



Rewarding Learning

**ADVANCED SUBSIDIARY (AS)
General Certificate of Education
2016**

**Sports Science and the
Active Leisure Industry**

Unit AS 2

The Active Leisure Industry:
Health, Fitness and Lifestyle

[A1L21]

FRIDAY 17 JUNE, MORNING

**MARK
SCHEME**

MARK SCHEMES

Foreword

Introduction

Mark Schemes are published to assist teachers and students in the preparation for examinations. Through the mark schemes teachers and students will be able to see what examiners are looking for in response to questions and exactly where the marks have been awarded. The publishing of the mark schemes may help to show that examiners are not concerned about finding out what a student does not know but rather with rewarding students for what they do know.

The Purpose of Mark Schemes

Examination papers are set and revised by teams of examiners and revisers appointed by the Council. The teams of examiners and revisers include experienced teachers who are familiar with the level and standards expected of 16- and 18-year-old students in schools and colleges. The job of the examiners is to set the questions and the mark schemes; and the job of the revisers is to review the questions and mark schemes commenting on a large range of issues about which they must be satisfied before the question papers and mark schemes are finalised.

The questions and mark schemes are developed in association with each other so that the issues of differentiation and positive achievement can be addressed right from the start. Mark schemes therefore are regarded as a part of an integral process which begins with the setting of questions and ends with the marking of the examination.

The main purpose of the mark scheme is to provide a uniform basis for the marking process so that all markers are following exactly the same instructions and making the same judgements in so far as this is possible. Before marking begins a standardising meeting is held where all the markers are briefed using the mark scheme and samples of the students' work in the form of scripts. Consideration is also given at this stage to any comments on the operational papers received from teachers and their organisations. During this meeting, and up to and including the end of the marking, there is provision for amendments to be made to the mark scheme. What is published represents this final form of the mark scheme.

It is important to recognise that in some cases there may well be other correct responses which are equally acceptable to those published: the mark scheme can only cover those responses which emerged in the examination. There may also be instances where certain judgements may have to be left to the experience of the examiner, for example, where there is no absolute correct response – all teachers will be familiar with making such judgements.

The Council hopes that the mark schemes will be viewed and used in a constructive way as a further support to the teaching and learning processes.

1 (a) Describe what is meant by the term “Healthy and Active Lifestyle”.

Answers may address some of the following points:

- Healthy lifestyle is when diet, exercise and work life balance are considered and managed appropriately with regular exercise.
- Active lifestyle is when a person regularly takes part in physical activity; exercise is part of their weekly routine.

Award [1] for brief description and up to [2] for the full description
All other valid points will be given credit (AO2)

[2]

(b) Explain **two** positive and **two** negative effects of active leisure pursuits on young people’s psychological well-being.

Some examples of suitable points to be explained by the candidate:

(i) Positive:

- Opportunities to belong to a team, club, feeling happy and accepted.
- Ability to respond to and cope with positive situations when participating in sport.
- Playing sport enables young people to sustain caring friendships and relationships with others on a team, making them feel accepted
- Developing their sense of ‘self-identity’
- The ability to manage their feelings, how they feel about themselves, how they feel about others from different backgrounds.
- Becoming more resilient, rising to challenges when games get tough.
- Learn to manage their impulses, settle and concentrate when participating.
- Manage strong and uncomfortable emotions such as anger and frustration.
- Manage stress and anxiety through participating in physical activity.

(ii) Negative:

- If injured, this may cause psychological issues for some young players, for example mood swings, depression, and disconnection from their peer group.
- Poor coaching can negatively affect a young player, undervalued, poor self-esteem due to ridicule or negative feedback.
- Parental pressure to perform could affect young players, they may not be able to deal with the pressure placed upon them.
- Poor performance and underachievement could lead to young people feeling isolated and withdrawn.
- Young athletes could develop aggressive traits and could lead to the need to dominate their opponents on and off the field.

Award [1] for a brief explanation and up to [2] for a full explanation.
All other valid points will be given credit

(2 × [2])
(AO2)

[4]

- (c) Many people take part in sport to improve their fitness level. Explain why the following components of fitness are important factors when improving fitness.

Some examples of suitable points to be explained by the candidate:

- (i) Cardiovascular endurance:
- Involves the ability of the cardiovascular and respiratory system to take in and transport oxygen to large muscle groups working dynamically.
 - Cardiovascular endurance enables moderate to high intensity exercise to be undertaken for prolonged periods of time.
 - Cardiovascular endurance, also known as stamina, is the ability of the body to continuously provide enough energy to sustain submaximal levels of exercise.
 - Good cardiovascular endurance has an impact on individuals as it helps fat metabolism, improves delivery of oxygen and faster removal of waste products.
- (ii) Strength:
- Strength is the ability to overcome a resistance. Performers may apply strength rapidly, powerfully or maintain a position over a period of time.
 - There are different types of strength, explosive, static and dynamic. The requirements of different sports can incorporate different aspects of strength. Athletes will work on the types of strength specific to their sport to aid improvement.
 - Strength is an important part of fitness as it enables athletes to avoid injuries and maintain good posture.
- (iii) Flexibility:
- Flexibility is the movement at a joint, usually controlled by the length of the muscle. Athletes incorporate flexibility into their training session.
 - Flexibility enables athletes to perform certain skills more efficiently and effectively, also allowing the athlete to perform more difficult skills requiring a greater range of movement.
 - Flexibility is important as it aids performance and decreases the risk of injury.
 - Flexibility helps improve posture, reduces low back pain, maintains healthy joints and improves balance during movement.

Award [1] for a brief explanation and [2] for a full explanation
All other valid points will be given credit.

(3 × [2])
(AO2)

[6]

- (d) Discuss the extent to which an active healthy lifestyle can help prevent coronary heart disease.

The quality of written communication is assessed in this question.

Indicative content

Some examples of suitable points to be discussed by the candidate.

- Coronary heart disease is the failure of the arteries to supply enough oxygen to the myocardium/heart muscle.
- There are many risk factors which could lead to CHD which are inactive/sedentary lifestyle, obesity, hypertension, high stress levels, diabetes, smoking, high blood cholesterol or excess alcohol intake.
- An active lifestyle can prevent CHD. Individuals need to participate regularly in physical activity, government guidelines recommend 30 minutes/5 days a week for adults and 60 minutes per day for children.
- Individuals need to do moderate intensity exercise which will increase the heart rate, working within the appropriate age related training zone.
- Exercising appropriately will improve the efficiency of the heart and the circulatory system. It will increase the levels of HDLs (high density lipoproteins) and help break down LDLs (low density lipoproteins).
- An active lifestyle can reduce stress levels. Individuals will be less likely to suffer from hypertension.
- A balanced diet will help prevent CHD. A low cholesterol diet will prevent a build-up of plaque or atheroma on the walls of the coronary arteries.
- Food consumption needs to be considered and adapted to prevent CHD. Food high in salt, sugar and fat needs to be reduced. High saturated fat will increase levels of LDLs in the blood. Low salt intake will be a preventative measure against CHD.
- Excess alcohol consumption has been linked as a contributing factor to CHD. A reduction in alcohol consumption, drinking in moderation, using the government recommended alcohol intake guidelines.
- Cessation of smoking is an important factor to consider as smoking causes many health problems and is one that is linked to CHD.

All other valid points will be given credit.

Level 1 ([1]–[3])

Overall impression: Basic

- Basic knowledge and understanding of how an active healthy lifestyle can help prevent coronary heart disease. The candidate may include basic examples.
- Demonstrates a basic ability to discuss how lifestyle management, including physical activity and health awareness could reduce an individual's chances of suffering from coronary heart disease. Candidate will give basic explanations.
- Quality of written communication is basic. The candidate makes a limited selection and use of an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

Level 2 ([4]–[6])

Overall impression: Good

- Good knowledge and understanding of how an active healthy lifestyle can help prevent coronary heart disease. The candidate will provide relevant examples.
- Demonstrates a good ability to discuss how lifestyle management, including physical activity and health awareness could reduce an individual's chances of suffering from coronary heart disease. The candidate will provide some explanations.
- Quality of written communication is good. The candidate makes a reasonable selection and use of an appropriate form and style of writing. Relevant material is organised with some clarity and coherence. There is adequate use of specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning clear.

Level 3 ([7]–[8])

Overall impression: Excellent

- Excellent knowledge and understanding of how an active healthy lifestyle can help prevent coronary heart disease. The candidate will provide fully developed examples and show excellent understanding.
- Demonstrates an excellent ability to discuss how lifestyle management, including physical activity and health awareness could reduce an individual's chances of suffering from coronary heart disease. The candidate will provide thorough explanation and will use a variety of relevant examples.
- Quality of written communication is excellent. The candidate successfully selects and uses an appropriate form and style of writing. Relevant material is organised with a degree of clarity and coherence. There is extensive and accurate use of specialist vocabulary. Presentation, spelling, punctuation and grammar are of a high standard and ensure the meaning is clear.

[0] is awarded for a response not worthy of credit.
(AO1, AO3)

[8]

20

AVAILABLE
MARKS

- 2 (a) Identify the main characteristics of each training method and describe how athletes would incorporate these methods into their training programmes.

Some examples of suitable points to be identified and described by the candidate:

(i) Fartlek training:

- Fartlek meaning 'speed play', involves exercise often running, varying time, distance, terrain and tempo.
- Due to the changes of intensity of the exercise, fartlek training works both aerobic and anaerobic fitness. The athlete becomes increasingly capable of meeting the changes of pace in a competition or game.
- This method of training would suit a games player. This type of exercise should be adapted to suit the movement in a game situation in order for the athlete to get the most out of training.
- The content of the session is flexible, therefore, the repetitions in the session can be varied to add interest to the training. Rest periods or periods of less strenuous exercise gives time to recover so training can continue.

(ii) Interval training:

- This is a method of training where exercise (work) is interrupted by periods of rest (interval). The training session is split up around a work to rest ratio.
- The training can be adapted to develop different types of fitness. Short bursts of pace, using anaerobic respiration needed by games players and use short interval training. Prolonged moderate to hard pace, using aerobic respiration needed in middle-distance running or endurance events uses long interval training.
- Interval training is suited to individuals working on their own, small groups of athletes or larger groups. The sessions can be adapted to practice the skills used in a particular game.

(iii) Circuit training:

- A general conditioning activity in which a series of exercises are used to work different muscle groups. Exercises can be made activity or game specific to meet the needs of the athletes.
- Circuit training can be useful in different ways. Depending on how the circuit is set up, it can develop power, strength, flexibility and endurance. It can be adapted to incorporate skills for a particular game.
- Circuit training can develop aerobic and anaerobic respiration. When using large muscle groups at each station, aerobic respiration is in operation and this develops the cardiovascular system.

Award [1] for identification of key phrase and up to [2] for full explanation. All other valid points will be given credit.

(3 × [3])

(AO1, AO2)

[9]

- (b) (i) Stretching may be used as part of a warm-up and cool-down. Identify and explain **two** types of stretching which an athlete could use.

Some examples of suitable points to be identified and explained by the candidate:

- Stretching is recognised as being the best way to increase or maintain muscle elasticity. There are different types of stretching that can be safely used by athletes and performers. Stretching can be active, where the position is held by agonist/muscles. It can be passive, where the position is held by another body part or position held by a partner.
- Static stretching – Position held with isometric contraction. The muscle is taken to its current elastic limit and held in position, over time the muscle spindles and golgi tendons send a message to the brain that the new stretched position is not as severe as first identified.
- Ballistic stretching – bouncing in and out of a stretch. Uses the momentum of a moving body or limb in an attempt to force it beyond its normal range of motion. This type of stretching involves bouncing into (or out of) a stretched position, using the stretched muscles as a spring to pull the athlete out of a stretched position.
- Dynamic stretching – involves stretching the muscles through a full range of movement. Where an event requires dynamic movements then it would be appropriate to use this form of stretching.
- PNF (Proprioceptive neuro-muscular facilitation) – it is currently the fastest and most effective way known to increase muscle elasticity and flexibility. It is a combination of passive stretching and isometric stretching in order to achieve maximum static flexibility. PNF usually employs the use of a partner to provide resistance for the isometric contraction and then later to passively take the joint through its increased range of motion.

Award [1] for each method identified and up to [2] for a full explanation.
(2 × [3])

- (ii) Explain the purpose of incorporating a cool-down into an athlete's training session.

Some examples of suitable points to be identified and explained by the candidate:

Cool-down:

- It is important to include a cool-down at the end of a training session. Gradually reducing the intensity of exercise, returning the heart rate to its resting rate. Stopping abruptly could cause blood pooling in the legs and could result in dizziness or fainting.
- The appropriate cool-down aids the dissipation of waste products, including lactic acid.
- By cooling down, it reduces the potential of delayed onset of muscle soreness, enabling the athlete to recover quicker.

Award up to [1] for key phrase, up to [2] for brief explanation and up to [4] for full explanation.
(AO1, AO2)

[10]

19

- 3 (a) Identify and explain the dietary considerations for a power athlete and an endurance athlete.

Some examples of suitable points to be identified and explained by the candidate:

(i) Power athlete:

- Power athletes need to prioritise protein in their diet. Energy and protein intake are important for increasing muscle mass. If energy balance is maintained, increased mass and strength are possible.
- Including higher percentage of protein in a power athletes's diet enables the athlete to achieve a high power to weight ratio, therefore maximising muscle mass and maintaining low body fat levels.
- Protein is necessary for growth and repair of body tissues. Power athletes will be repairing and developing muscle tissue and will therefore require sufficient protein in their diet. The power athlete will be optimising training adaptations with nutrition and this should aid quick recovery from training.
- Power athletes may also top up on fast release simple carbohydrate prior to exercise or training event.

(ii) Endurance athlete:

- Carbohydrates should make up about 60–65% of their total calorie intake. Carbohydrates are the best source of energy for the athlete. For both quick and long-lasting energy, the athlete's body works more efficiently with carbohydrates.
- Whole grain pasta, steamed/boiled rice, potatoes, fruit and starchy vegetables are good sources of carbohydrates that long distance athletes would incorporate into their daily diet and consume the appropriate amounts to meet their needs.
- It is critical for endurance athletes to consume sufficient calories on a daily basis to supply the energy for training and competing, also ensuring the delivery of nutrients needed to complete recovery from workouts and stay healthy and injury free. It enhances adaptation and recovery between training sessions.
- Maximising the athlete's endurance potential by 'topping up' muscle and liver glycogen stores. This provides enough energy and nutrients to meet the demands of training or exercise.
- Carbohydrate loading enables athletes to start training or start an event with a full storage of glycogen. This enables the athlete to perform at a peak level. Diet is a key factor in athletic success.
- Water – endurance athletes should aim to drink 1 litre additional fluid for every 1 kg lost during exercise.

Award [1] for identification and up to [2] for the explanation.

All other valid points will be given credit

(2 × [3])

(AO1, AO2)

[6]

- (b) Name the **three** food groups that can provide energy and explain the appropriate percentages required by a power athlete for each food group.

Examples of suitable points to be explained by the candidate:

(i) Fats

- Fats: 20–30% of dietary intake.
- Athletes need to gain weight and protein sources are frequently accompanied by higher fat contents/slightly higher body fat level is not critical for a power athlete.
- Unsaturated fats are a preferable source to saturated fat.

(ii) Carbohydrates

- Carbohydrates: 50–70% of dietary intake.
- Required to fuel high intensity but short duration activity/actual work time will be shorter than for an aerobic athlete.
- Main energy supply absorbed as glucose in small intestine. Transported around the body as blood glucose. Available for immediate energy, excess stored as muscle and liver glycogen.

(iii) Proteins

- Proteins: 15–25% of dietary intake.
- Required to repair muscle tissue damage/facilitate growth/enable recovery. This is the primary goal of each training session.
- Protein intake is needed to compensate for increased muscle breakdown that occurs during and after exercise.

Award [1] for each named group and up to [2] for full explanation.

All other valid points will be given credit.

(3 × [3])

(AO1, AO2)

[9]

- (c) Explain how a lifestyle including a well-balanced diet and exercise may reduce the risk of poor health.

Some examples of suitable points to be explained by the candidate:

(i) Well-balanced diet:

- A well-balanced diet is essential for optimal performance. This is made up of a variety of different nutrients to keep the body fit and healthy.
- It is essential that a balanced diet is made up of carbohydrates, fats, proteins, vitamins, minerals, fibre and water.
- Eating the correct quantities and combinations of food will keep the body's systems functioning effectively and efficiently.
- A well-balanced diet will ensure that the correct amount of calorie intake provides the body with enough energy to complete tasks.

(ii) Exercise:

- By exercising it can prevent premature death from causes of hypokinetic diseases, e.g. cardiovascular disease, type 2 diabetes, obesity and osteoporosis.
- Exercising can reduce obesity by burning off excess fat during and after activity when metabolic rate remains elevated.
- To sustain strength and endurance levels and improve flexibility of tendons and ligaments, allowing a fuller range of movement.

- Endorphins released by the brain generate a sense of happiness, 'feel good' factor and can reduce the feeling of depression. Positive energy gives clarity of thought, enabling some people to be able to cope much better.

Award [1] mark for identification of key phrase and up to [2] for full explanation.

All other valid points will be given credit.

(2 × [3])

(AO2)

[6]

- (d) Identify **three** government initiatives and discuss how each is attempting to encourage active lifestyles amongst young people.

Some examples of suitable points to be identified and discussed by the candidate:

Healthy Schools:

- Healthy schools programme is a long term government initiative aiming to create young people who are happier, healthier, stay safe and do better in learning and life.
- This initiative involves students, staff and parents, working together in an effort to equip young people with the skills and knowledge for them to make informed choices about healthy living.
- The themes of the initiative include personal, social and health education, physical activity, healthy eating and emotional health and well-being. The initiative aims to help children and young people to develop healthy behaviour, reduce health inequalities, raise their achievement and promote social inclusion.
- Healthy schools will provide parents with information on food in school, e.g. healthy option ideas for school lunch for young people.
- Healthy schools will enable young people to have access to healthy food including breakfast clubs, lunch times and tuck shops.
- Promotion of the healthy eating message to young people, through cookery clubs and gardening club.

Change4life:

- Change4life aims to create a movement in which everyone in society plays their part, helping to create fundamental changes to those behaviours that can help people lead healthier lives.
- Change4life has become one of the most instantly recognisable brands in health improvement. The government has invested a lot of money since 2009 to make this initiative work at improving the health of the nation.
- Change4life aims to help people to make small, sustainable changes yet significant improvements to their diet and activity levels. It uses the slogan "eat well, move more, live longer". This would have a major impact for young people thinking of making changes to improve their health and reduce the chances of being obese.
- Sugar swaps, advice given to young people about the sugar found in foods and suggestions given for healthier alternatives. This educates young people and would have an impact on their lives, including reducing the levels of obesity, if changes were made and incorporated into a balanced diet.
- Get going every day, encouraging young people to lead an active lifestyle. Educating young people about using exercise to manage weight, burning off excess calories and reducing the risk of ill health.

5-A-Day:

- The 5-A-Day initiative is aimed at getting young people to increase the amount of fruit and vegetables they consume on a daily basis.
- 5-A-Day highlights the health benefits of getting five 80g portions of fruit and vegetables daily which can help to improve and maintain young people's health, boost immune system, have a healthy body, lowers the chances of disease and infection, e.g. reducing the risk of heart disease, obesity, type 2 diabetes, stroke and some cancers.
- Enables young people to achieve a balanced diet by incorporating fruit and vegetables, addressing vitamin and mineral consumption. Fruit and vegetables are low in fat and calories, enabling young people to maintain a healthy weight and keeping their heart healthy.

GP Referral Schemes

- Exercise-on-prescription with the aim of promoting a healthier lifestyle for individuals with certain medical conditions. With the ever-increasing number of patients suffering from chronic illnesses in the UK, the benefits of exercise in disease prevention and rehabilitation has become more prevalent.
- The GP Referral Scheme last for 10/12 weeks and is supervised by qualified staff who will make sure that clients will have a safe and effective start to a more active, healthier lifestyle.

Award [1] for key phrase and up to [2] for explanation and [3] for full explanation.

All other valid points will be given credit.

(3 × [3])

(AO1, AO3)

[9]

30

AVAILABLE
MARKS

- 4 (a) Identify and consider **three** basic requirements for an individual participating in physical activity.

Some examples of suitable points to be explained by the candidate:

- Fitness – a basic level of fitness. It is perceived that people who play sport or take exercise are fit and will not be welcoming to those who are not fit. This perception puts people off because they see their current situation as being far removed from others.
- Ability – the skills required to participate in sport and recreation. Not having the required skills and ability could be a concern for some people as they may feel under pressure when participating. It is important that relevant coaching is provided to enable people to acquire the skills needed to teach and develop their ability.
- Time – leisure time away from the demands of work and other duties. People need to decide how they divide their time. The management of time involves allocating time for work requirements, family responsibilities, eating, washing, sleeping and time for relaxation. People need to find activities which fit in with their weekly schedule.
- Resources – these include facilities, equipment and clothing. Equipment and clothing requirements can seriously deter people from sports. There is an uneven spread of facilities across GB and Northern Ireland. Provision is dependent upon location (city or countryside) natural resources (such as water or mountains) the policy of the local authority on spending for sport and the demand from consumers varies across regions.

Award [1] for each requirement identified and up to [2] for the consideration of the requirements.

All other valid points will be given credit.

(3 × [3])

(AO1, AO3)

[9]

- (b) Discuss the possible reasons why girls have a greater tendency to drop out of sport and physical activity.

Some examples of suitable points to be discussed by the candidate:

- Domestic role, girls/women still bear the greater burden of domestic work reducing leisure time.
- Social stereotyping, society is less positive about females in sport (because it can be seen as less feminine if you are competitive or assertive).
- Less money and power, girls/women generally earn less than men. Men tend to dominate all the top positions in sport where the decisions are made.
- Sexism, discrimination through club membership as well as negative attitudes towards female participation.
- Inequalities in provision of facilities, changing/locker room facilities, childcare facilities.
- Tradition, influence of a tradition of 'all male' participation is still strong in some sports and some club houses.
- Conflicts with other commitments/pressure, time pressure may compromise dedication to sport.
- Lack of access, girls have fewer opportunities to play school sports than boys have.

- Lack of positive role models, girls are bombarded with images of external beauty, not those of confident, strong female athletic role models.
- Self-conscious, poor self-body image, some see getting sweaty as unfeminine.

All other valid points will be given credit.

Level 1 ([1]–[3])

Overall impression: Basic

- Basic knowledge and understanding of the reasons why girls have a tendency to drop out of sport and physical activity. The candidate may include basic examples.
- Demonstrates a basic ability to discuss the reasons and provide relevant information related to girls' dropout rates in sport and physical activity. The candidate will provide basic explanations.
- Quality of written communication is basic. The candidate makes a limited selection and use of an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

Level 2 ([4]–[6])

Overall impression: Good

- Good knowledge and understanding of the reasons why girls have a tendency to drop out of sport and physical activity. The candidate will provide relevant examples.
- Demonstrates a good ability to discuss the reasons and provide relevant information related to girls' dropout rates in sport and physical activity. The candidate will provide relevant explanations, using specific examples.
- Quality of written communication is good. The candidate makes a reasonable selection and uses an appropriate form and style of writing. Relevant material is organised with some clarity and coherence. There is adequate use of specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning clear.

Level 3 ([7]–[8])

Overall impression: Excellent

- Excellent knowledge and understanding of the reasons why girls have a tendency to drop out of sport and physical activity. The candidate will provide fully developed examples and show excellent understanding.
- Demonstrates an excellent ability to discuss the reasons and provide relevant information related to girls' dropout rates in sport and physical activity. The candidate will provide thorough explanations and will use a variety of relevant examples.
- Quality of written communication is excellent. The candidate successfully selects and uses an appropriate form and style of writing. Relevant material is organised with a degree of clarity and coherence. There is extensive and accurate use of specialist vocabulary. Presentation, spelling, punctuation and grammar are of a high standard and ensure the meaning is clear.

[0] is awarded for a response not worthy of credit.
(AO1, AO3)

[8]

17

- 5 (a) Outline briefly a government initiative that has been proposed to impact on the health of the population in another European country.

AVAILABLE
MARKS

Some suitable points outlined by the candidate:

- Healthy Ireland – Provides an overarching governance structure and monitoring mechanisms to support the implementation of health strategies with the goal of improving health and well-being for the Irish population, at all stages of life and in all sections of society. Healthy Ireland's four goals have broad potential for implementation. Goal 1: increase the proportion of people who are healthy at all stages of life. Goal 2: reduce health inequalities. Goal 3: protect the people from threats to health and well-being. Goal 4: create an environment where every individual and sector of society can play their part in achieving a healthy Ireland.
- Ireland's Cycle to Work Scheme – The cycle to work scheme is a tax incentive scheme which aims to encourage employees to cycle to and from work. The benefits of cycling have a major impact on the health of the individuals. Research has also shown that as levels of active travel increase, the rates of pedestrians, cyclists and overall road traffic injuries have been observed to decline, improving road safety.
- France – Government initiated the French 'National Nutrition and Health Program' – This was introduced as in the early part of the 21st Century, improving the nutritional status of the population constituted a major challenge for public health officials in France. Advances in research made it clear that an inadequate nutritional intake and insufficient physical activity played a determining role in deaths occurring each year in France. The French National Nutrition and Health Program focused on four areas. Reduce nutrition related health inequalities between social classes through specific actions within general preventative measures. Develop the practice of physical and sporting activities and limit sedentary behaviour. Organise detection and measurement of nutrition-related health conditions in patients, reduce the prevalence of undernutrition. Prevent and manage the nutritional disorders of disabled people.
- Finland – The implementation of the Heart and Nutrition Programme, the Government's policy to improve the health of the nation. This initiative was implementing strategies and recommendations for action to prevent cardiovascular disease. It focused on health promotion, training primary health care workers in nutrition and weight control, developed national guidelines on screening the adult population, provided early guidance and care for diagnosed people and a health media project. Mortality from CHD and strokes has decreased by three-quarters from the world's highest level four decades ago. This process in Finland is due to a positive campaign to change behaviour.
- Spain – The NAOS Strategy (Strategy for Nutrition, Physical Activity and Obesity Prevention). Launched by the Ministry of Health through the Spanish Food and Nutritional Agency, it encourages citizens to adopt healthy lifestyle habits, primarily through diet and regular physical activity. The fundamental goal is to promote a healthy diet and foster physical activity to invert the growing trend of the prevalence of obesity, to substantially reduce morbidity and mortality attributable to chronic diseases.
- Denmark – In October 2011, the "Fat Tax" was introduced in an attempt to limit the population's intake of fatty foods. It was voted in by an overwhelming majority of MPs. However, the tax on saturated fat led to inflation, cross-border shopping, job losses. Danish shoppers downgraded to cheaper brands from budget supermarkets often in

cheaper countries. Researchers stated that it had a negligible impact on consumption.

Award [1] for a key phrase, and up to [4] for the outline of the relevant initiative.

All other valid points will be given credit

(1 × [4])

(AO1)

[4]

- (b) Analyse the implications for society in the UK of having an inactive and overweight population.

The quality of written communication is assessed in this question.

Indicative content

Some examples of suitable points analysed by the candidate:

- Britain is now the most obese nation in Europe. Obesity is a modern epidemic in the developed world. The trend is set to double by 2050, where 50% of the population will be obese.
- If the statistics continue to rise, in relation to an inactive, overweight population then the unhealthy lifestyles of today's children could see them die younger than their parents.
- The strain on the NHS (National Health Service) and the cost to the wider economy are enormous given the associated health risks, such as heart disease, diabetes, obesity. Reliance on medical treatment and medication is greater.
- Being overweight and inactive has an impact on the wider economy, for example, more days off work/less productive workforce. Unhealthy lifestyle is an invisible 'enemy' to business whose costs in terms of productivity and turnover are affected.
- Disease and disability resulting from unhealthy habits impose enormous costs on society. Increased benefit payments and social care costs are on the rise.
- By 2016 estimated costs of the NHS treating overweight and obese patients will cost £6.3 billion. The social cost to local authorities for the care of housebound residents suffering from obese related illness is on the increase.
- Changing adult behaviour could reduce premature death, illness and cost to society. "One size fits all" solutions are no good when public health challenges vary.
- The government needs to make strategic plans to deal with an inactive, overweight population. Physical activity needs to be a priority for all in society. It will reduce the specific risk factors that contribute to poor health, helping to reduce health costs to local communities.
- The government is trying to reduce the rising health care costs. Money is being spent on treatment of diseases or disabilities that are a result from potentially changeable behaviours. This would need to be evaluated to make sure this is an effective approach. Changing adult behaviour could save the NHS time and money which could be put to use elsewhere to have a positive impact on society.
- It will increase life expectancy and reduce health inequalities. It will improve quality of life and increase independence, including older people and people with health conditions – helping reduce social service costs to the local community. It will create a healthier workforce, with less absenteeism, helping productivity and economic output.

Research has shown that being at work leads to a better physical and mental health and it could save the UK up to £100 billion a year by reducing working-age ill health.

AVAILABLE
MARKS

All other valid points will be given credit.

Level 1 ([1]–[4])

Overall impression: Basic

- Basic knowledge and understanding of the implications for society of having an inactive, overweight population. The candidate may include basic examples.
- Demonstrates a basic ability to link between the impact on society as a whole and inactivity levels and obesity levels of the population. The candidate will give basic explanations.
- Quality of written communication is basic. The candidate makes a limited selection and use of an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

Level 2 ([5]–[7])

Overall impression: Good

- Good knowledge and understanding of the implications for society of having an inactive, overweight population. The candidate will provide relevant examples.
- Demonstrates a good ability to link between the impact on society as a whole and the inactivity levels and obesity levels of the population. The candidate will provide some explanations.
- Quality of written communication is good. The candidate makes a reasonable selection and use of an appropriate form and style of writing. Relevant material is organised with some clarity and coherence. There is adequate use of specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning clear.

Level 3 ([8]–[10])

Overall impression: Excellent

- Excellent knowledge and understanding of the implications for society of having an inactive, overweight population. The candidate will provide fully developed examples and show excellent understanding.
- Demonstrates an excellent ability to link between the impact on society as a whole and the inactivity levels and obesity levels of the population. The candidate will provide thorough explanation and will use a variety of relevant examples.
- Quality of written communication is excellent. The candidate successfully selects and uses an appropriate form and style of writing. Relevant material is organised with a degree of clarity and coherence. There is extensive and accurate use of specialist vocabulary. Presentation, spelling, punctuation and grammar are of a high standard and ensure the meaning is clear.

[0] is awarded for a response not worthy of credit.
(AO1, AO3)

[10]

14

Total

100