- B The department that requires the goods
- C The accounting department staff
- D The stores department

52 The demand for a product is 12,500 units for a three-month period. Each unit of product has a purchase price of \$15 and ordering costs are \$20 per order placed.

The annual holding cost of one unit of the product is 10% of its purchase price.

What is the Economic Order Quantity (to the nearest unit)?

- A 577
- B 1,155
- C 1,816
- D 1,866

53 A company determines its order quantity for a raw material by using the Economic Order Quantity (EOQ) model.

What would be the effects on the EOQ and the total annual holding cost of a decrease in the cost of ordering a batch of raw material?

	<i>EOQ</i>	<i>Total annual holding cost</i>
A	Higher	Lower
B	Higher	Higher
C	Lower	Higher
D	Lower	Lower

54 Which of the following is correct with regard to inventory?

- (i) Stock-outs arise when too little inventory is held.
 - (ii) Safety inventory is the level of units of inventory maintained in case there is unexpected demand.
 - (iii) A reorder level can be established by looking at the maximum usage and the maximum lead time.
- A (i) and (ii) only
 - B (i) and (iii) only
 - C (ii) and (iii) only
 - D (i), (ii) and (iii)

- 55 Wivelsfield currently uses the economic order quantity (EOQ) to establish the optimal order quantities for their main raw material.

The company has been approached by an alternative supplier who would be willing to offer the following discounts:

<i>Order quantity</i>	<i>Discount</i>
0 – 199 units	1%
200 – 499 units	3%
500 – 699 units	5%
700 units or more	7%

Information regarding current inventory costs is as follows:

Holding cost per unit per annum = 10% of purchase price

Order costs = \$2 per order

Annual demand = 15,000 units

Purchase price = \$15

Current EOQ = 200 units

What is the new optimal order quantity?

- A 200
- B 203
- C 500
- D 700

This information is to be used for the next THREE questions

A company uses Material Z (cost \$3.50 per kg) in the manufacture of Products A and B. The following forecast information is provided for the year ahead:

	<i>Product A</i>	<i>Product B</i>
Production (units)	25,300	10,100
Material Z usage (kg per completed unit, net of wastage)	1.8	3.0
Material Z wastage (%)	5	11

Additional information:

Average purchasing lead time for Material Z is two weeks.

Usage of Material Z is expected to be even over the year.

Annual stock holding costs are 18% of the material cost.

The cost of placing orders is \$30 per order.

The reorder level for Material Z is set at the average usage in average lead time, plus 1,000 kg of safety (buffer) inventory.

56 What is the total requirement for Material Z (in kgs) for the year ahead?

- A 47,937 kg
- B 75,840 kg
- C 81,982 kg
- D 85,568 kg

57 What is the Economic Order Quantity for Material Z (in kgs)?

- A 2,794 kg
- B 2,805 kg
- C 2,975 kg
- D 6,824 kg

58 What is the average inventory investment (\$) for Material Z?

- A \$4,888
- B \$8,390
- C \$8,568
- D \$143,469

59 What is the annual inventory holding costs (\$) for Material Z?

- A \$880
- B \$1,510
- C \$1,542
- D \$808

The following information relates to the next TWO questions

The inventory record for component BXY for the month of January showed:

	<i>Receipts</i>	<i>Value</i> \$	<i>Issues</i>
Opening inventory	500	1,250	
4 January	1,000	2,750	
11 January	1,600	4,480	
18 January	1,200	3,480	
19 January			2,100
25 January	1,500	4,350	
31 January			1,800

- 60 Using the FIFO method of pricing issues, what is the cost of issues during the month?**
- A \$11,250
 - B \$10,800
 - C \$10,850
 - D \$11,300
- 61 Using the LIFO method of pricing issues, what is the value of inventory at 31 January?**
- A \$4,100
 - B \$3,720
 - C \$5,120
 - D \$3,950
- 62 Using the AVCO method of pricing, at what price would the issues on 31 January be made?**
- (Calculate to two decimal places.)
- A \$3.00
 - B \$2.95
 - C \$2.90
 - D \$2.83

63 Turner has the following inventory record:

<i>Date</i>		<i>Number of units</i>	<i>Cost</i>
1 March	Opening inventory	100 units	at \$3.00/unit
3 March	Receipt	200 units	at \$3.50/unit
8 March	Issue	250 units	
15 March	Receipt	300 units	at \$3.20/unit
17 March	Receipt	200 units	at \$3.30/unit
21 March	Issue	500 units	
23 March	Receipt	450 units	at \$3.10/unit
27 March	Issue	350 units	

What is the valuation of issues using the weighted average method of inventory valuation at each issue?

- A \$3,248
- B \$3,548
- C \$3,715
- D \$4,015

The following information relates to the next TWO questions

Date		<i>Units</i>	<i>Unit price (\$)</i>	<i>Value (\$)</i>
1 Jan 20X1	Balance b/f	100	5.00	500.00
3 Mar 20X1	Issue	40		
4 Jun 20X1	Receipt	50	5.50	275.00
6 Jun 20X1	Receipt	50	6.00	300.00
9 Sep 20X1	Issue	70		

64 If the first-in, first-out method of pricing is used what is the value of the issue on 9 September 20X1?

- A \$350
- B \$355
- C \$395
- D \$420

65 What is the valuation of closing inventory if LIFO is used?

- A \$350
- B \$395
- C \$410
- D \$420

- 66 If a company is using the first-in, first-out method for material issues at a time when material prices are rising this will mean which of the following?**
- A Production costs will be lower and profits will be higher than if the last-in, first-out method had been used
 - B Production costs will be higher and profits will be lower than if the last-in, first-out method had been used
 - C Production costs will be lower and profits will be lower than if the last-in, first-out method had been used
 - D Production costs will be higher and profits will be higher than if the last-in, first-out method had been used
- 67 Which of the following individuals is usually responsible for preparing a delivery note?**
- A Buyer
 - B Supplier
 - C Stores manager
 - D Accountant
- 68 Which of the following is in the correct chronological sequence for sales documents?**
- A Enquiry – Order – Invoice – Payment
 - B Order – Enquiry – Invoice – Payment
 - C Enquiry – Order – Payment – Invoice
 - D Enquiry – Invoice – Order – Payment
- 69 Which of the following is in the correct chronological sequence for purchase documents?**
- A Purchase order – Invoice – Goods received note – Delivery note
 - B Delivery note – Goods received note – Purchase order – Invoice
 - C Purchase order – Delivery note – Goods received note – Invoice
 - D Goods received note – Delivery note – Purchase order – Invoice
- 70 Which of the following documents should be checked before a purchase invoice is paid, to confirm that the price and quantities are correct?**
- | | <i>Price check</i> | <i>Quantity check</i> |
|---|---------------------|-----------------------|
| A | Purchase order | Purchase order |
| B | Goods received note | Delivery note |
| C | Purchase invoice | Goods received note |
| D | Purchase order | Goods received note |

CHAPTER 6: ACCOUNTING FOR LABOUR

71 Which one of the following groups of workers would be classified as indirect labour?

- A Machinists in an organisation manufacturing clothes
 - B Bricklayers in a house building company
 - C Maintenance workers in a shoe factory
 - D Assembly workers in a vehicle manufacturing business
-

This information is to be used for the next TWO questions.

A plc makes engineering components. The company has been manufacturing 6,000 components per week, with six direct employees working a 40-hour week, at a basic wage of \$4.00 per hour. Each worker operates independently.

A new remuneration scheme is being introduced. Each employee will receive payment on the following basis:

First 800 components per week	16 cents per unit
Next 200 components per week	17 cents per unit
All additional components per week	18 cents per unit

There will be a guaranteed minimum wage of \$140.00 per week. It is expected that output will increase to 6,600 components per week with the new scheme.

72 What is the average labour cost per unit using the existing remuneration scheme?

- A \$1.60
- B \$0.24
- C \$0.20
- D \$0.16

73 What is the wage per employee using the new remuneration scheme?

- A \$140
- B \$160
- C \$180
- D \$200

74 RCW operates a bonus scheme based on time saved against a predetermined time allowance for actual output. In Week 6, an operative produced 750 units of 'R' in 32 hours. The standard allowance is 20 units of 'R' per hour.

What is the time saved by this employee in Week 6 on 'R' production?

- A 6.50
 - B 4.75
 - C 5.50
 - D 5.90
-

- 75** Gross wages incurred in a cost centre for the month of January totalled \$45,250, as follows:

		\$
Ordinary time	direct employees	27,500
	indirect employees	6,500
Overtime	direct employees	
	basic	4,500
	premium	2,250
Special conditions allowance	direct employees	1,300
	indirect employees	450
Shift allowance	direct employees	2,000
Sick pay	direct employees	750

The overtime is a regular feature.

What are the direct wages for January?

- A \$31,550
 - B \$32,800
 - C \$35,300
 - D \$32,000
- 76** HH operates an incentive scheme based on differential piecework. Employees are paid on the following basis:

Weekly output up to:	600 units	–	\$0.40 per unit
	601–650 units	–	\$0.50 per unit
	650 units +	–	\$0.75 per unit

This is paid only upon production meeting quality standards with only the additional units qualifying for the higher rates.

In Week 17, an employee produced 660 good units.

What is the gross pay for the week 17?

- A \$272.50
 - B \$260.40
 - C \$488.25
 - D \$325.75
- 77** Which of the following relates to the cost of replacing (rather than retaining) labour due to high employee turnover?
- A Improving working conditions
 - B Suffering the learning curve effect
 - C Provision of a pension
 - D Provision of welfare services

- 78** A job requires 2,400 actual labour hours for completion and it is anticipated that there will be 20% idle time.

If the wage rate is \$10 per hour, what is the budgeted labour cost for the job?

- A \$19,200
- B \$24,000
- C \$28,800
- D \$30,000

- 79** A job is budgeted to require 3,300 productive hours after incurring 25% idle time.

If the total labour cost budgeted for the job is \$36,300, what is the labour cost per hour?

- A \$8.25
- B \$8.80
- C \$11.00
- D \$13.75

- 80** An employee is paid on a piecework basis. The basis of the piecework scheme is as follows:

1 to 100 units – \$0.40 per unit

101 to 200 units – \$0.50 per unit

201 to 299 units – \$0.60 per unit

Only additional units qualify for the higher rates. Rejected units do not qualify for payment.

During a particular day the employee produced 240 units of which 8 were rejected as faulty.

What did the employee earn for the day's work?

- A \$109.20
- B \$114.00
- C \$139.20
- D \$144.00

- 81** **What is a standard hour?**

- A a normal working hour
- B a normal clock hour
- C the amount of work expected to be completed in an hour
- D the portion of time in a given hour that is productive and not lost through idle time

- 82** A company operates a piecework scheme to pay its staff. The staff receive \$0.20 for each unit produced. However the company guarantees that every member of staff receive at least \$15 per day.

Shown below is the number of units produced by Operator A during a recent week:

<i>Day</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
Units produced	90	70	75	60	90

What are Operator A's earnings for the week?

- A \$75.00
- B \$77.00
- C \$81.00
- D \$152.00

CHAPTER 7: ACCOUNTING FOR OVERHEADS

- 83** Carrell produces two types of jacket, Blouson and Bomber, in its factory that is divided into two departments, cutting and stitching. The firm wishes to calculate a fixed overhead cost per unit from the following budgeted data.

	<i>Cutting dept</i>	<i>Stitching dept</i>
Allocated and apportioned fixed overheads	\$120,000	\$72,000
Labour hours per unit		
Blouson	0.05 hours	0.20 hours
Bomber	0.10 hours	0.25 hours
Budgeted production		
Blouson	6,000 units	6,000 units
Bomber	6,000 units	6,000 units

If fixed overheads are absorbed by reference to labour hours, what is the fixed overhead cost of a Bomber?

- A \$5.33
B \$6.67
C \$12.00
D \$20.00
- 84** A company budgeted to produce 3,000 units of a single product in a period at a budgeted cost per unit, built up as follows:

	<i>\$/unit</i>
Direct costs	12
Variable overhead	5
Fixed overhead	9
	<hr/>
	\$26
	<hr/>

In the period covered by the budget:

Actual sales were 3,500 units and inventory levels decreased by 300 units

Actual fixed overhead expenditure was 5% above that budgeted

Other costs were as budgeted per unit.

Which statement is correct?

- A Total overheads in the period were \$450 over-absorbed
B Total overheads in the period were \$450 under-absorbed
C Total overheads in the period were \$1,450 over-absorbed
D Total overheads in the period were \$1,450 under-absorbed

- 85** A management consultancy recovers overheads on chargeable consulting hours. Budgeted overheads were \$615,000 and actual consulting hours were 32,150. Overheads were under-recovered by \$35,000.

If actual overheads were \$694,075 what was the budgeted overhead absorption rate per hour?

- A \$19.13
- B \$20.50
- C \$21.59
- D \$22.68

- 86** A company manufactures two products P1 and P2 in a factory divided into two cost centres, X and Y. The following budgeted data are available:

	<i>Cost centre</i>	
	<i>X</i>	<i>Y</i>
Allocated and apportioned fixed overhead costs	\$88,000	\$96,000
Direct labour hours per unit:		
	3.0	1.0
	2.5	2.0

Budgeted output is 8,000 units of each product. Fixed overhead costs are absorbed on a direct labour hour basis.

What is the budgeted fixed overhead cost per unit for Product P2?

- A \$10
- B \$11
- C \$12
- D \$13

This information is to be used for the next TWO questions

One of the cost centres in a factory is involved in the final stage of production. Budgeted fixed overhead costs for the cost centre for a period were:

Apportioned costs	\$74,610
Allocated costs	\$98,328

A predetermined machine hour rate is established for the absorption of fixed production overhead into product cost. Budgeted machine hours for the cost centre in the period were 1,900.

Actual overheads allocated and apportioned in the period were \$173,732. Actual machine hours in the period were 1,950.

- 87** **What is the predetermined fixed overhead absorption rate?**

- A \$39.27
- B \$88.62
- C \$91.02
- D \$93.42

88 What is the over/under absorption of fixed overheads?

- A \$794 under absorbed
 - B \$794 over absorbed
 - C \$3,757 under absorbed
 - D \$3,757 over absorbed
-

This information is to be used for the next TWO questions

PTS Ltd is a manufacturing company which uses three production departments to make its product. It has the following factory costs which are expected to be incurred in the year to 31 December 20X2:

		\$
Indirect wages and salaries	Machining	120,354
	Assembly	238,970
	Finishing	89,700
Factory rent		12,685,500

Other information is available as follows:

	<i>Machining</i>	<i>Assembly</i>	<i>Finishing</i>
Number of employees	50	60	18
Floor space occupied (m ²)	1,800	1,400	800
Number of labour hours	100,000	140,000	35,000
Number of machine hours	200,000	36,000	90,000
Total overhead allocated and apportioned (\$)	10,179,032	6,468,847	4,669,495

89 What is the factory rent apportioned to the machining department?

- A \$2,537,100
- B \$3,400,153
- C \$5,708,475
- D \$7,782,515

90 What is the overhead absorption rate for the assembly department most likely to be?

- A \$46.21 per labour hour
-

- B \$49.41 per labour hour
- C \$180 per machine hour
- D \$192.16 per machine hour

This information is to be used for the next THREE questions

QRS Ltd has three main departments – casting, dressing and assembly – and for period 3 has prepared the following production overhead budgets for an output level of 110,000 units:

<i>Department</i>	<i>Casting</i>	<i>Dressing</i>	<i>Assembly</i>
Production overheads	\$225,000	\$175,000	\$93,000
Expected production hours	7,500	7,000	6,200

During period 3, actual results were as follows for an output level of 117,500 units:

<i>Department</i>	<i>Casting</i>	<i>Dressing</i>	<i>Assembly</i>
Production overheads	\$229,317	\$182,875	\$94,395
Expected production hours	7,950	7,280	6,696

- 91 What is the overhead absorption rate for the casting department?**
- A \$28.30 per hour
 - B \$28.84 per hour
 - C \$30 per hour
 - D \$30.58 per hour
- 92 What is the under/over absorption of overheads for the dressing department for period 3?**
- A \$7,875 over absorbed
 - B \$7,875 under absorbed
 - C \$875 over absorbed
 - D \$875 under absorbed
- 93 What is the under/over absorption of overheads for the assembly department for period 3?**
- A \$6,045 over absorbed
 - B \$6,045 under absorbed
 - C \$1,395 over absorbed
 - D \$1,395 under absorbed

This information is to be used for the next THREE questions

A manufacturing company has two production costs centres (Departments A and B) and one service cost centre (Department C) in its factory.

The overheads of each production cost centre comprise directly allocated costs and a share of the costs of the service cost centre.

70% of the costs of Department C are to be apportioned to production cost centres on the basis of machine hours worked and the remainder on the basis of direct labour hours.

Overhead absorption rates are calculated using a machine hour basis.

Budgeted production overhead data for a period is as follows:

	<i>Department A</i>	<i>Department B</i>	<i>Department C</i>
Allocated costs	\$217,860	\$374,450	\$103,970
Machine hours	13,730	16,110	
Direct labour hours	16,360	27,390	

Actual production overhead costs and activity for the same period are:

	<i>Department A</i>	<i>Department B</i>	<i>Department C</i>
Allocated costs	\$219,917	\$387,181	\$103,254
Machine hours	13,672	16,953	
Direct labour hours	16,402	27,568	

94 What is the overhead absorption rate per machine hour for department A?

- A \$23.44
- B \$21.17
- C \$19.16
- D \$15.87

95 What are the actual overhead costs allocated and apportioned to department B?

- A \$263,739
- B \$387,181
- C \$427,192
- D \$446,613

96 What is the under/over absorption of overheads for department A?

- A \$1,650 under absorbed
- B \$1,783 under absorbed
- C \$4,250 over absorbed
- D \$4,250 under absorbed

- 97 Omicron Ltd produces one product, the Alpha. The Alpha goes through four processes during its manufacture, as follows:

<i>Process</i>	<i>Time taken (Hours)</i>	<i>Fixed costs \$</i>
1	3	24,000
2	5	12,000
3	4	9,600
4	7	14,400

Omicron recovers overheads on the basis of time taken and plans to produce 6,000 units of Alpha.

What is the fixed cost per unit of Alpha?

- A \$5.00
B \$10.00
C \$15.00
D \$20.00
- 98 A company has over absorbed fixed production overheads for the period by \$6,000. The fixed production overhead absorption rate was \$8 per unit and is based on the normal level of activity of 5,000 units. Actual production was 4,500 units.

What was the actual fixed production overheads incurred for the period?

- A \$30,000
B \$36,000
C \$40,000
D \$42,000
- 99 A company manufactures two products, X and Y, in a factory divided into two production cost centres, Primary and Finishing. The following budgeted data are available:

<i>Cost centre</i>	<i>Primary</i>	<i>Finishing</i>
Allocated and apportioned fixed overhead costs	\$96,000	\$82,500
Direct labour minutes per unit:		
product X	36	25
product Y	48	35

Budgeted production is 6,000 units of product X and 7,500 units of product Y. Fixed overhead costs are to be absorbed on a direct labour hour basis.

What is the budgeted fixed overhead cost per unit for product Y?

- A \$11
B \$12
C \$14
D \$15

CHAPTER 8: ABSORPTION AND MARGINAL COSTING

This information is to be used for the next THREE questions

Isma plc has budgeted to produce and sell 20,000 units of Rondal in 20X7. The standard cost card for a unit of Rondal is as follows:

	\$
Materials	3.00
Labour	5.00
Variable production overhead	2.50
Fixed production overhead	2.00
Variable sales overhead	0.75
Fixed sales overhead	1.25
Profit	0.50
	<hr/>
Selling price	15.00
	<hr/>

In 20X7, Isma plc produces 21,000 units and sells 19,000 units. Its costs incurred were as expected for this level of activity.

100 How much fixed overhead in total did Isma expect to incur in 20X7?

- A \$55,000
- B \$60,000
- C \$65,000
- D \$70,000

101 What was Isma plc's inventory valuation under an absorption costing system?

- A \$22,000
- B \$23,000
- C \$24,000
- D \$25,000

102 What was Isma plc's inventory valuation under a marginal costing system?

- A \$20,250
- B \$20,500
- C \$20,750
- D \$21,000

This information is to be used for the next TWO questions

A company sells a single product at a price of \$14 per unit. Variable manufacturing costs of the product are \$6.40 per unit. Fixed manufacturing overheads are absorbed into the cost of production at a unit rate (based on normal activity of 20,000 units per period) are \$92,000 per period. Any over or under absorbed fixed manufacturing overhead balances are transferred to the income statement at the end of each period, in order to establish the manufacturing profit.

Sales and production (in units) for two periods are as follows:

	<i>Period 1</i>	<i>Period 2</i>
Sales	15,000	22,000
Production	18,000	21,000

The manufacturing profit in Period 1 was reported as \$35,800.

103 What was the manufacturing profit for period 2, using absorption costing?

- A \$61,400
- B \$66,000
- C \$70,600
- D \$75,000

104 What was the manufacturing profit for period 2, using marginal costing?

- A \$66,000
- B \$75,200
- C \$78,500
- D \$167,200

This information is to be used for the next TWO questions

N Ltd manufactures three products which have the following revenue and costs (\$ per unit):

	<i>Product 1</i>	<i>Product 2</i>	<i>Product 3</i>
Selling price	2.92	1.35	2.83
Variable costs	1.61	0.72	0.96
Fixed costs:			
Product specific	0.49	0.35	0.62
General	0.46	0.46	0.46

Unit fixed costs are based upon the following annual sales and production volumes (thousand units):

<i>Product 1</i>	<i>Product 2</i>	<i>Product 3</i>
98.2	42.1	111.8

105 What is the total contribution for N Ltd?

- A \$364,231
- B \$253,093
- C \$232,062
- D \$116,096

106 What is the total fixed cost for N Ltd?

- A \$300,000
- B \$252,100
- C \$248,135
- D \$115,966

107 When preparing an operating statement based on marginal costing principles, inventory valuation comprises which of the following costs?

- A Direct labour and material only
- B Prime cost plus production overhead
- C Prime cost plus variable overhead
- D Total cost of sales

108 With which costs is absorption costing concerned?

- A Direct labour costs only
- B Direct material costs only
- C Fixed costs only
- D Variable and fixed costs

The following information relates to the next TWO questions

Dundee makes cakes, for which the budgeted profit per unit is as follows:

	\$
Materials	2
Labour	3
Variable production overhead	3
Fixed production overhead	4
Variable selling cost	1
Fixed selling overhead	2
Profit	5
	—
Sales price	20
	—

Both types of fixed overheads were based on a budget of 10,000 cakes a year.

In the first year of production, the only difference from the budget was that Dundee produced 11,000 cakes and sold 9,000.

109 What was the profit made under an absorption costing system?

- A \$39,000
- B \$43,000
- C \$47,000
- D \$51,000

110 What would the profit have been using a marginal costing system?

- A \$35,000
- B \$39,000
- C \$42,000
- D \$47,000

111 A company currently uses absorption costing. The following information relates to Product X for Month 1:

Opening inventory	Nil
Production	900 units
Sales	800 units

If the company had used marginal costing, which of the following combinations would be TRUE?

	<i>Profit</i>	<i>Inventory value</i>
A	Would be higher	Would be higher
B	Would be higher	Would be lower
C	Would be lower	Would be higher
D	Would be lower	Would be lower

- 112** A company manufactures a single product. Production and sales quantities for a period were:

	<i>Production</i>	<i>Sales</i>
Budget	100,000 units	102,000 units
Actual	97,000 units	96,000 units

The fixed production overhead absorption rate is \$1.40 per unit.

If marginal costing had been used instead of absorption costing how would the profit for the period have differed?

- A \$1,400 less using marginal costing
 - B \$1,400 more using marginal costing
 - C \$4,200 less using marginal costing
 - D \$4,200 more using marginal costing
- 113** A company sold 82,000 units of its single product in a period in which 84,000 units were manufactured.

Consider the following statements:

- 1 Inventory value at the end of the period would be higher than at the beginning of the period.
- 2 Inventory values both at the beginning and at the end of the period would be higher using absorption rather than marginal costing.

Are the statements TRUE or FALSE in relation to the situation described?

	<i>Statement 1</i>	<i>Statement 2</i>
A	False	False
B	False	True
C	True	False
D	True	True

- 114** What distinguishes absorption costing from marginal costing?

- A Product costs include both prime cost and production overhead
- B Product costs include both production and non-production costs
- C Inventory valuation includes a share of all production costs
- D Inventory valuation includes a share of all costs

CHAPTER 9: JOB, BATCH, PROCESS COSTING

This information is to be used for the next TWO questions

An advertising agency uses job costing and recovers overheads on labour cost. Jobs for three accounts were worked on in Month 4 as follows:

	<i>Job 1</i>	<i>Job 2</i>	<i>Job 3</i>
	\$	\$	\$
Opening work-in-progress	7,000	9,000	6,000
Direct materials, etc.	1,750	0	2,400
Labour cost	13,000	12,600	9,400

Both budgeted and actual overheads were \$70,000.

115 Jobs 1 and 3 were incomplete at the end of Month 4. What was the value of work-in-progress at the end of Month 4?

- A \$80,000
- B \$84,350
- C \$86,650
- D \$90,000

116 Job 2 was completed in the period and consists of 5,000 delegate places at a promotional launch for a new product. The agency adds 75% to total production costs to reach a selling price.

What is the ticket price of each delegate place at the launch?

- A \$14.58
- B \$15.38
- C \$16.38
- D \$17.58

117 A hair shampoo is produced during a series of five processes. The following information relates to Process 5:

	<i>Litres</i>
Opening work in process	3,000
Input	50,000
Transfer to finished goods inventory	49,750
Closing work in process	1,000
Normal loss	1,500

What is the abnormal loss?

- A 750
- B 850
- C 950
- D 1,050

- 118** Amdico Ltd makes photograph albums. At the start of March it had 5,000 albums, which were 50% complete. It started work in March on another 15,000 albums. At the end of March it had 4,500 albums, which were 50% complete. During March it incurred costs of \$65,000. It had costs brought forward from February of \$6,000. Amdico uses the weighted average method of spreading costs.

What is the cost per album of March production?

- A \$2.50
- B \$3.00
- C \$3.50
- D \$4.00

- 119** A jobbing enterprise calculates the prices of its jobs by adding overheads to the prime cost and adding 30% to total costs. Job number 256 was sold for \$1,690 and incurred overheads of \$694.

What was the prime cost of the job?

- A \$489
- B \$507
- C \$606
- D \$996

This information is to be used for the next THREE questions

A firm makes special assemblies to customers' orders and uses job costing. The data for a period are:

	<i>Job number</i> <i>AA10</i>	<i>Job number</i> <i>BB15</i>	<i>Job number</i> <i>CC20</i>
	\$	\$	\$
Opening WIP	26,800	42,790	0
Material added in period	17,275	0	18,500
Labour for period	14,500	3,500	24,600

The budgeted overheads for the period were \$126,000. Overheads are absorbed on the basis of labour costs. Actual labour costs in the period were the same as budgeted labour costs.

- 120** What overhead should be added to job number CC20 for the period?

- A \$24,600
- B \$65,157
- C \$72,761
- D \$126,000

- 121** Job number BB15 was completed and delivered during the period and the firm wishes to earn 33% profit on sales.

What is the selling price of job number BB15?

- A \$69,435
- B \$70,804
- C \$75,521
- D \$84,540

- 122** What was the approximate value of closing work-in-progress on job AA10 at the end of the period?

- A \$58,575
- B \$101,462
- C \$147,965
- D \$217,323

- 123** Burgess operates a continuous process into which 3,000 units of material costing \$9,000 was input in a period.

Conversion costs for this period were \$11,970 and losses, which have a scrap value of \$1.50, are expected at a rate of 10% of input. There was no opening or closing WIP and output for the period was 2,900 units.

What was the output valuation?

- A \$20,271
- B \$20,520
- C \$20,970
- D \$22,040

- 124** A company produces Inverness in a continuous process.

At the beginning of November work-in-progress of 400 units was 30% complete with regards to labour and overheads. At the end of the month, work-in-progress was 200 units and was 60% complete. During the month 2,000 units were introduced to the process.

Labour and overheads in November cost \$3,300, and FIFO is used for inventory valuation.

What is the cost per equivalent unit in the month?

- A \$1.42
- B \$1.50
- C \$1.62
- D \$1.65

- 125** A company operates a job costing system. Job number 1012 requires \$45 of direct materials and \$30 of direct labour. Direct labour is paid at the rate of \$7.50 per hour. Production overheads are absorbed at a rate of \$12.50 per direct labour hour and non-production overheads are absorbed at a rate of 60% of prime cost.

What is the total cost of job number 1012?

- A \$170
- B \$195
- C \$200
- D \$240

- 126** C Ltd operates a process which produces two joint products. In the period just ended costs of production totalled \$417,850. Output from the process during the period was:

Product W 276,000 kg

Product X 334,000 kg

There were no opening inventories of the products. Products W and X are sold in this state. Sales of Products W and X during the period were:

Product W 255,000 kg at \$0.945 per kg

Product X 312,000 kg at \$0.890 per kg

Selling and administration costs are charged to products when sold, at 10% of revenue.

What is the profit earned from the sales of products W, if joint costs are apportioned on the basis of weight of output?

- A \$21,122
- B \$23,457
- C \$25,642
- D \$27,817

This information is to be used for the next THREE questions

The following information relates to the final process in a factory for the month just ended:

Units:

Opening work-in-progress: 500 units

Transfers in from previous process: 6,500 units

Closing work-in-progress: 600 units

Costs:

Opening work-in-progress: \$1,527

Transfers in:

Previous process costs: \$14,625

Materials added: \$5,760

Conversion costs: \$3,608

The degree of completion of work-in-progress (WIP) rates was:

	<i>Opening WIP</i>	<i>Closing WIP</i>
Previous process costs	100%	100%
Materials added	80%	80%
Conversion costs	40%	60%

There is no loss of units in the process. The company uses the FIFO method for charging out the costs of production.

127 What is the total cost per equivalent unit?

- A \$1.43
- B \$1.68
- C \$2.54
- D \$3.68

128 What is the total cost of finished output?

- A \$22,018
- B \$23,545
- C \$23,552
- D \$25,627

129 What is the value of closing work-in-progress?

- A \$1,975
- B \$2,000
- C \$2,345
- D \$2,768

This information is to be used for the next THREE questions

A process in a factory produces joint products (M and N). Each joint product may be further processed. The following data is available for a period:

	<i>Total</i>	<i>Product M</i>	<i>Product N</i>
Joint processing costs (\$)	44,730		
Production (kg)		2,760	6,640
Selling price after further processing (\$ per kg)		11.00	4.80
Further processing costs (\$ per kg)		1.20	0.90
Selling price before further processing (\$ per kg)		9.00	4.00

The company sells both products after further processing and apportions joint costs on the basis of net realisable value.

130 What is the joint cost apportioned to product M?

- A \$31,997
- B \$28,768
- C \$22,852
- D \$20,345

131 The company maximises contribution by selling product M after further processing.

Is this statement true or false?

- A True
- B False

132 The company maximises contribution by selling product N after further processing.

Is this statement true or false?

- A True
- B False

This information is to be used for the next THREE questions

A firm operates a process, the details of which for the period were as follows.

There was no opening work-in-progress.

During the period 8,250 units were received from the previous process at a value of \$453,750, labour and overheads were \$350,060 and material introduced was \$24,750.

At the end of the period the closing work-in-progress was 1,600 units, which were 100% complete in respect of materials, and 60% complete in respect of labour and overheads.

The balance of units was transferred to finished goods.

133 How many equivalent units are completed for labour and overheads?

- A 8,250
- B 8,000
- C 7,880
- D 7,610

134 What is the value of finished output?

- A \$691,600
- B \$675,000
- C \$654,000
- D \$374,810

135 What is the value of closing work-in-progress?

- A \$182,360
- B \$174,560
- C \$142,350
- D \$136,960

136 A company operates a job costing system. Job 812 requires \$60 of direct materials, \$40 of direct labour and \$20 of direct expenses. Direct labour is paid \$8 per hour. Production overheads are absorbed at a rate of \$16 per direct labour hour and non-production overheads are absorbed at a rate of 60% of prime cost.

What is the total cost of Job 812?

- A \$240
- B \$260
- C \$272
- D \$320

137 Which one of the following statements is incorrect?

- A Job costs are collected separately, whereas process costs are averages
- B In job costing the progress of a job can be ascertained from the materials requisition notes and job tickets or time sheet
- C In process costing information is needed about work passing through a process and work remaining in each process
- D In process costing, but not job costing, the cost of normal loss will be incorporated into normal product costs

138 A company uses process costing to value its output. The following was recorded for the period:

Input materials	2,000 units at \$4.50 per unit
Conversion costs	\$13,040
Normal loss	5% of input

There were no opening or closing inventories.

What was the valuation of one unit of output?

- A \$11.80
- B \$11.60
- C \$11.20
- D \$11.00

139 The direct costs for batch number 35401, comprising 200 men's shirts, were as follows:

Materials	\$3,000
Labour	120 hours @\$5 per hour

Production overheads are absorbed at a company-wide rate of \$12 per direct labour hour.

Non-production overheads are absorbed at the rate of \$1,000 per batch.

What is the total production cost per unit of each shirt in the batch?

- A \$18.00
- B \$22.20
- C \$25.20
- D \$30.20

- 140** ABG plc makes batches of “own brand” ready meals for supermarkets, using a semi-automated production process. The costs for batch number 87102, comprising 10,000 Thai fish curry meals, were as follows:

Ingredients	\$7,000
Packaging	\$3,600
Labour	80 hours @\$10 per hour

The batch took 40 machine hours to produce.

Production overheads are absorbed at a factory-wide rate of \$5 per machine hour.

Non-production overheads are absorbed at the rate of \$15 per labour hour.

What is the total cost per meal in the batch?

- A \$1.16
 - B \$1.22
 - C \$1.28
 - D \$1.30
- 141** A company uses process costing to value its output. The following was recorded for the period:

Input materials	1,000 litres at \$5 per litre
Conversion costs	\$11,000
Output	800 litres, as expected. All losses were “normal”

There were no opening or closing inventories.

What was the valuation of one litre of output?

- A \$5.00
- B \$16.00
- C \$18.75
- D \$20.00

The following information relates to the next TWO questions

Procal Ltd is a manufacturer. In Period 1 the following production occurred

Units started (there was no opening WIP) 1,300 units

Closing WIP 500 units

Degree of completion of closing WIP:

Materials 80%

Conversion costs 50%

Costs incurred in Period 1:

Materials \$7,200

Conversion \$4,200

142 What was the total cost per equivalent unit of production?

- A \$6.00
- B \$8.77
- C \$9.54
- D \$10.00

143 What was the value of closing WIP?

- A \$3,400
- B \$4,000
- C \$5,000
- D \$8,000

144 In process costing what is an equivalent unit?

- A a unit of cost based on optimum efficiency
- B an effective whole unit representing the varying degrees of completion of work
- C a unit made in more than one process cost centre.
- D a unit being currently made which is the same as previously manufactured

CHAPTER 10: SERVICE AND OPERATION COSTING

145 Which of the following would be the most useful cost unit when running a hospital?

- A Cost per doctor
- B Cost per nurse
- C Cost per inpatient hour
- D Cost per bed

146 For operational purposes, which of the following cost units would be most useful for a company operating a fleet of delivery vehicles?

- A Cost per mile run
- B Cost per driver hour
- C Cost per tonne mile
- D Cost per kilogram carried

147 A transport company has a cost accounting system for measuring the costs of the services it provides. The company provides train services throughout the southern region of the country.

Which of the following would be the most appropriate cost unit for measuring operating costs, in a way that costs of its various services can be usefully compared?

- A Cost per train
- B Cost per journey
- C Cost per passenger
- D Cost per passenger/kilometre

148 A training company runs courses for students that vary in length between one day and four weeks. The size of classes varies between 5 students and 40 students. The company wants to set a price for its courses based on a mark-up on cost.

What would be the most appropriate basis for measuring costs?

- A Cost per student per day
- B Cost per course
- C Cost per student
- D Cost per day

149 When is service costing used?

- A When indirect costs are a small proportion of total costs
- B When overhead absorption is straightforward
- C When the absence of a physical product makes it impossible to determine unit costs
- D When the output is intangible

- 150** The cost unit of a transport business with a single vehicle is tonne/kilometre. Total costs were \$4,558 in a week during which the following journeys were made:

<i>Journey</i>	<i>Load (tonnes)</i>	<i>Distance (kms)</i>
1	5	80
2	7	100
3	3	40
4	5	60
5	4	150

What was the cost per tonne/kilometre in the week?

- A \$0.44
 - B \$2.15
 - C \$10.60
 - D \$57.57
- 151** In a 30-day period a restaurant was open for 9 hours per day. Costs incurred in the period totalled \$65,124. The following additional information is available:

Number of tables available	15
Number of seats per table	4
Customer turnaround	1 hour
Seating occupancy achieved	60%

What was the cost per customer?

- A \$4.02
- B \$6.70
- C \$16.08
- D \$26.80

CHAPTER 11: ALTERNATIVE COSTING PRINCIPLES

152 A food-processing company operates an activity based costing (ABC) system.

Which of the following would be classified as a facility-sustaining activity?

- (i) General staff administration
 - (ii) Plant management
 - (iii) Technical support for individual products and services
 - (iv) Updating of product specification database
 - (v) Property management
- A (i) and (ii)
B (i), (ii) and (v)
C (ii), (iii) and (iv)
D (ii), (iii), (iv) and (v)
E All of them

153 Which of the following statements are correct?

- (i) A cost driver is any factor that causes a change in the cost of an activity.
 - (ii) For long-term variable overhead costs, the cost driver will be the volume of activity.
 - (iii) Traditional absorption costing tends to under-allocate overhead costs to low-volume products.
- A (i) and (iii) only
B (ii) and (iii) only
C (i) and (ii) only
D (i), (ii) and (iii)

154 In the context of quality costs, what are training costs and reworking costs classified as?

	<i>Training costs</i>	<i>Reworking costs</i>
A	internal failure costs	external failure costs
B	prevention costs	external failure costs
C	external failure costs	internal failure costs
D	prevention costs	internal failure costs

- 155 When calculating the life cycle costs of a product, which of the following items would be excluded?**
- (i) Planning and concept design costs
 - (ii) Preliminary and detailed design costs
 - (iii) Testing costs
 - (iv) Production costs
 - (v) Distribution and customer service costs
- A (iii)
B (iv)
C (v)
D None of them
- 156 Which of the following statements about TQM is correct?**
- A TQM relies on motivating employees to improve quality rather than on quality standards and statistical control methods
B The level of defects must remain below a minimum acceptable level
C All individuals within the organisation must be involved in quality improvements
D The aim should be to eliminate all costs relating to quality
- 157 Corrective work, the cost of scrap and materials lost are examples of which of the following?**
- A examples of internal failure costs
B examples of external failure costs
C examples of appraisal costs
D examples of preventative costs
- 158 The product life cycle is depicted on a chart or diagram as a line against the variables of which of the following?**
- A cash flow and market share
B number of customers and sales value
C sales volume and time
D relative market share and market growth rate

CHAPTER 12: FORECASTING TECHNIQUES

This information is to be used for the next THREE questions

The costs of carrying out maintenance checks are semi-fixed and semi-variable. The cost varies to some extent with the time taken for each check. It is assumed that there is an approximate linear relationship between time and cost and a regression analysis is being used to establish the relationship between time taken and costs. Calculations have produced the following information:

$n = 4$, $\sum x = 4$, $\sum y = 68$, $\sum xy = 71.5$, $\sum x^2 = 4.5$, $\sum y^2 = 1,182$

159 What is the value of 'b' in the equation for the line of best fit?

- A \$1.04
- B \$7.00
- C \$7.50
- D \$36.00

160 What is the value of 'a' in the equation in the line of best fit?

- A \$16.00
- B \$10.00
- C \$8.50
- D \$2.50

161 What is the correlation coefficient (r) for your estimates of the fixed and variable costs involved in maintenance checks?

- A 0.97
- B 0.90
- C 0.78
- D 0.75

162 An ice-cream supplier has recorded some sales data which he believes show a relationship between temperature and sales. The results shown below are for 10 sample days in the summer.

$\sum x = 210$ $\sum y = 187$ $\sum x^2 = 4,634$ $\sum y^2 = 3,865$ $\sum xy = 4,208$

Which of the following is the correlation coefficient is nearest to?

- A 0.84
- B 0.88
- C 0.92
- D 0.98

- 163** W is preparing its budgets for next year. The following regression equation has been found to be a reliable estimate of W's deseasonalised sales in units:

$$y = 10x + 420$$

Where y is the total sales units and x refers to the accountancy period. Quarterly seasonal variations have been found to be:

Q1	Q2	Q3	Q4
+10%	+25%	-5%	-30%

What is the seasonally adjusted sales units for accounting period 33 (which is quarter 4)?

- A 525
B 975
C 750
D 713
- 164** M uses time series analysis and regression techniques to estimate future sales demand. Using these techniques, it has derived the following trend equation:

$$y = 10,000 + 4,200x$$

Where y is the total sales units and x is the time period.

It has also derived the following seasonal variation index values for each of the quarters using the multiplicative (proportional) seasonal variation model:

Quarter	Index value
1	120
2	80
3	95
4	105

The transport costs incurred by M have been found to be represented by the formula:

$$t = \$7,000 + \$0.5v$$

Where t is the total transport cost and v is the volume of sales in units.

What is the total transport cost for time period 33, which is the first quarter of year 9, to the nearest \$1,000?

- A \$68,000
B \$69,000
C \$96,000
D \$97,000

This information is to be used for the next THREE questions

Sapphire recorded the following costs for the past 5 months of activity:

<i>Month</i>	<i>Activity level (units)</i>	<i>Total cost (\$)</i>
5	220	4,500
6	400	7,000
7	360	5,500
8	380	6,000
9	290	5,000

The data has been partially analysed and the following information produced:

$$\sum x = 1,650 \quad \sum y = 28,000 \quad \sum x^2 = 566,500 \quad \sum xy = 9,500,000$$

165 What is the value of 'b' in the equation for the line of best fit?

- A \$10.00
- B \$17.00
- C \$11.80
- D \$0.60

166 What is the value of 'a' in the equation in the line of best fit?

- A \$1,699
- B \$1,724
- C \$2,589
- D \$56,400

167 What is the total cost for an activity level of 300 units?

- A \$5.25
- B \$1,678
- C \$5,245
- D \$10,896

This information is to be used for the next THREE questions

	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>
Sales/production (units)	67,200	71,300	75,600	75,100
Total costs (\$)	135,000	144,072	156,090	158,950
Cost inflation index	100	103.5	107.5	110.0

168 What are the total costs in year 3 at year 1 price levels?

- A \$135,000
- B \$145,200
- C \$144,500
- D \$139,200

169 Using the high-low method what is the linear function in the form $y = a + bx$ to represent total costs at year 1 price levels (unit costs should be calculated to two decimal places of \$)?

- A Total cost (\$) = $53,688 + 1.21x$
- B Total cost (\$) = $\$68,616 + 3.03x$
- C Total cost (\$) = $\$13,200 + 0.40x$
- D Total cost (\$) = $\$22,647 + 0.33x$

170 Using the linear function from the above question what are the total costs in Year 5 based on a volume of 77,200 units and a cost inflation index of 112.9?

- A \$154,026
- B \$130,381
- C \$147,100
- D \$166,076

This information is to be used for the next TWO questions

The following information is available for a company's sales demand

<i>Month</i>	<i>Actual</i>
January 20X0	80
February	90
March	100
April	89
May	99
June	109
July	98
August	108
September	118
October	107
November	117
December	127
January 20X1	116
February	126
March	136
April	125
May	135
June	145

171 Using a 3 month moving average what is the seasonal variation for October 20X0?

- A 0
- B -7
- C 7
- D 6

172 Using a 3 month moving average what is the seasonal variation for April 20X1?

- A 0
- B -7
- C 7
- D 6

- 173** A simple food price index, weighted for an average family on a normal diet, comprises the following items:

	<i>Current price</i>	<i>Weighting</i>
Bread	\$0.64/loaf	7 loaves
Potatoes	\$0.12/lb	20 lb
Milk	\$0.24/pint	15 pints
Eggs	\$0.98/dozen	2 dozen
Meat	\$2.80/lb	10 lb

During the past year the cost of bread has risen by 10%, potatoes have risen by 30%, milk has fallen by 8%, eggs have fallen by 5% and meat has increased by 30%.

What is the present index (to the nearest whole percent), on a weighted aggregative basis, if the index a year ago was 100?

- A 82%
- B 90%
- C 111%
- D 121%

CHAPTER 13: BUDGETING

174 What is a flexible budget?

- A a budget comprising variable production costs only
- B a budget that is updated with actual costs and revenues as they occur during the budget period
- C a budget that shows the costs and revenues at different levels of activity
- D a budget that is prepared for a period of six months and reviewed monthly. Following such review a further one month's budget is prepared

175 Which of the following costs are likely to be controlled using a fixed budget?

- (i) Staff training costs
 - (ii) Direct material costs
 - (iii) Advertising costs
- A (i) only
 - B (i) and (ii)
 - C (i) and (iii)
 - D (ii) only

176 A company manufactures and sells one product. Budgeted sales units for the next period are 5,500. Opening inventory is expected to be 400 units and planned to increase by 50% by the end of the period.

What is the production budget?

- A 5,500 units
- B 5,700 units
- C 5,900 units
- D 6,100 units

177 A company manufactures and sells one product. The production budget for the next period is 2,800 units. Each unit requires 3 kg of material A. Opening inventory of material A is expected to be 200 units and is planned to be reduced to 170 units at the end of the period.

What is the materials usage budget?

- A 8,570 kg
- B 8,400 kg
- C 8,370 kg
- D 8,430 kg

178 When preparing a production budget, what does the quantity to be produced equal?

- A sales quantity + opening inventory + closing inventory
- B sales quantity – opening inventory + closing inventory
- C sales quantity – opening inventory – closing inventory
- D sales quantity + opening inventory – closing inventory

179 Which of the following can be identified as a purpose of budgeting?

- (i) Communication
- (ii) Authorisation
- (iii) Sales maximisation
- (iv) Co-ordination
- A (ii) and (iv) only
- B (i) and (ii) only
- C (i), (ii) and (iv) only
- D All of them

This information is to be used for the next TWO questions

The budgeted profit to be achieved from product T next period is as follows:

	<i>Product T</i>
	\$
Revenue	8,308
Variable costs	6,290
	<hr/>
Contribution	2,018
Fixed costs	884
	<hr/>
Budgeted profit	1,134
	<hr/>

180 What is the revised budgeted profit if the unit selling price is reduced by 10% and as a result the volume of sales is increased by 15%?

- A \$1,173
- B \$1,100
- C \$746
- D \$481

181 What is the revised budgeted profit if sales volume is reduced by 5 per cent and unit variable costs are increased by 8 per cent?

- A \$1,163
- B \$840
- C \$555
- D \$124

182 What is the purpose of a flexible budget?

- A to cap discretionary expenditure
- B to produce a revised forecast by changing the original budget when actual costs are known
- C to control resource efficiency
- D to communicate target activity levels within an organisation by setting a budget in advance of the period to which it relates

183 What is a fixed budget?

- A a budget for a single level of activity
- B used when the mix of products is fixed in advance of the budget period
- C a budget which ignores inflation
- D an overhead cost budget

184 M prepared the following flexible budget for April:

Activity (% of capacity)	75%	85%	90%
Total costs	\$33,500	\$35,500	\$36,500

Budgeted capacity for the month was 60,000 machine hours.

If the actual activity in April was 50,000 machine hours, the budget cost allowance for April (to the nearest \$1,000) would have been?

- A \$18,000
- B \$20,000
- C \$35,000
- D \$38,000

- 185** N is forecasting the power costs for Period 12 using the following past data values:

	<i>Number of machine hours</i>	<i>Cost \$</i>
Period 8	4,260	8,944
Period 9	3,657	7,961
Period 10	4,689	9,643

If price levels are expected to remain unchanged in Period 12, the expected power cost of 4,500 machine hours is closest to?

- A \$7,309
 - B \$7,335
 - C \$9,309
 - D \$9,335
- 186** The following cost per unit details have been extracted from a production overhead cost budget:
- | | | |
|-------------------------------|-------|--------|
| Output (units) | 6,000 | 10,000 |
| Production overhead (\$/unit) | 3.20 | 3.00 |
- What is the budget cost allowance for production overhead for an activity level of 7,350 units?**
- A \$20,505
 - B \$21,765
 - C \$22,845
 - D \$23,515
- 187 What is a flexible budget?**
- A a budget showing variable production costs only
 - B a budget showing actual costs and revenues in the budget period
 - C a budget which shows the costs and revenues at different levels of activity
 - D a budget that is changed monthly
- 188 Which of the following best describes a variance report comparing actual results achieved during a month with the budgeted performance for the month?**
- A control action
 - B feedback control
 - C feedforward control
 - D reporting by exception

189 The following statements relate to the application of feedback and feedforward control:

- 1 Feedback and feedforward are both applied in budgetary planning and control.
- 2 Feedback is used in the analysis of variances.
- 3 Feedforward enables budgeted data for a period to be amended for the next period.
- 4 Feedforward relates to the setting of performance standards.

Which of the above statements are true?

- A 1 and 2 only
- B 3 and 4 only
- C 1, 2 and 4 only
- D 1, 3 and 4 only

190 Which one of the following is the correct description of a flexible budget?

- A A budget that can be changed according to circumstances
- B A budget that is adjusted according to actual activity
- C A budget that is open to negotiation
- D A budget that is used for planning purposes only

191 A manufacturer holds inventory of a raw material item. The manufacturer makes and sells a single product, and each unit of product uses 2.5 kilograms of the raw material. The budgeted production for the year is 6,000 units of the product. At the start of the year, the manufacturer expects to have 1,800 units of the raw material item in inventory, but plans to reduce inventory levels by one-third by the end of the year.

What will be the budgeted purchase quantities of the raw material item in the year?

- A 13,800 kg
- B 14,400 kg
- C 15,000 kg
- D 15,600 kg

192 A manufacturing company has budgeted sales next year of 5,000 units of product T. Each unit of product T uses 3 units of a component X. The company plans to increase inventory levels of finished goods by 200 units by the end of the year, and to increase inventory levels of component X by 400 units.

What will be the budgeted purchase quantities of component X for the year?

- A 15,200 units
- B 15,400 units
- C 15,600 units
- D 16,000 units

- 193** A manufacturing company makes and sells a single product. The sales budget for the year is 8,000 units. Each unit of the product requires 1.2 kilograms of raw materials. The company has budgeted to reduce inventory levels of finished goods from 2,000 units at the start of the year to 1,500 units at the end of the year, but it plans to increase inventory levels of the raw material from 1,500 kilograms to 2,400 kilograms.

What will be the budgeted purchase quantities of raw materials for the year?

- A 8,100 kilograms
- B 8,300 kilograms
- C 9,900 kilograms
- D 10,200 kilograms

- 194** Vincent is preparing a cash budget for July. His credit sales are as follows.

	\$
April (actual)	40,000
May (actual)	30,000
June (actual)	20,000
July (estimated)	25,000

His recent debt collection experience has been as follows.

Current month's sales	20%
Prior month's sales	60%
Sales two months prior	10%
Cash discounts taken	5%
Irrecoverable debts	5%

How much may Vincent expect to collect from credit customers during July?

- A \$18,000
- B \$20,000
- C \$21,000
- D \$24,000

- 195** DRF's projected revenue for 20X9 is \$28,000 per month. All sales are on credit. Receivables' accounts are settled 50% in the month of sale, 45% in the following month, and 5% are written off as irrecoverable debts after two months.

What are the budgeted cash collections for March?

- A \$24,500
- B \$26,600
- C \$28,000
- D \$32,900

- 196** A company anticipates that 10,000 units of product z will be sold during January. Each unit of z requires 2 litres of raw material w. Actual stocks as of 1 January and budgeted inventories as of 31 January are as follows.

	<i>1 January</i>	<i>31 January</i>
Product z (units)	14,000	12,000
Raw material w (litres)	20,000	15,000

1 litre of w costs \$4.

If the company pays for all purchases in the month of acquisition, what is the cash outlay for January purchases of w?

- A \$84,000
 - B \$80,000
 - C \$44,000
 - D \$12,000
- 197** A company has a two-month receivables' cycle. It receives in cash 45% of the total gross sales value in the month of invoicing. Irrecoverable debts are 20% of total gross sales value and there is a 10% discount for settling accounts within 30 days.

What proportion of the first month's sales will be received as cash in the second month?

- A 25%
- B 30%
- C 35%
- D 55%

CHAPTER 14: CAPITAL BUDGETING

198 What costs are used in decision making?

- A sunk costs
- B current costs
- C estimated future costs
- D notional and full costs

199 What is a sunk cost?

- A a cost committed to be spent in the current period
- B a cost that is irrelevant for decision making
- C a cost connected with oil exploration in the North Sea
- D a cost unaffected by fluctuations in the level of activity

200 For decision-making purposes, which of the following are relevant costs?

- (i) Avoidable cost
 - (ii) Future cost
 - (iii) Opportunity cost
 - (iv) Differential cost
- A (i), (ii), (iii) and (iv)
 - B (i) and (ii) only
 - C (ii) and (iii) only
 - D (i) and (iv) only

The following data relates to the next TWO questions

A special contract requires 100 hours of skilled labour, 200 hours of unskilled labour and 20 hours of management time. Skilled workers are in short supply and would have to be moved from work which is currently earning a contribution of \$3.50 per hour. Skilled workers are paid \$9 per hour and semi-skilled workers are paid \$5 per hour. Management salaries are regarded as fixed costs in the company.

The contract would also require 100 kg of Material N and 300 kg of Material T. Material N is in constant use in the business and there is currently 200 kg of this material held in inventory which is valued at \$600. The cost of replacing N is \$4 per kg. Material T has no other use in the business. There are currently 200 kg in inventory which could be sold at a value of \$4 per kg. The replacement cost of T is \$8 per kg.

201 What is the relevant cost of labour?

- A \$1,350
- B \$2,250
- C \$2,600
- D \$2,650

202 What is the relevant cost of materials?

- A \$1,200
- B \$1,600
- C \$2,000
- D \$2,400

203 If the cost of capital is 8%, what is the present value of a stream of five annual revenues of \$1,000 (the first one is due now) closest to?

- A \$3,790
- B \$3,990
- C \$4,000
- D \$4,312

204 The present value of a five-year annuity which begins in one year's time is \$60,000 at a cost of capital of 5% per annum.

What is the amount of the annuity?

- A \$12,000
- B \$13,198
- C \$13,860
- D \$259,769

- 205** A company has arranged a ten-year lease at an annual rental of \$8,000. The first rental payment has to be made immediately (i.e. in advance) and the others are to be paid at the start of each succeeding year.

What (approximately) is the present value of the lease at a discount rate of 12% per annum?

- A \$50,640
- B \$51,562
- C \$45,200
- D \$49,852

- 206** An individual is to receive an annuity of \$5,000 for ten years, at the end of each year. The present value of the annuities is \$33,550.

What is the cost of capital?

- A 2% per annum
- B 4% per annum
- C 8% per annum
- D 16% per annum

- 207** Dalby is currently considering an investment that gives a positive net present value of \$3,664 at 15%. At a discount rate of 20% it has a negative net present value of \$21,451.

What is the internal rate of return of this investment?

- A 15.7%
- B 16.0%
- C 19.3%
- D 19.9%

- 208** A capital investment project has an initial investment followed by constant annual returns.

How is the payback period calculated?

- A Initial investment ÷ Annual profit
- B Initial investment ÷ Annual net cash inflow
- C (Initial investment – Residual value) ÷ Annual profit
- D (Initial investment – Residual value) ÷ Annual net cash inflow

209 Which of the following accurately defines the internal rate of return (IRR)?

- A The average annual profit from an investment expressed as a percentage of the investment sum
- B The discount rate (%) at which the net present value of the cash flows from an investment is zero
- C The net present value of the cash flows from an investment discounted at the required rate of return
- D The rate (%) at which discounted net profits from an investment are zero

210 An investment project has the following discounted cash flows (\$000):

Year	Discount rate		
	0%	10%	20%
0	(90)	(90)	(90)
1	30	27.3	25.0
2	30	24.8	20.8
3	30	22.5	17.4
4	30	20.5	14.5
	—	—	—
	30	5.1	(12.3)
	—	—	—

The required rate of return on investment is 10% per annum.

What is the discounted payback period of the investment project?

- A Less than 3.0 years
- B 3.0 years
- C Between 3.0 years and 4.0 years
- D More than 4.0 years

211 A machine has an investment cost of \$60,000 at time 0. The present values (at time 0) of the expected net cash inflows from the machine over its useful life are:

Discount rate	Present value of cash inflows
10%	\$64,600
15%	\$58,200
20%	\$52,100

What is the internal rate of return (IRR) of the machine investment?

- A Below 10%
- B Between 10% and 15%
- C Between 15% and 20%
- D Over 20%

- 212** An investment project has a positive net present value (NPV) of \$7,222 when its cash flows are discounted at the cost of capital of 10% per annum. Net cash inflows from the project are expected to be \$18,000 per annum for five years. The cumulative discount (annuity) factor for five years at 10% is 3.791.

What is the investment at the start of the project?

- A \$61,016
- B \$68,238
- C \$75,460
- D \$82,778

- 213** The following statements relate to an investment project that has been discounted at rates of 10% and 20%:

- 1 The discounted payback period at 10% will be longer than the discounted payback period at 20%.
- 2 The discounted payback period at 20% will be longer than the discounted payback period at 10%.
- 3 The non-discounted payback period will be longer than the discounted payback period.
- 4 The non-discounted payback period will be shorter than the discounted payback period.

Which of the statements are TRUE?

- A 1 and 3
- B 1 and 4
- C 2 and 3
- D 2 and 4

- 214** What is the effective annual rate of interest of 2.1% compounded every three months?

- A 6.43%
- B 8.40%
- C 8.67%
- D 10.87%

- 215** A company is considering an immediate investment in new machinery. The machinery would cost \$100,000 with expected net cash inflows of \$30,000 per year starting in Year 1. The disposal value of the machine after five years is expected to be \$10,000. \$15,000 has already been incurred on development costs.

What is the payback period of the investment based on future incremental cash flows?

- A 3.0 years
- B 3.3 years
- C 3.5 years
- D 3.8 years

- 216** An investment project has net present values as follows:

At a discount rate of 5% \$69,700 positive

At a discount rate of 14% \$16,000 positive

At a discount rate of 20% \$10,500 negative

Using the above figures, what is the BEST approximation of the internal rate of return of the investment project?

- A 17.6%
- B 17.9%
- C 18.0%
- D 22.7%

- 217** A company has decided to lease a machine. Six annual payments of \$8,000 will be made with the first payment on receipt of the machine. Below is an extract from an annuity table:

<i>Year</i>	<i>Annuity factor</i>
	10%
1	0.909
2	1.736
3	2.487
4	3.170
5	3.791
6	4.355

What is the present value of the lease payments at an interest rate of 10%?

- A \$30,328
- B \$34,840
- C \$38,328
- D \$48,000

218 Which of the following are relevant in capital investment decision-making using discounted cash flow methods of appraisal?

- 1 Annual depreciation
- 2 Cost of capital
- 3 Sunk costs
- 4 Timing of future cash flows

- A 1 and 3
- B 2 and 4 only
- C 1, 2 and 4
- D 2, 3 and 4

219 What is the value after three years, to the nearest \$, of \$100 invested now at a compound rate of interest of 6% per annum?

- A \$18
- B \$19
- C \$118
- D \$119

220 Discounted cash flow analysis is being applied to a project with the following results:

<i>Rate of interest</i> <i>% per annum</i>	<i>Net present value</i> \$
13	9,362
19	(2,015)

Using the above results, what is the best approximation of the internal rate of return of the project?

- A 13.8%
- B 14.1%
- C 17.9%
- D 20.6%

221 A capital investment project requires expenditure of \$90,000 in Year 0, followed by cash inflows of \$30,000 at the end of each of the four years of the project's life. The project will have a terminal value of \$60,000.

What is the payback period of the investment project?

- A 1 year
- B 2 years
- C 3 years
- D 4 years

- 222** The management of Blundell Ltd are thinking of investing in refreshment vending machines for their staff. This will avoid the need to replace the tea lady, who is about to retire. A new tea lady would have been paid \$4,000 in the forthcoming year (on a monthly basis), with a 3% pay rise each year after that. The vending machines will cost a total of \$18,000.

What is the payback period of the vending machine investment project?

- A 4 years 4 months
 - B 4 years
 - C 5 years
 - D 5 years 3 months
- 223** Angel plc has \$1 million available for investment. It has identified a possible investment Angel plc uses a 15% cost of capital when appraising investments of this type. Details of the investment are set out below:

	\$000
Initial Investment	500
Net positive cash flows:	
Year 1	70
Year 2	90
Year 3	630
Net Present value	43

What is the Internal Rate of Return of an investment in the project to the nearest 0.1%?

- A 17.0%
- B 17.5%
- C 18.2%
- D 18.7%

This information is to be used for the next TWO questions

Teatime Ltd is considering the purchase of a new piece of equipment that will enable them to produce a continental dough based tea loaf. The general manager has asked you to financially appraise the new project, and gives you the following information:

<i>Cash flows (\$)</i>	<i>Year 0</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>
Equipment cost	40,000			
Marketing costs	3,000	2,500		
Sales revenues		28,000	34,000	38,000
Variable costs		12,500	15,500	17,000

Teatime has a cost of capital of 12%. Discount factors are as follows:

Year 1	0.893
Year 2	0.797
Year 3	0.712

224 What is the net present value?

- A \$1,694.50
- B −\$1,694.50
- C \$74,010.50
- D −\$74,010.50

225 What is the payback period?

- A not able to calculate
- B 2 years 2 months
- C 2 years 7 months
- D 2 years 11 months

CHAPTER 15: STANDARD COSTING

This information is to be used for the next TWO questions

A company has a budgeted material cost of \$125,000 for the production of 25,000 units per month. Each unit is budgeted to use 2 kg of material. The standard cost of material is \$2.50 per kg.

53,000 kg of material were purchased and used at a cost of \$136,000 and 27,000 units were produced.

226 What was the adverse material price variance?

- A \$1,000
- B \$3,500
- C \$7,500
- D \$11,000

227 What was the favourable material usage variance?

- A \$2,500
- B \$4,000
- C \$7,500
- D \$10,000

228 Which of the following statements is correct with regard to the material price variance calculation?

The material price variance is calculated by comparing the:

- A actual quantity purchased at standard cost with the actual quantity used at standard cost
- B actual quantity purchased at actual cost with the actual quantity used at standard cost
- C actual quantity purchased at actual cost with the actual quantity purchased at standard cost
- D actual quantity purchased at actual cost with the actual quantity used at actual cost

- 229** Bowen has established the following with regard to fixed overheads for the past month:

Actual costs incurred	\$132,400
Actual units produced	5,000 units
Actual labour hours worked	9,750 hours
Budgeted costs	\$135,000
Budgeted units of production	4,500 units
Budgeted labour hours	9,000 hours

Overheads are absorbed on a labour hour basis.

What was the fixed overhead capacity variance?

- A \$750 favourable
 - B \$11,250 favourable
 - C \$22,500 favourable
 - D \$11,250 adverse.
- 230** Trim Ltd's materials price variance for the month of January was \$1,000 F and the usage variance was \$200 F.

The standard material usage per unit is 3 kg, and the standard material price is \$2 per kg. 500 units were produced in the period. Opening inventory of raw materials was 100 kg and closing inventory was 300 kg.

What were the material purchases in the period?

- A 1,200 kg
 - B 1,400 kg
 - C 1,600 kg
 - D 1,800 kg
- 231** The following information relates to R plc for October 20X7:

Bought 7,800 kg of material R at a total cost of \$16,380.

Inventory levels of material R increased by 440 kg.

Material R is valued using standard purchase price.

Material price variance was \$1,170 Adverse.

What is the standard price per kg for material R?

- A \$1.95
- B \$2.10
- C \$2.23
- D \$2.25

- 232** XY Ltd purchased 6,850 kilograms of material at a total cost of \$21,920. The material price variance was \$1,370 adverse.

What is the standard price per kilogram?

- A \$0.20
- B \$3.00
- C \$3.20
- D \$3.40

This information is to be used for the next TEN questions

The following details have been extracted from the standard cost card of Product X which is manufactured by the XYZ chemical company which uses an absorption costing system:

	\$
Direct materials (2 kg at \$4.20)	8.40
Direct labour (1 hour)	7.60
Variable overhead (1 hour)	3.90
Fixed overhead (1 hour)	5.10
	<hr/>
	25.00
	<hr/>

The fixed overhead charged to each unit of the product is based on a monthly production of 2,000 units.

During October 20X3, the actual production amounted to 2,150 units and costs incurred were as follows:

	\$
Direct materials (4,330 kg)	18,100
Direct labour (2,200 hours)	14,980
Variable overhead (2,200 hours)	8,160
Fixed overhead (2,200 hours)	9,950

- 233** What was the material price variance?

- A \$86 F
- B \$86 A
- C \$1,300 F
- D \$1,300 A

- 234** What was the material usage variance?

- A \$40 F
- B \$40A
- C \$126 F
- D \$126 A

- 235 What was the direct labour rate variance?**
- A \$1,360 F
 - B \$1,360 A
 - C \$1,740 F
 - D \$1,740 A
- 236 What was the direct labour efficiency variance?**
- A \$50 F
 - B \$50 A
 - C \$380 F
 - D \$380 A
- 237 What was the variable overhead expenditure variance?**
- A \$225 F
 - B \$225 A
 - C \$420 F
 - D \$420 A
- 238 What was the variable overhead efficiency variance?**
- A \$50 F
 - B \$50 A
 - C \$195 F
 - D \$195 A
- 239 What was the fixed overhead expenditure variance?**
- A \$250 F
 - B \$250 A
 - C \$1,015 F
 - D \$1,015 A
- 240 What was the fixed overhead volume variance?**
- A \$150 F
 - B \$150 A
 - C \$765 F
 - D \$765 A

241 What was the fixed overhead efficiency variance?

- A \$50 F
- B \$50 A
- C \$255 F
- D \$255 A

242 What was the fixed overhead capacity variance?

- A \$255 F
- B \$255 A
- C \$1,020 F
- D \$1,020 A

This information is to be used for the next THREE questions

Shown below is the previous month's overhead expenditure and activity, both budget and actual, for Department 7 in a manufacturing company:

	<i>Month's budget</i>	<i>Month's actual</i>
Activity:		
Standard hours	8,000	8,400
	<hr/>	<hr/>
	\$	\$
Fixed overheads:		
Salaries	6,750	6,400
Maintenance	3,250	3,315
Variable overheads:		
Power	17,600	20,140
Consumable materials	6,000	5,960
Indirect labour	4,400	4,480
	<hr/>	<hr/>
Total overheads	38,000	40,295
	<hr/>	<hr/>

The budgeted overheads shown above are based upon the anticipated activity of 8,000 standard hours and it should be assumed that the department's budgeted overhead expenditure and activity occur evenly throughout the year. Variable overheads vary with standard hours produced.

243 What was the fixed overhead volume variance?

- A \$400 F
- B \$500 F
- C \$600 F
- D \$700 F

244 What was the fixed overhead expenditure variance?

- A \$350 F
- B \$285 F
- C \$60 A
- D \$2,295 A

245 What was the total variable overhead variance?

- A \$2,580 F
- B \$2,580 A
- C \$1,180 F
- D \$1,180 A

246 A company uses a standard absorption costing system. The following details are taken from its budget for March 20X8:

Fixed production overhead cost \$72,000

Production (units) 7,200

The accounts for March 20X8 show that the fixed production overhead cost was over-absorbed by \$12,000, and the fixed production overhead expenditure variance was \$3,000 adverse.

What is the actual number of units produced?

- A 5,700
- B 6,300
- C 8,100
- D 8,700

247 An adverse material usage variance could be caused by which of the following?

- 1 The storeroom supplying less material than is required by production
 - 2 The purchase of cheap material
 - 3 Poorly maintained machinery
 - 4 A series of short deliveries
-
- A Items 1 and 2 only
 - B Items 2 and 3 only
 - C Items 3 and 4 only
 - D Items 1 and 4 only

248 Which of the following situations is likely to cause an adverse material usage variance?

- A A world shortage of the material used
- B Employing unskilled machine operators
- C Machinery idle time
- D Limited storage space

249 A product has a budgeted direct labour cost of \$6 per unit. In a period, production volume was as follows:

Budget 8,000 units

Actual 7,700 units

Actual direct labour costs for the period were \$47,600.

What was the total direct labour cost variance due to rate and efficiency factors?

- A \$400 Favourable
- B \$400 Adverse
- C \$1,400 Favourable
- D \$1,400 Adverse

250 A product has a budgeted direct materials cost of \$12 per unit. Production volume for the period was:

Actual 6,750 units

Budget 6,500 units

Actual direct materials cost for the period were \$79,840.

What was the total direct material cost variance?

- A \$1,160 Favourable
- B \$1,160 Adverse
- C \$1,840 Favourable
- D \$1,840 Adverse

251 A product has a budgeted fixed production overhead cost per unit cost of \$10. Production volume for the period was:

Actual 15,000 units

Budget 15,500 units

Actual fixed overhead expenditure for the year was \$161,000.

What was the fixed overhead expenditure variance?

- A Nil
- B \$5,000 Adverse
- C \$6,000 Adverse
- D \$8,000 Adverse

- 252 Which of the following factors should be the least likely to affect a decision about whether or not to investigate a variance reported during a particular month in the middle of the financial year?**
- A Size of the variance
 - B Whether it is favourable or adverse
 - C Whether it is likely to be controllable
 - D The trend in the monthly variance over the year to date
- 253 What is the principle of reporting by exception with variance analysis?**
- A Report variances only occasionally
 - B Report only those variances that exceed a certain limit
 - C Report only to the most senior management
 - D Report only adverse variances
- 254 A product has a budgeted direct material cost of \$5 per unit. In a period, production of the product was:**
- | | |
|--------|-------------|
| Budget | 9,000 units |
| Actual | 8,800 units |
- \$44,380 was incurred on direct materials for the period's production.
- What was the direct material variance due to price/usage factors?**
- A \$380 Adverse
 - B \$380 Favourable
 - C \$620 Adverse
 - D \$620 Favourable
- 255 Which one of the following is *not* a factor that should affect a decision as to whether to investigate a variance?**
- A Controllability of variance
 - B Cost of investigation
 - C Personnel involved
 - D Trend of variance

CHAPTER 16: PERFORMANCE MEASUREMENT

256 What is CSF the abbreviation for?

- A Common success factors
- B Critical statistical findings
- C Critical success factors
- D Common statistical findings

257 For which of the following types of business unit would residual income be a suitable measure of performance?

- A Cost centre
- B Revenue centre
- C Profit centre
- D Investment centre

258 A large hotel has coffee shops, restaurants and banqueting. They are used by hotel residents and outside users. The manager of the hotel is responsible for encouraging residents to use the hotel's catering facilities.

Which report will show how effective the manager has been in achieving this objective?

- A A report analysing the utilisation of hotel services per room occupied
- B A report showing the amount of money spent in the hotel's catering facilities
- C A report showing the number of residents in the hotel at any given time
- D A report showing the occupancy of the various catering facilities

259 What is the systematic comparison of key factors between sections or departments within the same organisation called?

- A internal benchmarking
- B performance appraisal
- C environmental auditing
- D quality assessment

This information is to be used for the next ELEVEN questions

The summarised financial statements of Weden, a limited liability company engaged in manufacturing, are shown below:

<i>Year ended March 20X2</i>				
<i>Income statement</i>		<i>Statement of Financial Position</i>		
	\$000	\$000		\$000
Sales revenue		3,200	Non-current	1,970
Cost of sales			Current	
Opening inventory	800		Inventory	300
Purchases	1,800		Receivables	600
Less: Closing inventory	300			60
	—		Cash	50
		(2,300)		—
		—		1,010
Gross profit		900		—
Expenses		(400)		2,980
		—		—
Profit from operations		500	Issued share	600
Interest paid		(100)	Share	200
		—	Retained	750
Profit for the period		400		—
		—		1,550
			Non-current	
			10% loan	1,000
			Current	
			Payables	380
			Accruals	50
				—
				430
				—
				2,980
				—

260 What is the gross profit margin?

- A 12.5%
- B 28.1%
- C 19.6%
- D 64.5%

261 What is the profit for period margin?

- A 12.5%
- B 28.1%
- C 19.6%
- D 64.5%

262 What is the return on capital employed?

- A 12.5%
- B 28.1%
- C 19.6%
- D 64.5%

263 What is the asset turnover?

- A 1.25
- B 5.00
- C 1.65
- D 2.35

264 What is the current ratio?

- A 1.25
- B 5.00
- C 1.65
- D 2.35

265 What is the quick ratio?

- A 1.25
- B 5.00
- C 1.65
- D 2.35

266 What is the inventory holding period (days)?

- A 77.1 days
- B 68.4 days
- C 136.9 days
- D 47.6 days

267 What is the receivables collection period (days)?

- A 77.1 days
- B 68.4 days
- C 136.9 days
- D 47.6 days

268 What is the payable payment period (days)?

- A 77.1 days
- B 68.4 days
- C 136.9 days
- D 47.6 days

269 What is the gearing ratio (debt/equity)?

- A 12.5%
- B 28.1%
- C 19.6%
- D 64.5%

270 What is the interest cover?

- A 1.25
- B 5.00
- C 1.65
- D 2.35

271 During a period, the actual hours worked by professional staff totalled 3,471. Budgeted hours were 3,630. The standard hours for the work totalled 3,502.

What is the efficiency ratio?

- A 99.1%
- B 95.6%
- C 100.9%
- D 96.5%

- 272** During a period, the actual hours worked by employees totalled 31,630. Budgeted hours were 29,470 hours. The standard hours for the work totalled 30,502.

What is the capacity ratio?

- A 107.3%
- B 103.5%
- C 96.4%
- D 93.1%

- 273** Extracts of the results of Gransden Ltd for the year to 31 May 20X0 are reproduced below

	\$000	\$000		\$000
Turnover		135,000	Net assets	
Cost of sales			Non-current assets	100,000
Opening inventory	25,000		Depreciation	(40,000)
Purchases	75,000		Carrying amount	60,000
Closing inventory	(20,000)		Inventory	20,000
		80,000	Receivables	16,875
Gross profit		55,000	Payables	(12,500)
Wages and salaries		10,000	Capital employed	84,375
Depreciation		10,000		
Other costs		9,688		
Operating profit for the year		25,312		

The cost of capital is 12%

What are the ROI and RI?

- | | <i>ROI</i> | <i>RI</i> |
|---|------------|-----------|
| A | \$15,187 | 30.0% |
| B | 30.0% | \$15,187 |
| C | 65.2% | \$44,875 |
| D | \$44,875 | 65.2% |

CHAPTER 17: SPREADSHEETS

- 274** You prepare a budget using a spreadsheet program. The numerical data is presented in a tabular form. However, the tabulated data can also be presented in alternative or additional forms.

Which of the following methods of data presentation *cannot* be produced automatically by a spreadsheet program?

- A Bar chart
- B Narrative (words)
- C Pie chart
- D Graph

- 275** The following statements relate to spreadsheets:

- (i) A spreadsheet consists of records and files.
- (ii) Most spreadsheets have a facility to allow data within them to be displayed graphically.
- (iii) A spreadsheet could be used to prepare a budgeted income statement.
- (iv) A spreadsheet is the most suitable software for storing large volumes of data.

Which of the above statements are correct?

- A (i) and (ii) only
- B (i), (iii) and (iv) only
- C (ii) and (iii) only
- D (iii) and (iv) only

- 276** Which of the following are advantages of spreadsheet software over manual approaches?

- (i) Security
 - (ii) Speed
 - (iii) Accuracy
 - (iv) Legibility
- A All of them
 - B (ii), (iii) and (iv)
 - C (ii) and (iv)
 - D (i) and (iv)

- 277** A company manufactures a single product. In a computer spreadsheet the cells F1 to F12 contain the budgeted monthly sales units for the 12 months of next year in sequence with January sales in cell F1 and finishing with December sales in F12. The company policy is for the closing inventory of finished goods each month to be 10% of the budgeted sales units for the following month.

Which of the following formulae will generate the budgeted production (in units) for March next year?

- A $=[F3 + (0.1 * F4)]$
 - B $=[F3 - (0.1 * F4)]$
 - C $=[(1.1 * F3) - (0.1 * F4)]$
 - D $=[(0.9 * F3) + (0.1 * F4)]$
- 278** What is the effect of using brackets in a spreadsheet formula?
- A Divisions and multiplications are calculated before additions and subtractions
 - B Additions and subtractions are calculated before divisions and multiplications
 - C The contents of the brackets are calculated first
 - D The contents of the brackets are calculated last

