

Pearson BTEC Level 3 Nationals Extended Diploma

Thursday 14 January 2021

Supervised hours: 3 hours

Paper Reference **31589H**

**Business/Enterprise and
Entrepreneurship**

Unit 7/Unit 6: Business Decision Making

Part S

You must have:

Calculator, note paper and pen

Instructions

- This booklet contains material for the completion of the set task under supervised conditions.
- This booklet is specific to each series and this material must only be issued to learners who have been entered to undertake the task in the relevant series.
- This booklet should be kept securely until the start of the 3-hour supervised assessment period.
- This booklet must be issued to learners on the timetabled date and under conditions specified by Pearson.

Information

- The total mark for this paper is 70.

Turn over ►

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Instructions to Teachers/Tutors and/or Invigilators

This paper must be read in conjunction with the unit information in the specification and the *BTEC Nationals Instructions for Conducting External Assessments (ICEA)* document. See the Pearson website for details.

The set task is undertaken under supervision in a **single session** of three hours on the timetabled day specified by Pearson.

Centres must schedule all learners in the same session and must release the assessment to individual learners only for their scheduled session.

Work should be completed on a computer.

Centres may schedule supervised rest breaks during the session.

All learner work must be completed independently and authenticated by the teacher/tutor and/or invigilator before being submitted to Pearson.

Refer carefully to the instructions in this booklet and the *BTEC Nationals Instructions for Conducting External Assessments (ICEA)* to ensure that the supervised assessment is conducted correctly and that learners submit evidence that is their own work.

Learners must not bring anything into the supervised environment or take anything out without teacher/tutor and/or invigilator knowledge and approval. A calculator, note paper and pen are allowed.

Centres are responsible for putting in place appropriate checks to ensure that only permitted material is introduced into the supervised environment.

Maintaining security

- During the supervised assessment period the assessment areas must be accessible only to individual learners and to named members of staff.
- Learners can access their work only under supervision.
- Learner work should be backed up regularly.
- Any work learners produce under supervision must be kept securely.
- During any break materials must be kept securely.

Outcomes for submission

Each learner will need to complete **three** documents:

- a report
- a presentation with speaker notes or script
- an authentication sheet.

Instructions for Learners

Read the set task information carefully.

It contains all the information you need to complete both activities.

This is a **single session** of three hours. Plan your time carefully. Your teacher/tutor and/or invigilator will tell you if there are any supervised breaks.

You will complete the activities within the set task under supervision and your work will be kept securely during any breaks taken.

You may use a calculator and will have access to a computer.

You must work independently throughout the supervised assessment period and must not share your work with other learners.

Your teacher/tutor and/or invigilator can clarify the wording that appears in this set task but must not provide any other guidance to help you complete the task.

Outcomes for submission

You will need to complete **three** documents:

- a report
- a presentation with speaker notes or script
- an authentication sheet.

Set Task Information

You are working in a business advice centre and have been approached by a new client, Hasan. Hasan has more than 15 years' experience in his current role as an electrician for an electrical repair company. Hasan has told you that he is about to be made redundant.

Hasan has often considered working for himself. He thinks that being made redundant will give him the opportunity to achieve this goal.

Hasan's goals for his new business are to break even in its first year and, in the future, grow into a successful private limited company.

Hasan has asked you to recommend which of these two options would be best for him.

Option 1

Start a business providing general electrical installation, servicing and repairs for both individual customers and commercial customers.

Option 2

Start a business installing and servicing electric vehicle charging equipment.

On the following pages you will find information relating to the two options.

This includes data and information on:

- Industry trends
- Option 1 – General electrical installation, servicing and repair business
- Option 2 – Electric vehicle charging business.

Set Task

You must complete both activities.

You will produce **two** documents on a computer:

- a report
- a presentation of slides with speaker notes or script.

Activity 1

You are to produce a report that examines the two options Hasan is considering for opening his new business.

Your report must address **both** options and include:

- an assessment of
 - the key factors and risks
 - the implications for resources
- appropriate financial forecasts
- an interpretation of financial information using ratio analysis
- use of appropriate decision-making tools to make a supported recommendation to Hasan.

Your report must be set within the context of the business and its goals.

Your report should be presented in an appropriate format for Hasan.

You should present your report as a word processed document in a minimum of 12-point font.

(Total for Activity 1 = 52 marks)

Activity 2

Using appropriate software prepare a presentation for Hasan.

The presentation should:

- summarise the recommendations made in your report
- give your rationale for the recommendations made.

The presentation must be accompanied by speaker notes or a script that will engage and convince Hasan of the viability of your recommendation.

(Total for Activity 2 = 18 marks)

TOTAL FOR PAPER = 70 MARKS

Industry trends – General electrical contracting

The general electrical contracting market covers any electrical work within a building. This includes electrical cable installation, lighting and power sockets, wireless networks and fire detection/security systems.

A recent report has shown the UK electrical contracting market was worth £21.6 billion in 2018. The electrical work required in new houses accounts for around 56% of this market value. Over the next two to four years, the electrical contracting market is expected to see annual growth of between 2% and 3%. This growth is expected to come from the installation in homes of equipment to improve energy efficiency and reduce carbon emissions. The installation of this equipment involves fitting sensors and other smart technology. This allows homeowners to remotely control security devices, lighting and heating while away from their property.

Competition in the market is fierce. The five largest electrical contracting businesses control about 10% of the total market. In addition, there has been an increase in the number of smaller independent businesses operating in the market. These businesses may have been started by workers who were previously employed by an electrical contractor. A self-employed contractor can expect to achieve sales turnover of between £150 000 and £200 000 a year.

Industry trends – Electric vehicle charging

There are 35 million cars on UK roads, an increase of 12% in the last 10 years. The reasons for this increase include a rapidly growing population, greater economic prosperity and increasing levels of employment. There were 2.37 million new car registrations in 2018, a fall of 6.8% from 2017. This fall in new car sales was attributed to reduced consumer confidence and the government announcement of a non-electric car sales ban from 2035, as well as other environmental restrictions.

The sale of new all electric vehicles (EVs) increased by 70% over the last two years and there are now 220 000 EVs on UK roads. This number is predicted to increase to 500 000 by the end of 2020, rising to over 1 million by the end of 2022. Given this level of growth, there is a potential shortage of EV charging points in the UK. A recent report stated that the UK will need a 600% increase in the number of EV charging points to meet predicted demand.

The UK government's aim to make all new cars and vans zero emission vehicles by 2035 is supported by an investment of nearly £1.5 billion. It has committed £440 million to increasing the number of EV charging points. The government offers a discount of up to £3 500 on the purchase price of a new electrical vehicle. The government also offers a one-time contribution of £500 to the cost of installing an EV charging point at the vehicle owner's home. To qualify for this charging point contribution, owners of recently purchased electric vehicles have to use government-approved installers.

Option 1 – General electrical installation, servicing and repair business

Hasan believes he can be successful running his own electrical installation, servicing and repair business. Initially his target market would be builders in his local area and individual customers. He would need to register with the National Inspection Council for Electrical Installation (NICEIC) so that his work can be certificated. He would then be able to use the NICEIC website for job referrals.

Hasan has done some research on what other contractors charge for electrical work. The price for installing new lighting would be between £100 and £300 and the price for installing a new power socket would be £100. The price to rewire a house would be between £4000 and £6000. Hasan forecasts that he could achieve sales turnover of £120 000 in his first year with cost of sales of 40%.

Hasan would need to take out a £5 000 loan to pay for a van, electrical testing equipment and other tools. He would pay back the loan over two years at a cost of £225 a month. Initially, Hasan would work from home so that he can keep his expenses to a minimum.

Hasan would need to set up a website and do some marketing to attract customers. He could look for work on websites such as mybuilder.com and ratedpeople.com. These are online directories where customers post jobs for electricians and other tradespeople to bid for work. Hasan should also be able to obtain new work through the good reviews left by customers. Building a strong social media presence should help him build his reputation.

As a start-up business, Hasan would have to purchase all his materials using cash or a credit card until his supplier agreed to offer him trade credit. All of Hasan's sales revenue would be paid immediately on completion of work. As a sole trader Hasan knows he would have to pay tax on his net profit and what is left could be used as owner drawings.

Financial forecast for first year for an electrical installation, servicing and repair business

Annual sales revenue	£120 000
Cost of sales	40.0%
Expenses (vehicle running costs, liability insurance, website, marketing, etc.)	£10 300
Loan repayments on van	£2 700
Tax on net profit	20%
Owner drawings year 1	£45 000

Figure 1

Option 2 – Electric vehicle charging business

Hasan has seen news articles about the growth in the number of electric vehicles (EVs) sold, and the predicted shortage in electric charging points for these cars. He sees this as an opportunity for his new business. He would target buyers of both new and second-hand EVs, installing the electric charging point at the car owner's home. He could also try to get orders from local businesses to install EV charging points at the workplace.

There are a number of competitors already in the market and Hasan believes the amount of competition will increase rapidly over the next two years. If Hasan is to be successful, he needs to enter the market now. Another challenge Hasan anticipates is that there are cheaper alternative products on the market. These take longer to charge the vehicle but would not require specialist electrical installation.

Hasan wants to have his business added to the list of government-approved installers. This would enable customers buying a new EV to be eligible for the £500 installation grant. To achieve this, he would have to attend a two-day training course covering the skills needed to install, fault find, inspect and test EV charging points. The cost of the course would be £400.

As with Option 1, Hasan would work from home and would need a £5 000 loan to pay for a van and some equipment. He would market his business to potential customers online using Facebook and Google Ads.

The price to install a government-approved smart charger, would be £1 000. Half of the revenue on each installation that Hasan makes would come from the government grant for new vehicles. He would have to wait up to two months to receive this part of his sales revenue.

Hasan has put together some financial data for this option.

Financial forecast for first year for an electrical vehicle charging business

Annual sales revenue	£180 000
Cost of sales	50.0%
Expenses (vehicle running costs, liability insurance, website, online marketing, accreditation training, etc.)	£19 500
Loan repayments on van	£2 700
Tax on net profit	20%
Owner drawings year 1	£45 000

Figure 2

Hasan is aware that whichever option he chooses, success in achieving his goal of expansion and becoming a private limited company will ultimately depend very much on the growth of the business in year two and three.