

# BTEC Level 3 National Extended Certificate in Sport

## Induction Pack



PEARSON

## **In this induction pack you will find the following:**

- **Introduction to the course** (what is it all about?).
- **Assessment** (how you will be assessed in each unit).
- **Unit Summary** (what each is about and the assessment objectives for each unit).
- **Expectations** (what we expect from you whilst completing this course).
- **Useful Resources** (where you can access additional support and information).
- **Unit Break Down** (each unit broken down to give you more information).
- **Research Activities** (tasks that you will be completing during the first two weeks of the course and over the summer).
- **Blank Skeleton** (for one of your research tasks)
- **Example Assessment Material** (for the units that will be externally assessed)

### **Introduction to the course**

Welcome to your Pearson BTEC Level 3 National Extended Certificate in Sport. This booklet is designed to introduce you to the course, to inform you of what you will be covering over the entirety of the course, how you will be assessed and to give you tasks to complete during the first two weeks of the course and over the summer.

You will be covering a broad basis of study including anatomy and physiology, fitness training and programming, professional development in the sports sector and application of fitness testing. This qualification is designed to support progression to higher education when taken as part of a programme of study that includes other appropriate BTEC Nationals or A Levels. It is equivalent in size to one A-Level and will be delivered over 360 Guided Learning Hours (GLH), you will however be expected to complete tasks, such as research in your own time in order to be successful on the course.

**Please use this induction pack to help you understand the course, the assessment methods and to refer to when you need further information about the course you will be starting.**

**If you have any questions you must always ask your teachers.**

## Assessments

You will be assessed externally (by the exam board) and internally (by your teachers) during the duration of the course.

Pearson BTEC Level 3 National Extended Certificate in Sport				
Unit number	Unit title	GLH	Type	How assessed
<b>Mandatory units – learners complete and achieve all units</b>				
<b>1</b>	Anatomy and Physiology	<b>120</b>	<b>Mandatory</b>	External
<b>2</b>	Fitness Training and Programming for Health, Sport and Well-being	<b>120</b>	<b>Mandatory Synoptic</b>	External
<b>3</b>	Professional Development in the Sports Industry	<b>60</b>	<b>Mandatory</b>	Internal
<b>Optional units – learners complete 1 unit</b>				
<b>4</b>	Sports Leadership	<b>60</b>	<b>Optional</b>	Internal
<b>5</b>	Application of Fitness Testing	<b>60</b>	<b>Optional</b>	Internal
<b>6</b>	Sports Psychology	<b>60</b>	<b>Optional</b>	Internal
<b>7</b>	Practical Sports Performance	<b>60</b>	<b>Optional</b>	Internal

We must cover the following units (mandatory)

- Unit 1 – Anatomy and Physiology
- Unit 2 – Fitness Training and Programming for Health, Sport and Well-being
- Unit 3 – Professional Development in the Sports Industry

We will also be covering the following unit in order to cover the correct amount of GLH and to link in with the previous units delivered:

- Unit 6 – Sports Psychology

The programme for delivery will be determined by the exam board and when assessments are available, therefore meeting deadlines is vital for success on the course. You will be given details of dates, deadlines and examinations early in September 2018.

## Externally Assessed Units

Unit	Type	Availability
<b>Unit 1: Anatomy and Physiology</b>	<ul style="list-style-type: none"> <li>• Written examination set and marked by Pearson.</li> <li>• 1.5 hours.</li> <li>• 90 marks.</li> </ul>	<b>Jan and May/June</b> <b>First assessment</b> <b>May/June 2017</b>
<b>Unit 2: Fitness Training and Programming for Health, Sport and Wellbeing</b>	<ul style="list-style-type: none"> <li>• A task set and marked by Pearson and completed under supervised conditions.</li> <li>• In Part A, learners will be provided with a case study two weeks before a supervised assessment period in order to carry out research.</li> <li>• In Part B, the supervised assessment period is two hours over a period of two days timetabled by Pearson.</li> <li>• Written submission.</li> <li>• 60 marks.</li> </ul>	<b>Dec/Jan and</b> <b>May/June</b> <b>First assessment</b> <b>May/June 2017</b>

\*Unit 1 is now out of 80 marks.

## Unit Summary

**Unit 1** - Will be assessed with a written exam, when the exam is taken will depend on the delivery plan which will be decided early in September 2018.

**Unit 2** - Will be assessed through a set assignment by the exam board and will be externally assessed. Again the assignment will be set at a time appropriate to delivery and will be decided in early September 2018.

**Unit 3** – Will be internally assessed and subject to exam board sampling of your teachers grading.

**Unit 6** – Will be internally assessed and subject to exam board sampling of your teachers grading.

## **Expectations**

In order to be successful on the course you will need to:

- Develop the ability to work independently,
- Research actively and methodically,
- Give presentations and be active group members,
- Be organised and meet all deadlines set,
- Revise thoroughly before all practise and real exams,
- Complete all work to the highest standard you are capable of,
- Keep your notes up to date and in order,
- Catch up on any work that you may miss due to absence,
- Attend any additional sessions that are put on for you,
- Always ask when you are unsure of something in lessons,
- Read through your unit outlines and apply the information when completing tasks,
- Complete all induction work,
- Be highly motivated to achieve on the course,
- Attend all lessons, on time and with the right attitude.

## **Useful Resources - Recommendations**

### **Web Sites**

American College of Sports Medicine	<a href="http://www.acsm.org">www.acsm.org</a>
BrianMac	<a href="http://www.brianmac.co.uk">www.brianmac.co.uk</a>
British Association of Sport and Exercise Sciences	<a href="http://www.bases.org.uk">www.bases.org.uk</a>
Coachwise	<a href="http://www.1st4sport.com">www.1st4sport.com</a>
Human Kinetics	<a href="http://www.humankinetics.com">www.humankinetics.com</a>
Peak Performance	<a href="http://www.pponline.co.uk">www.pponline.co.uk</a>

Sports Coach	<a href="http://www.brianmac.co.uk">www.brianmac.co.uk</a>
Sports Coach UK	<a href="http://www.sportscoachuk.org">www.sportscoachuk.org</a>
Sport Science	<a href="http://www.sportsci.org">www.sportsci.org</a>
Top End Sports	<a href="http://www.topendsports.com">www.topendsports.com</a>

### **Journals**

American College of Sport Medicine's Health and Fitness Journal

British Journal of Sports Medicine

Exercise and Sport Sciences Reviews

International Journal of Sports Science and Coaching

Medicine and Science in Sports and Exercise

Research Quarterly for Exercise and Sport

### **Text Books**

Howley E T and Franks B D – *Health Fitness Instructor's Handbook* (Human Kinetics Europe, 2003) ISBN 9780736042109

Palastanga N – *Anatomy and Human Movement: Structure and Function* (Butterworth-Heinemann, 2006) ISBN 9780750688147

Sharkey B J and Gaskill S E – *Fitness and Health* (Human Kinetics, 2006) ISBN 9780736056144

Tortora G J and Derrickson B H – *Principles of Anatomy and Physiology, 12th edition* (John Wiley & Sons, 2008) ISBN 9780470233474

Adams G M – *Exercise Physiology Laboratory Manual: Health and Human Performance* (McGraw Hill Higher Education, 2001) ISBN 9780072489125

American College of Sports Medicine – *ACSM's Health-Related Physical Fitness Assessment Manual* (Lippincott Williams & Wilkins, 2007) ISBN 9780781775496

Coulson M – *The Fitness Instructor's Handbook: A Complete Guide to Health and Fitness – Fitness Professionals* (A&C Black, 2007) ISBN 9780713682250

Hazeldine R – *Fitness for Sport* (The Crowood Press, 2000) ISBN 9781861263360

Heyward V H – *Advanced Fitness Assessment and Exercise Prescription* (Human Kinetics, 2006) ISBN 9780736057325

Howley E T and Franks B D – *Health Fitness Instructor’s Handbook* (Human Kinetics Europe, 2003) ISBN 9780736042109

National Coaching Foundation – *Physiology and Performance – NCF Coaching Handbook No. 3* (Coachwise Ltd, 1987) ISBN 9780947850241

Powers S K and Howley E T – *Exercise Physiology: Theory and Application to Fitness and Performance* (McGraw Hill Higher Education, 2006) ISBN 9780071107266

Sharkey B J and Gaskill S E – *Fitness and Health* (Human Kinetics, 2006) ISBN 9780736056144

Watson A W S – *Physical Fitness and Athletic Performance: A Guide for Students, Athletes and Coaches* (Longman, 1996) ISBN 9780582091108

Wilmore J and Costill D – *Physiology of Sport and Exercise* (Human Kinetics, 2008) ISBN 9780736055833

## **Unit Breakdown**

### **Unit 1 – Anatomy and Physiology**

#### **Unit Summary**

You will explore how the skeletal, muscular, cardiovascular and respiratory systems function and the fundamentals of the energy systems.

#### **Unit Introduction**

Having an understanding of body systems is imperative in the sports industry so that professionals can help support people who are taking part in sport and exercise. The human body is made up of many different systems that interrelate to allow us to take part in a huge variety of sport and exercise activities. For example, an athlete can go from rest to sprinting in a matter of seconds, whereas an endurance athlete can continue exercising for many hours at a time.

In order to appreciate how each of these systems function, you will explore the structure of the skeletal, muscular, cardiovascular, respiratory and energy systems as well as additional factors which affect sport and exercise performance. The anatomy and physiology of each body system and their processes are very different but work together to produce movement. You will gain a full appreciation of how the body is able to take part in sport and exercise through understanding the interrelationships between these body systems.

## Summary of Assessment

This unit is externally set and marked by Pearson. The examination will be one hour and 30 minutes in length. The number of marks for the examination is 80. The paper will contain a number of short and long answer questions that will assess your understanding of the following topics:

- The skeletal system,
- The muscular system,
- The respiratory system,
- The cardiovascular system
- The energy system for sports performance.

You will use this knowledge and understanding to determine the interrelationships between body systems for sports performance.

## Unit 1 - Assessment Outcomes

**AO1** Demonstrate knowledge of body systems, structures, functions, characteristics, definitions and other additional factors affecting each body system

- **Command words:** describe, give, identify, name, state
- **Marks:** ranges from 1 to 5 marks

**AO2** Demonstrate understanding of each body system, the short- and long-term effects of sport and exercise on each system and additional factors that can affect body systems in relation to exercise and sporting performance

- **Command words:** describe, explain, give, name, state
- **Marks:** ranges from 1 to 5 marks

**AO3** Analyse exercise and sports movements, how the body responds to short-term and long-term exercise and other additional factors affecting each body system

- **Command words:** analyse, assess
- **Marks:** 6 marks

**AO4** Evaluate how body systems are used and how they interrelate in order to carry out exercise and sporting movements

- **Command words:** assess, evaluate
- **Marks:** 6 marks

**AO5** Make connections between body systems in response to short-term and long-term exercise and sport participation. Make connections between muscular and all other systems, cardiovascular and respiratory systems, energy and cardiovascular systems

- **Command words:** analyse, assess, discuss, evaluate, to what extent



- **Marks:** 8 marks

## **Unit 2 – Fitness Training and Programming for Health, Sport and Well-Being.**

### **Unit Summary**

You will explore client screening and lifestyle assessment, fitness training methods and fitness programming to support improvements in a client's health and well-being.

### **Unit Introduction**

The health and fitness industry is concerned with helping to support clients to increase their fitness levels and also ensuring a client is in appropriate health to take on a fitness programme. To work in the health and fitness industry, staff need to know how to assess clients and then be able to plan appropriate training programmes to take into account individual needs.

In this unit, you will explore the process required for screening clients and assessing their lifestyle and nutritional intake. How to interpret this information will then be examined. From this information you will explore how to make judgements on a specific individual's current lifestyle and then suggest modifications to help improve the individual's fitness, health and overall well-being.

Fitness training methods will be examined for each component of physical and skill-related fitness. The selection of appropriate training methods for a selected individual and their application into a training programme will then be explored. In this unit, you will draw on your learning from across your programme to complete the assessment task.

Carrying out client screening and designing fitness training programmes is an essential skill for many people working in the sports industry, including sports coaches looking to improve an individual or team's sporting performance. Any person working in these careers would need to be able to carry out client screening and the design of training programmes in time-constrained conditions, utilising knowledge gained from previous experiences. This unit has been selected as an externally-assessed unit as it replicates the processes that are carried out in the industry, and as a synoptic unit as the knowledge and skills can be applied to the content of a number of units in the qualification.

### **Summary of Assessment**

This unit will be assessed through a written task worth 60 marks. The task is set and marked by Pearson. The task will assess your ability to interpret lifestyle factors and health screening data from a scenario and stimulus information in order to develop and justify a fitness training programme and nutritional advice based on these interpretations.

The task will comprise two parts.

**Part A** - Will contain a scenario based on an individual who requires guidance on training, lifestyle, and nutrition upon which secondary research will be conducted. Part A will be released one week before the supervised assessment session (Part B).

**Part B** - You will then take your prepared research notes into the supervised assessment session (Part B), where you will be issued with supplementary stimulus information building on the scenario information in Part A. You will have two hours, under supervised conditions, to respond to the task. The two hour supervised assessment session must be taken in a period specified by Pearson.

## **Unit 2 – Assessment Outcomes**

**AO1** Demonstrate knowledge and understanding of the effects of lifestyle choices on an individual's health and well-being

**AO2** Apply knowledge and understanding of fitness principles and theory, lifestyle modification techniques, nutritional requirements and training methods to an individual's needs and goals

**AO3** Analyse and interpret screening information relating to an individual's lifestyle questionnaire and health monitoring tests

**AO4** Evaluate qualitative and quantitative evidence to make informed judgements about how an individual's health and well-being could be improved

**AO5** Be able to develop a fitness training programme with appropriate justification

## **Unit 3 – Professional Development in the Sports Industry**

### **Unit Summary**

You will explore the knowledge and skills required for different career pathways in the sports industry. You will take part in, and reflect on, a personal skills audit, career action plan and practical interview assessment activities.

### **Unit Introduction**

The sports industry is a vast market with many different pathways. For a successful career, you need to understand the scope and breadth of the available opportunities and the steps needed to follow your chosen pathway.

In this unit, you will research the different possible careers and the associated job roles in the sports industry, then action plan your development towards achieving a

selected career aim.

You will analyse your own skills and identify how to develop them into a career through the use of a career plan. You will research your chosen career to understand how to access and progress within it. You will take part in application and interview assessment activities for a selected career pathway, drawing on knowledge and skills from across the qualification to identify your own strengths and gaps in knowledge and skills. You will evaluate your own performance to gain an understanding of the generic employability and specific-technical knowledge and skills required to access and progress in a selected career pathway in the sports industry.

This unit will prepare you for progression to a career in the sports industry either directly or through higher education, by developing your understanding of investigation, career planning and awareness of the skills and qualities that sports employers look for in a potential employee.

### **Unit 3 – Learning Aims**

**A** - Understand the career and job opportunities in the sports industry.

**B** - Explore own skills using a skills audit to inform a career development action plan.

**C** - Undertake a recruitment activity to demonstrate the processes that can lead to a successful job offer in a selected career pathway.

**D** - Reflect on the recruitment and selection process and your individual performance.

## **Unit 6 – Sports Psychology**

### **Unit Summary**

This unit covers the psychological dimensions of sport, and introduces psychological techniques that can be used to enhance performance.

### **Unit Introduction**

At the highest level in sport, success is often down to small margins and performers are always looking for ways to gain an edge over their opponents. Performers take advice on areas such as physical preparation, tactics, strategies and nutrition. Increasingly, performers are using sport psychology to improve the mental side of their sport in the hope of gaining an advantage over their opponents. In this unit, you will look at individual psychological factors that can influence performance, the psychological aspects of environments that sports are played in and the influences that others can have on performance. You will look at how the functioning of a group can influence the outcome a sports team produces and how motivation can be developed and influenced. You will examine how arousal, anxiety, stress and self-

confidence can affect performance and how these need to be controlled in order to achieve optimum performance. Finally, you will explore the psychological skills and programmes that can be used to improve performance. This combination of knowledge, understanding and skills will help to prepare you for a range of careers or higher education courses in the sport and active leisure sector supporting individual athletes or teams.

## **Unit 6 – Learning Aims**

**A** - Understand how personality, motivation and competitive pressure can affect sport performance

**B** - Examine the impact of group dynamics in team sports and its effect on performance

**C** - Explore psychological skills training programmes designed to improve performance.

## **Research Activities**

Over the summer period you are to work through these research tasks in order to prepare you for the course in September. You have research tasks for all four units.

### **Unit 1 – Research Activity**

#### **Focus - Structure of skeletal system**

##### **Task 1**

- Label an image of a skeleton with the major bones of the body (this must not be a pre-labelled skeleton) a copy of a skeleton has been included at the back of this booklet.
- You **MUST** label the following: cranium, clavicle, ribs, sternum, scapula, humerus, radius, ulna, carpals, metacarpals, phalanges, pelvis, vertebral column (cervical, thoracic, lumbar, sacrum, coccyx), femur, patella, tibia, fibula, tarsals, metatarsals.

##### **Task 2**

- Describe in your own words the different types of bones, to include how they are identified (i.e. shape and size).

- You must include the following types of bone – long, short, flat, sesamoid, irregular.
- Identify these types of bone on your skeleton diagram using a colour code or numbering system.

### Task 3

- Describe in your own words the different areas of the skeleton to include axial skeleton, appendicular skeleton, spine, curves of the spine, neutral spine alignment, postural deviations (kyphosis, scoliosis).
- Make sure you give appropriate examples of each within your descriptions.

### Task 4

- Our bones give us the structure we need for movement and for our muscles to attach.
- You need to describe in your own words the process of bone growth; you must include information on osteoblasts, osteoclasts and epiphyseal plate.

## Unit 2 – Research Activity

### Focus - Positive lifestyle factors and their effects on health and well-being

#### Task 1

Exercise has many positive lifestyle effects, including physical; reduce risk of diseases, psychological, social and economic.

- In your own words you must write at least a sentence on the following positive impacts:
  - **Physical** (strengthens bones, improves posture, improves body shape),
  - **Reduces risk of chronic diseases** (CHD, cancer, type 2 diabetes),
  - **Psychological** (relieves stress, reduces depression, improves mood),
  - **Social** (improves social skills, enhances self-esteem),
  - **Economic** (reduces costs to National Health Service, reduces absenteeism from work).

#### Task 2

As well as being physically fit, it is important to follow a balanced diet in order to maintain levels of fitness and a healthy lifestyle.

- In your own words you are to describe the following:
  - A balanced diet: include information on the eatwell plate (food groups)
  - Benefits of a healthy diet (improved immune function, maintenance of body weight,
  - Reduces risk of chronic diseases – diabetes, osteoporosis, hypertension, high cholesterol),
  - Fluid intake requirements (moderation of caffeine intake),
  - Strategies for improving dietary intake (timing of meals, eating less/more of certain food groups, five a day, reducing salt intake, healthy alternatives).

### Task 3

Participation in exercise often improves people's self confidence, this can lead to positive risk-taking activities and being more adventurous.

In your own words you need to summarise the following positive benefits:

- **Positive risk-taking activities:** participation in outdoor and adventurous activities, endorphin release, improved confidence.

### Task 4

The Government sets out recommendations on physical activity for particular age groups. Complete research in order to summarise the government guidelines for the following:

- Physical activity
- Alcohol
- Healthy eating

### **Unit 3 – Research Activities**

#### **Focus - Scope and provision of the sports industry**

You will be researching the size, breadth and geographic spread of the sports industry, locally and nationally and factors that affect sports provision and employment opportunities.

#### **Task 1**

- Research the sport and recreation industry data to include the economic significance and number of jobs provided in the industry.
- Summarise your findings in a paragraph.

#### **Task 2**

- There are many factors that can impact on provision in the sports industry, research the following - **Geographical factors** – location, environment, infrastructure, population.
- Summarise your findings in a paragraph.

#### **Task 3**

- Socio-economic factors can impact on scope and provision in the sports industry; research the following – wealth, employment, history, culture, fashion and trend.
- Summarise your findings in a paragraph.

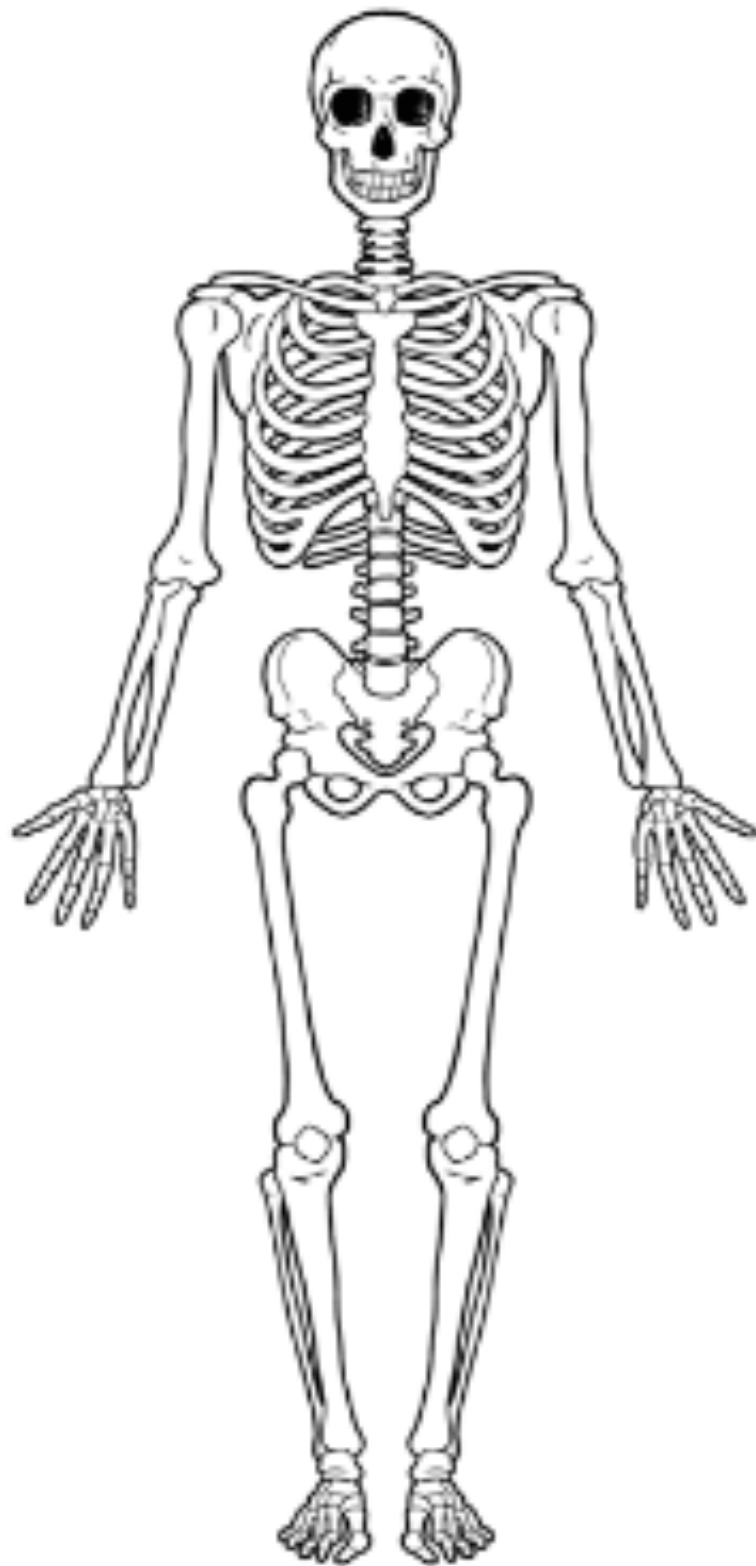
#### **Task 4**

- Season factors can have an impact on participation and scope of provision e.g. swimming pools that only open in the summer, summer camps, holiday sports clubs, competition seasons, training camps.
- Summarise your findings in a paragraph on the impact of seasonal factors.

#### **Task Guidance**

- All worked must be typed up
- It must be clearly labelled with each unit and what task is it.
- You can hand write your skeleton.
- Any website or book that you use must be referenced (copy and paste the web site and / or write down the name of the book and author(s))
- **Deadline:** Tuesday 4<sup>th</sup> September 2018





## Example Assessment Material

### Unit 1 – Sample Assessment Material

- 1 Explain how bones of the skeleton are used in movement for sport.

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Total for Question 1 = 2 marks

Anita has the first stages of osteoporosis. She has been told to take part in exercise to help prevent this condition from getting worse.

- 2 (a) Identify **one** type of exercise that Anita could take part in to help prevent the osteoporosis from getting worse.

1 mark

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- (b) Explain why weight bearing exercise will help to prevent the osteoporosis from getting worse.

3 marks

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## Unit 2 – Example Assessment Material

### Example Scenario

#### Part A Set Task Information

##### Scenario

Mr Mann is 30 years old and works 9 hours a day sitting down in an office. He does not take part in any exercise and often has to do more work when he gets home.

He catches the bus to work each day, a journey of 3 miles.

He has recently noticed that he is gaining weight and also feels constantly tired. He works with Miss Tibbs who exercises regularly and seems to be fitter, healthier and happier than him. Miss Tibbs suggests that Mr Mann joins her gym and trains to be able to take part in a 5K fun run that is taking place in 6 weeks.

Mr Mann decides to join the gym and takes part in a fitness assessment. As part of the fitness assessment he will be given a 6-week training programme to follow.

Mr Mann has previously completed a PAR-Q form and has indicated that he has no medical conditions and is fit to take part in physical activity.

### Example Tasks (based on scenario – more detail will be given)

- 1 Interpret the lifestyle factors and screening information for the selected individual.

12 marks

- 2 Provide lifestyle modification techniques.

12 marks

- 3 Nutritional guidance.

8 marks

- 4 Training methods.

8 marks

- 5** Six-week training programme – Design key stages (weeks 1, 3 and 6) of a six week training programme for the selected individual.

6 marks

- 6** Provide justification for the training programme that has been produced for the selected individual.

14 marks