This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2017 series for most Cambridge IGCSE®, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

Answer	Question	Marks
1(a)	**Identify and explain <u>two</u> ways in which TT might achieve quality production.**	**8**

Knowledge [2 × 1] – award one mark for each way.
Analysis [2 × 1] – award one mark for a relevant explanation for each way.
Application [2 × 2] – award two application marks for each way.

Award one mark for each way (maximum of two), from this list:

- Quality control
- Quality assurance
- Quality labour – skilled/trained workers
- Quality materials – consider producing own T shirts instead of buying in
- Use new technology/new computer-controlled equipment/CAD,CAM or CIM
- TQM/quality circles

Do not accept JIT or lean production.

Award a maximum of three additional marks for each explanation – 2 of which must be applied to this context - of how the quality can be achieved.

Indicative response:

Quality control (k) means that each batch of children's T-shirts are checked at the end of the production process (app) If there are any faults then the batch can be sewn up and repairs made to any gaps in the seams (app) so that products only leave the factory if they are correctly made and in perfect condition (an).

> Possible application marks:
>
> Ready-made plain white T-shirts; high quality material; prints designs; T-shirts imported from country Q, a developing country; 50 different designs; batches production of various sizes; personalized T-shirts; buying new computer controlled equipment for $500 000; retailers expect high quality products
>
> There may be other examples in context that have not been included here.

Answer	Question	Marks
1(b)	**Consider the advantages and the disadvantages of the <u>two</u> options for expansion. Recommend the best option to choose. Justify your answer.** **Relevant points might include:**	12

		Advantages	Disadvantages
	Option A – take over competing company	Specialised in different product range – increase sales. Economies of scale possible – reduce management layers – reduce wage costs. Increase efficiency – share good practice - lower unit costs – more competitive – increase profit.	High cost to buy out shareholders. No guarantee of success – no expertise in this market. Low staff morale – job insecurity – lack of coordination between the two management structures – diseconomies of scale.
	Option B – expand own production facilities	Increased efficiency from new equipment – increased output – increased sales. Not using a wholesaler – absorb profit margin. Option B is cheaper than Option A.	May need joint venture/use an agent – reduce profit margin – lower profit. Lack of knowledge of export market – culture/taste may be different – more difficult to have effective marketing.

Knowledge/Analysis/Evaluation – award up to 10 marks using the levels-based mark scheme below.

	Knowledge / Analysis / Evaluation
Level 3	At least 2 × Level 2 + 9–10 marks for well justified recommendation of which option to choose and why not choose the alternative option. 7–8 marks for limited recommendation of which option to choose.
Level 2	4–6 marks Detailed discussion of advantages and/or disadvantages of each option.
Level 1	1–3 marks Outline of advantages and/or disadvantages of each option.

Answer	Question	Marks
1(b)	Level 1 – 1 mark for each L1 statement (max of 3 marks) e.g. Economies of scale are possible if they take over another company. Level 2 – 1 × L2 explanation can gain 4 marks and a further mark can be awarded for each additional L2 explanation (max 6 marks) e.g. Economies of scale are possible if they take over another company as T-shirts could be purchased in bulk and a discount received. However, it will cost over $10m to buy out the shareholders and they may not be able to finance it. (L2 plus 1 App mark for consideration of the costs of the takeover of a competitor). Level 3 – For L3 to be awarded there needs to be at least two L2 marks awarded and then a recommendation of which option to choose. **Award up to 2 additional marks for relevant application.** Possible application marks: private limited company; set up 15 years ago; in country P; buys ready-made plain white T-shirts; prints designs; T-shirts imported from country Q, a developing country; 50 different designs; batches production of various sizes; sold to small retailers in country P;expect high quality; share capital $2 m; increased to $8 m by 2015; exporting T-shirts; take over DesOwn; personalized T-shirts; sells online; raise $10 m to buy out the existing shareholders; buying new computer controlled equipment for $500 000; sell directly to large retailers; use an agent or a joint venture; really unhappy factory workers; workers want to leave. There may be other examples in context that have not been included here.	

Answer	Question	Marks
2(a)	**Identify <u>two</u> motivational theories and explain how TT could use these theories to help increase worker motivation**	**8**
	Knowledge [2 × 1] – award one mark for each theory Analysis [2 × 1] – award one mark for a relevant explanation for each theory Application [2 × 2] – award two application marks for each theory	
	Award one mark for each theory (maximum of two), from: • Taylor – scientific management approach, money is the main motivator, pay according to tasks performed so speed is encouraged, specialisation would make best use of skills • Maslow – hierarchy of needs, satisfy physiological, safety, social, self-esteem, self-actualisation needs to increase motivation • Herzberg – two factor theory where hygiene factors relate to the working environment and motivating factors relate to improving the job itself so that work is meaningful and the worker is given responsibility	
	Note: There may be reference to other motivational theorists.	
	Award a maximum of three additional marks for each explanation – 2 of which must be applied to this context – of the theory.	
	Note: The explanation must focus on how TT can use each specific theory.	
	Indicative response:	
	Taylor (k) believed that money is a main motivator for workers (an) and so TT should increase the workers' wages especially to pay them for all the tasks they do (app) and then they may feel more motivated and less unhappy in their jobs and not want to leave (app).	
	Possible application marks: prints designs; 50 different designs; batch production of various sizes; expect high quality; personalized T-shirts; really unhappy factory workers; may be made redundant if taking over another business; Operations Manager just tells me what to do; she never asks what I think; shouted at if I do anything wrong; told to keep quiet; no training on selling; workers want to leave; information is only put on one noticeboard. There may be other examples in context that have not been included here.	

Answer	Question	Marks
2(b)	**TT should consider the following <u>three</u> changes before making a final decision about whether to start exporting its products. Which change will be the most important for the decision? Justify your answer.**	12

Relevant points might include:

Appreciation in the exchange rate of country P's currency.	Exports more expensive – harder to sell its products abroad – imports cheaper – T-shirts lower costs – could lower prices or increase profit.
Increased economic growth in many developed economies.	Increased demand – increased sales of T-shirts – may demand alternative more expensive clothes.
Increase in the import tariffs in many developed economies.	Higher import prices for T-shirts – increased costs – higher price of finished T-shirt – lower demand.

Knowledge/Analysis/Evaluation – award up to 10 marks using the levels-based mark scheme below.

		Knowledge/Analysis/ Evaluation
	Level 3	At least 2 × Level 2 + 9–10 marks for well justified conclusion as to which change will be the most important compared to the other changes. 7–8 marks for some limited judgement shown in conclusion as to which change will be most important.
	Level 2	4–6 marks Discussion of advantages and/or disadvantages of each change.
	Level 1	1–3 marks Outline of advantages and/or disadvantages of each change.

Level 1 – 1 mark for each L1 statement (max of 3 marks) e.g. appreciation of currency will lead to higher export prices, economic growth will lead to increased sales of T shirts, increased import tariffs will make T shirt prices higher.

Level 2 – 1 × L2 explanation can gain 4 marks and a further mark can be awarded for each additional L2 explanation (max 6 marks) e.g. Appreciation in the currency will lead to higher export prices which may lead to a fall in demand for the T-shirts. This will make it harder to sell in this market and consumers may switch to home produced goods that now appear cheaper. (L2)

Level 3 – For L3 to be awarded there needs to be at least two L2 marks awarded and then a conclusion of which change will be most important.

Award up to 2 additional marks for relevant application.

Possible application marks: Buys ready-made plain white T-shirts; prints designs on T shirts; T-shirts imported from country Q, a developing country; sold to small retailers; expand the company; exporting T-shirts; sells online; sell directly to large retailers; use an agent or a joint venture.   There may be other examples in context that have not been included here.

Answer	Question	Marks
3(a)	**Identify <u>two</u> communication barriers which might occur within TT and explain how each barrier might be reduced.**	**8**

Knowledge [2 × 1] – award one mark for each barrier
Analysis [2 × 1] – award one mark for a relevant explanation for each barrier
Application [2 × 2] – award two application marks for each barrier

Award one mark for each barrier (maximum of two), such as:

- Problems with the sender – different languages in country P and country Q/ not made the message clear /speaks quickly/sends message to wrong person/too many workers to contact
- Problems with the medium – message lost/no feedback given/wrong channel used/ message not picked up
- Problems with the receiver – not listening/ may not trust the sender/not understanding the message
- Problems with feedback – only one-way communication/there is no feedback/distortion of feedback as passed through too many people/ long chain of command
- Problems with the physical environment – noise level/separate buildings/time difference

Award a maximum of three additional marks for each explanation – 2 of which must be applied to this context - of how the barrier might be reduced.

Indicative response:

Problems with the medium used (k) in the case of TT information is put on a factory noticeboard in another building where the workers do not see it (app). If the message is put on a noticeboard in the same building as the factory workers and also in a newsletter sent to every worker in the T-shirt factory (app) then this should ensure that all workers receive the information and the barrier will be overcome (an).

> Possible application marks:
>
> Private limited company; in country P/Q; prints designs; T-shirts imported from country Q, a developing country; sold to small retailers in country P; expand the company; exporting T-shirts; take over DesOwn, a competing company; personalized T-shirts; sells online; use an agent or a joint venture; really unhappy factory workers; shouted at if I do anything wrong; workers want to leave; workers in the factory; Operations manager just tells me what to do; she never asks what I think; told to keep quiet; no training on selling; information is only put on one noticeboard.
>
> There may be other examples in context that have not been included here.

Answer	Question	Marks
3(b)	**Consider the following <u>three</u> channels of distribution TT could use for its products in country P. Recommend the best channel to gain the highest sales. Justify your answer.** **Relevant points might include:**	12

	Advantages	Disadvantages
Sell to a wholesaler	Bulk buy – gain advice on what sells well – lower administration costs.	Lower profit margin.
Sell directly to large retailers	Good locations/high footfall – increase sales.	Many competing brands also sold there.
Open its own shops in shopping malls	Control over presentation of T-shirts – independent decision making about selling to customers.	High costs of operating own shop – insufficient designs for own shops.

Note: **Do not accept** answers referring to exporting. The question only asks about country P.

Knowledge/Analysis/Evaluation – award up to 10 marks using the levels-based mark scheme below.

	Knowledge/Analysis/ Evaluation
Level 3	At least 2 × Level 2 + 9–10 marks for well justified recommendation as to best channel of distribution to choose and why not the other channels. 7–8 marks for some limited judgement shown in recommendation as to best channel of distribution to choose.
Level 2	4–6 marks Detailed discussion of each channel of distribution.
Level 1	1–3 marks Outline of each channel of distribution.

Answer	Question	Marks
3(b)	Level 1 – 1 mark for each L1 statement (max of 3 marks) e.g. Wholesaler will buy in bulk. Level 2 – 1 × L2 explanation can gain 4 marks and a further mark can be awarded for each additional L2 explanation (max 6 marks) e.g. Wholesaler will buy in bulk which will reduce administration and transport costs. However, the wholesaler will expect a reduced price and so the profit margin will be lower. (L2) Level 3 – For L3 to be awarded there needs to be at least two L2 marks awarded and then a recommendation which justifies the best channel of distribution to choose. **Award up to 2 additional marks for relevant application.** Possible application marks: Private limited company; prints designs; 50 different designs; batch production of various sizes; sold to small retailers; expect high quality; expand the company; personalized T-shirts; use an agent or a joint venture; no training on selling. There may be other examples in context that have not been included here.	

Answer	Question	Marks
4(a)	**Identify and explain <u>one</u> reason why TT will need short-term finance and <u>one</u> reason why TT will need long-term finance.**	8

Knowledge [2 × 1] – award one mark for each reason
Analysis [2 × 1] – award one mark for a relevant explanation for each reason
Application [2 × 2] – award two application marks for each reason

Award one mark for each reason (maximum of two), such as:

Short-term finance – needed on a day-to-day basis to keep the business running:
- Working capital /cover expenses/pay wages
- Pay for materials/Inventories of T-shirts
- Cash flow problems

Long-term finance – needed over a long period of time to support expensive business development. Will need to be repaid in many instalments:
- Investment in equipment/machinery/fixed assets
- Take over another company/expand

Award a maximum of three additional marks for each explanation – 2 of which must be applied to this context – of each reason.

Indicative response:

Short-term finance will be needed to pay for inventory (k) in this case it will be the T-shirts that are to have prints on them (app). The T-shirts will need to be purchased from abroad and paid for long before they have designs printed on them (app) and sold so working capital will be needed to allow this to take place. (an)

> Possible application marks:
>
> Private limited company; set up 15 years ago; in country P; buys ready-made plain white T-shirts; T-shirts imported from country Q, a developing country; 50 different designs; batches production of various sizes; sold to small retailers in country P; share capital $2 m; increased to $8 m by 2015; expand the company; exporting T-shirts; take over DesOwn, a competing company; sells online; raise $10 m to buy out the existing shareholders; buying new computer controlled equipment for $500 000; sell directly to large retailers; use an agent or a joint venture.
>
> There may be other examples in context that have not been included here.

Answer	Question	Marks
4(b)	**Refer to Appendix 3 and other information in the case study. Consider the financial performance of TT. Do you think the directors should be pleased with the company's performance? Justify your answer using appropriate ratios.** **Relevant points might include:** <table><tr><td>2015</td><td>GPM = 80% (L2)</td><td>GP = $8 m (L1)</td></tr><tr><td></td><td>NPM = 10% (L2)</td><td>NP = £1 m (L1)</td></tr><tr><td></td><td>ROCE = 10% (L2)</td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td>2016</td><td>GPM = 73% or 73.3% (L2)</td><td>GP = $11 m (L1)</td></tr><tr><td></td><td>NPM = 13% or 13.3% (L2)</td><td>NP = $2 m (L1)</td></tr><tr><td></td><td>ROCE = 14% or 14.2% (L2)</td><td></td></tr></table> Between 2015 and 2016: • The revenue increased (by $5 m) (L1) • The gross profit increased (by $3 m) (L1) • The net profit increased (by $1 m) (L1) Note: **Do not accept** APP for use of data already provided in Appendix 3 (non-calculated figures). Knowledge/Analysis/Evaluation – award up to 10 marks using the levels-based mark scheme below. <table><tr><td></td><td>Knowledge/Analysis/ Evaluation</td></tr><tr><td>Level 3</td><td>At least 2 × Level 2 + 9–10 marks for well justified conclusion as to whether the directors should be pleased with the company performance. 7–8 marks for some limited conclusion as to whether the directors should be pleased with the company performance/recommend action for improvement or future development of the business.</td></tr><tr><td>Level 2</td><td>4–6 marks Correct calculation of profitability ratios.</td></tr><tr><td>Level 1</td><td>1–3 marks Outline of the differences between the years.</td></tr></table>	12

Answer	Question	Marks
4(b)	Level 1 – 1 mark for each L1 statement (max of 3 marks). Level 2 – 1 × L2 calculation can gain 4 marks and a further mark can be awarded for each additional L2 calculation (max 6 marks) e.g. The net profit margin for 2016 was 13%. (L2). Level 3 – For L3 to be awarded there needs to be at least two L2 marks awarded and then a conclusion whether the directors should be pleased with the company performance. **Award up to 2 additional marks for relevant application.** Possible application marks: Private limited company; set up 15 years ago; in country P; share capital \$2 m; increased to \$8 m by 2015; expand the company; raise \$10 m to buy out the existing shareholders; buying new computer controlled equipment for \$500 000. There may be other examples in context that have not been included here.	