

11. B. Economic order quantity
12. B. Sudden increase in consumer demand
13. D. 1 week
14. C. 1500 kgs
15. B. 3000 kgs
16. C. Higher average fixed costs of production
17. B. 80%
18. B. Queuing times will rise
19. D. Subcontracting work
20. D. low, high
21. B. Subcontracting
22. D. Consideration and observation of overseas regulations
23. D. Ratio analysis
24. C. Greater job security
25. B. Offshoring

Unit 5.6

Research and Development (HL Only)

Task 1 – Complete the missing words...

Research is about investigating the unknown, such as new products or processes. **Development** is about using research findings to create new products that might be commercialised. The purpose of **Research** and **Development** (R&D) is to provide continual advancements in production and to launch new products to satisfy customer needs in a profitable way. **Innovation** is the commercialisation of these new processes, products or ideas.

In order to provide inventors with an incentive to innovate, the legal system controls and enforces the use of intellectual **property rights** (IPRs), such as **copyrights** and **trademarks**. People or firms wishing to use the IPR of others must first seek the legal permission of the IPR holder. For instance, **patents** give an entrepreneur or a business the exclusive and legal right to produce a new product or to use a particular production process. Intellectual property rights are recorded on a firm's **balance sheet**, under the section of intangible fixed assets.

Task 2 – True or False?

	True / False
a.	T
b.	T
c.	F
d.	F
e.	F
f.	T
g.	T
h.	T

Task 3 – Explain...

- a. **TV advertising is not cost effective in this case due to the huge expenses for targeting only a small proportion of the customers; TV advertising is used for mass market promotion whereas direct marketing is more focused on (and therefore appealing to) the early adopters.**
- b. **Market research is used to gain insight to what customers want (enabling the business to have a higher chance of success in the market); this could also include an investigation of any legal restrictions and parameters. Product development helps to ensure the right product is launched to meet the needs of consumers.**
- c. **Limited internal finance to fund R&D expenditure; Unlikely to be able to secure external sources of finance to fund R&D; Less able to attract/employ highly skilled/innovative workers.**
- d. **Growth opportunities, productivity gains (and hence lower unit costs), improved competitiveness (domestic and international), brand switching / brand loyalty, job creation, social benefits / social betterment.**

Task 4 – Multiple Choice

1. C. **Position mapping**
2. A. **To increase earning potential of the business in the future**
3. C. **Market leaders**
4. B. **The commercial development and use of an idea or process that appeals to consumers**
5. D. **Reduced product failure rate**
6. B. **Establishing a unique selling point**
7. D. **Competitiveness**
8. A. **Process innovation**
9. D. **Paradigm innovation**
10. C. **Medicines**
11. B. **Patent**
12. D. **A trademark**
13. A. **Balance sheet**
14. C. **Adaptive creativity**
15. B. **Innovative creativity**