

GCSE PE Structured questions

1a Applied anatomy and physiology

Understand the structure and functions of the skeleton

1. Describe the main functions of the skeletal system that keep the body healthy and active. [4]

Four marks for 4 from:

- A. *Shape/support*
- B. *Blood cell (red) production*
- C. *Mineral production/store*
- D. *Protection*
- E. *To be able to move/keep moving/being mobile/leverage*

2. How does the skeletal system provide a framework for movement? [4]

4 marks for four from:

- A. *Joints*
- B. *Points of attachment for muscles*
- C. *Short bones - fine movements*
- D. *Long bones - gross movements*
- E. *Flat bones protect organs*

Understand the structure and functions of synovial joints

3. Explain the function of synovial fluid in joints. [3]

3 marks for 3 from:

- A. *Lubricates the joint*
- B. *Thus protecting (cartilage)/prevents injury*
- C. *Ensures smooth/unobstructed/efficient movement/prevents friction*
- D. *This is secreted into the joint by the synovial membrane e.g. knee joint*
- E. *Nourishes the cartilage*
- F. *Helps to stabilise the joint*

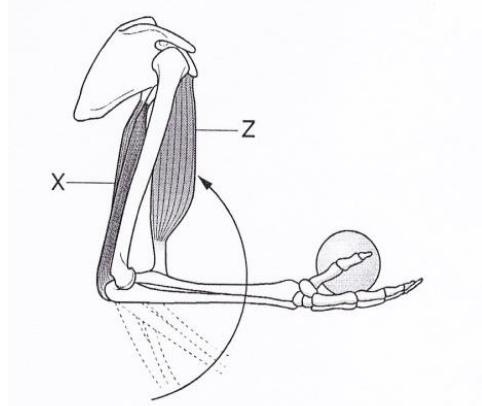
4. Describe, using an example of a named hinge joint, the structure of a synovial joint. [4]

4 marks for 4 from:

- A. *E.g. - knee, elbow, ankle*
- B. *Joint - where two or more bones meet*
- C. *Has joint capsule*
- D. *Has synovial fluid*
- E. *Has synovial membrane*
- F. *Cartilage (on articulating surfaces)*
- G. *Has ligaments (holding bone to bone)*

Understand the movements involved at different joints

5. Using the diagram of an elbow joint:



- (i) Name muscle X [1]
- (ii) Name muscle Z [1]
- (iii) Identify which muscle is the agonist [1]
- (iv) Identify which muscle is the antagonist [1]

Four marks max for identifying and naming

- (i) *X = Antagonist/Tricep*
- (ii) *Z = Agonist/Bicep*
- (iii) *Agonist is the biceps (brachii)/Z*
- (iv) *Antagonist is the triceps (brachii)/X*

6. Explain, using a practical example for each, what is meant by abduction and adduction. [4]

Four marks for:

- A. Adduction - movement towards mid line of body*
- B. E.g. leg / arm action in breast stroke*
- C. Abduction - movement away from mid line of body*
- D. E.g. - splits / crucifix*

7. Name the **two** bones that form the shoulder joint. [2]

- A. Humerus*
- B. Scapula*

8. Name the **three** bones that form the elbow joint. [3]

- A. Humerus*
- B. Radius*
- C. Ulna*

9. Name the bones that form the knee joint. [2]

- A. Tibia*
- B. Femur*

10. Name the **three** bones that form the ankle joint and state the type of synovial joint found at the ankle. [4]

Four marks for:

- A. *Talus*
- B. *Tibia*
- C. *Fibula*
- D. *Hinge joint*

Understand the names of the major muscles causing movements

11. Identify **two** major muscle groups of the upper body that are used when performing a standing throw of a ball. [2]

Two marks max for: (mark first two only)

- A. *Deltoids*
- B. *Latissimus Dorsi*
- C. *Pectorals*
- D. *Biceps*
- E. *Triceps*

Accept other relevant muscle groups

12. Name the muscles that cause movements at the knee joint. [2]

- A. *Quadriceps*
- B. *Hamstrings*

13. Name the muscles that cause movements at the ankle. [2]

- A. *Gastrocnemius*
- B. *Tibialis anterior*

1b The structure and function of the cardio-respiratory system

Understand the pathway of air into and out of the lungs

1. When we breathe in, air enters our nose and mouth. Identify the other structures through which air passes before entering our lungs. [4]

Four marks for:

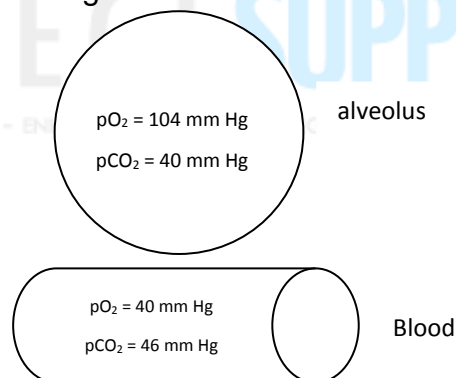
1. *Trachea*
2. *Bronchi*
3. *Bronchioles*
4. *Alveoli*

2. Define tidal volume and state its average value. [2]

- A. *Amount / volume of air entering lungs during normal breathing*
B. *500 mls / 0.5 litres*

Understand gas exchange at the alveoli and the features that assist in gaseous exchange

3. The diagram shows the concentrations of oxygen (pO_2) and carbon dioxide (pCO_2) in the alveoli and lung capillaries. Use the information in the diagram to explain how these gases move. [3]



Three marks for 3 from:

- A. *Process = diffusion*
B. *Gases move from high to low concentration*
C. *Oxygen from alveolus to blood / 104 to 40*
D. *Carbon dioxide from blood to alveolus / 46 to 40*

4. State **three** factors that assist the process of diffusion in the alveoli. [3]

Three marks for 3 of:

- A. *Large surface area*
B. *Thin membranes / cell walls*
C. *Short distance for diffusion*
D. *Steep diffusion gradient / differences in concentration*
E. *Layer of moisture*
F. *Rich / slow blood supply*

Understand the structure and function of blood vessels

5. State the type of blood vessels that carry blood away from the heart. [1]

A. *Arteries / aorta*

6. List **three** features of veins. [3]

Any three from:

- A. *Thin-walled*
- B. *Have valves*
- C. *Large lumen*
- D. *No pulse / stretch*

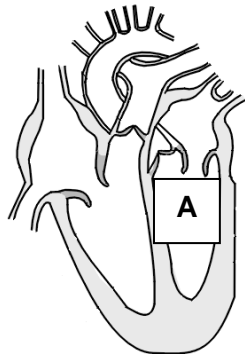
7. State the term used to describe the narrowing of small arteries to re-distribute blood? [1]

A. *Vasoconstriction*

Understand the structure of the heart

8. Name the heart chamber labelled A in the diagram. [1]

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A. *Left ventricle*

Understand the order of the cardiac cycle and the pathway of the blood through the heart

9. Describe the route taken by deoxygenated blood from when it enters the heart until it becomes oxygenated. [4]

- A. *Enters right atria*
- B. *Via vena cava*
- C. *Passes through a-v valve*
- D. *Into right ventricle*
- E. *Systole / contraction*
- F. *blood into pulmonary artery*
- G. *To lungs*

10. Describe the route taken by oxygenated blood from when it becomes oxygenated until it leaves the heart. [4]

Four marks for 4 from:

- A. *From lungs*
- B. *Along pulmonary veins*
- C. *Enters left atria*
- D. *Passes through a-v valve*
- E. *Into left ventricle*
- F. *Systole / contraction*
- G. *Blood into aorta*

Understand the terms cardiac output, stroke volume and heart rate, and the relationship between them

11. State the relationship between cardiac output, stroke volume and heart rate. [1]

- A. *Cardiac output = stroke volume x heart rate*

12. Give **three** short term effects of exercise on the heart. [3]

3 marks for:

- A. *Increase in heart / pulse rate*
- B. *Increase in cardiac output / more blood pumped out per minute*
- C. *Increase in stroke volume*

Understand the mechanics of breathing as the interaction of the intercostal muscles, ribs and diaphragm

13. Name the muscles that cause inspiration at rest. [2]

- A. *Diaphragm*
- B. *Intercostals*

14. Describe the changes that enable breathing to increase during exercise. [3]

Any three for 3 marks

Inspiration helped by:

- A. *Sternocleidomastoid*
- B. *Pectorals*

Expiration helped by:

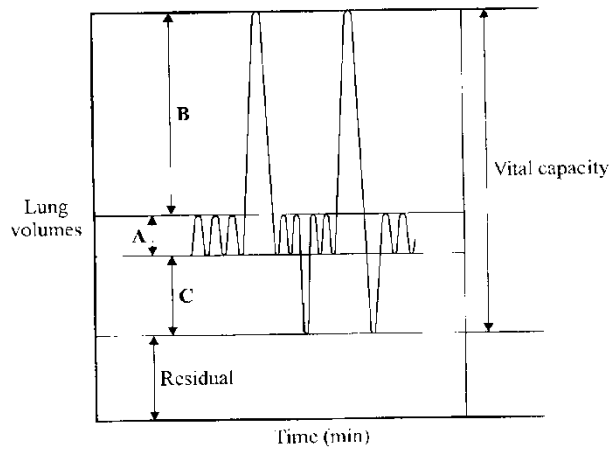
- C. *Abdominals*
- D. *Becomes active*

Understand and interpret lung volumes through spirometer traces

15. Identify the lung volumes are used during exercise. [3]

- A. Tidal volume
- B. Expiratory reserve volume
- C. Inspiratory reserve volume

16. Identify the lung volumes represented by the labels A and B. [2]



- A. *Tidal volume*
- B. *Inspiratory reserve volume*



1c Anaerobic and aerobic exercise

Understand the idea of aerobic and anaerobic exercise during differing intensities

1. Give an example from a team game of aerobic exercise and an example of anaerobic exercise. [2]

- A. *Fast rapid movements - tacking / shooting / dribbling*
- B. *Slow movements - walking / resting / jogging*

2. State the type of exercise that the equation 'glucose → energy + lactic acid' summarises. [1]

- A. *Anaerobic*

3. Write an equation to summarise aerobic energy production. [2]

Mark in two sections:

- A. *Glucose + oxygen →*
- B. *energy + carbon dioxide + water*

Understand the recovery process from vigorous exercise in terms of Excess post-exercise oxygen consumption (EPOC)/oxygen debt

4. Explain the function of EPOC. [2]

- A. *Remove lactic acid*
- B. *Uses oxygen*

5. State **two** factors that may affect the duration of EPOC. [2]

Two marks for 2 of:

- A. *Fitness*
- B. *Intensity of exercise*
- C. *Age*
- D. *Duration of exercise*

Understand methods to help recover from strenuous exercise

6. Describe two ways of avoiding DOMS. [2]

Any two of:

- A. *Ice baths*
- B. *Cool down*
- C. *Massage*
- D. *Rehydration*

7. Describe how ice baths speed up recovery. [2]

Any 2 from:

- A. *Flush out waste products*
- B. *E.g. lactic acid*
- C. *Increase blood flow into muscles after leaving bath*

Understand the immediate effects of exercise (during exercise)

8. Describe the immediate effects of exercise. [3]

Three marks for 3 from:

- A. *Heart rate increases*
- B. *Breathing rate increases*
- C. *Temperature increases*
- D. *Sweating / reddening of skin*

Understand the short-term effects of exercise (24 to 36 hours after exercise)

9. Suggest how lactic acid produced in our muscles, and briefly describe the effects of lactic acid. [4]

Four marks max. One mark for each correct response.

Two marks max for:

- A. *Produced because of lack of oxygen/anaerobic exercise*
- B. *After prolonged/hard high intensity exercise/overworked/working too hard*

Three marks max for:

- C. *Causes fatigue/tiredness*
- D. *May cause us to stop*
- E. *Performer has to slow down/decreases effectiveness*
- F. *Can hurt/painful/aches/soreness*

10. Describe **three** short-term effects of exercise. [3]

Any three from:

- A. *Fatigue*
- B. *Light-headedness*
- C. *Nausea*
- D. *DOMS*

Understand the long-term effects of exercise (months and years of exercising)

11. Describe **four** long term effects of exercise on muscles.

[4]

Four marks for four from:

- A. Increase in size (of muscle fibres) / hypertrophy of muscles*
- B. Increase in strength (of muscle fibres) / power*
- C. Increase in muscular endurance*
- D. Increase in flexibility (of muscle) / elasticity*
- E. Increased tolerance to lactic acid / removal of lactic acid*
- F. Greater potential for energy production/more energy available*
- G. Increase in capillaries / more oxygen / haemoglobin to (working) muscles*

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2 Movement analysis

Understand the different classes of levers found in the body

1. The diagram represents the lever system operating at the elbow joint during the extension phase of a throw

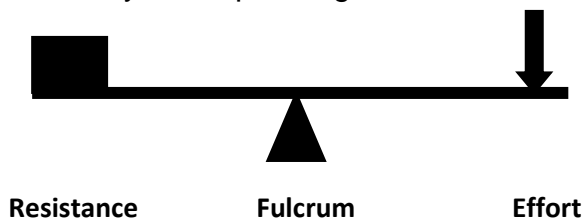


- (i) State the class of lever that operates at the elbow during extension. [1]
- (ii) Identify which parts of the lever system at the elbow that labels A and B represent. [2]
- (i) *First class lever*
- (ii) *A - resistance/load or effort/force*
B - resistance/load or effort/force
2. Sketch and label a third class lever system. [2]
- A. *Effort / resistance / fulcrum labelled*
B. *Effort in centre*
3. Sketch and label a second class lever system. [2]
- A. *Effort / resistance / fulcrum labelled*
B. *Resistance/load in centre*
4. Identify which type of lever system operates at the ankle during plantar flexion and state the name of the agonist involved. [2]
- A. *Second class system*
B. *Gastrocnemius*

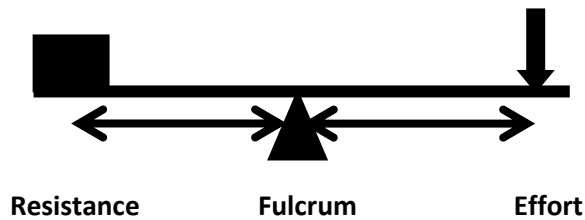
Understand the mechanical advantages of different lever systems

5. State the mechanical advantage of a second class lever system. [1]
- A. *Lift / move heavy weight / apply large force*

6. Sketch the effort arm and the resistance arm on the diagram of a third class lever system operating at the ankle. [2]



- A. Resistance arm identified
B. Effort arm identified



7. Identify the commonest class of lever found in the body and state the mechanical advantage of this type of lever system. [3]

Three marks for:

- A. Third class lever system
B. Rapid movements
C. Large range of movement

Understand how muscles work to cause movements

8. Using an example from a sport of your choice, state what is meant by an isometric muscle contraction. [2]

- A. E.g. gymnastic balance/'get set' at start of race
B. Contraction without movement

9. State the term used to describe the way muscles work in pairs to cause movement. [1]

- A. Antagonistic

10. The diagram shows a weight training exercise



Identify the main agonist and the main antagonist during the exercise shown. [2]

- A. *Agonist - biceps*
- B. *Antagonist - triceps*

11. The diagram shows the action during the downward phase of a squat.



Identify the main agonist and the type of muscle contraction occurring during this action. [2]

- A. *Agonist - quadriceps*
- B. *Type of contraction - eccentric*

12. Describe the function of tendons and how that differs from the function of ligaments. [2]

- A. *Tendons - join muscles to bone*
- B. *Ligaments join bone to bone/hold bones in place*

Understand the planes and axes of different movements

13. Identify the plane and axis of the hip joint action during running. [2]

- A. *Sagittal plane*
- B. *Transverse axis*

14. Identify through what plane and about which axis the elbow action takes place during a press-up. [2]

- A. *Sagittal plane*
- B. *Transverse axis*

15. Identify the plane and axis involved in a cartwheel. [2]

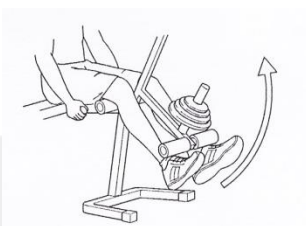
- A. *Frontal plane*
- B. *Sagittal axis*

16. Identify the plane and axis involved in an ice-skating spin. [2]

- A. *Transverse plane*
- B. *Longitudinal axis*

Understand the types of movements that occur at different joints

17. The diagram shows a leg exercise.



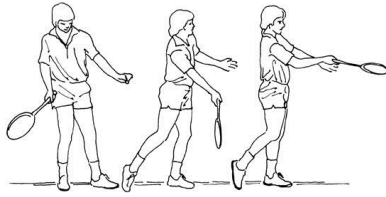
Use the diagram to identify:

- (i) The name and type of joint involved in the movement. [2]
- (ii) The articulating bones associated with this movement. [2]
- (iii) The type of movement taking place. [1]

5 marks in total

- (i) *2 marks for:*
 - A. *Name – knee*
 - B. *Type – hinge/synovial*
- (ii) *2 marks for:*
 - A. *Femur*
 - B. *Tibia*
- (iii) *1 mark for:*
 - A. *Extension*

18. The diagram shows a badminton serve



Use the diagram to identify:

- (i) The names of the bones forming the shoulder joint. [1]
- (ii) The name of the type of joint found at the shoulder. [1]
- (ii) The name of the joint action taking place at the shoulder. [1]
- (iv) The name of the main agonist causing this movement. [1]

Four marks in total

- (i) *humerus and scapula*
- (ii) *ball and socket*
- (iii) *flexion*
- (iv) *deltoid*

19. The diagram shows a player kicking a ball

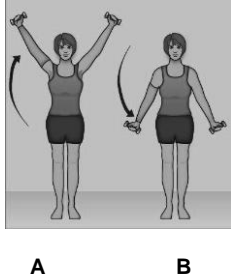


Use the diagram to identify the joint action taking place at:

- (i) the hip, and [1]
- (ii) the knee, during the sequence A-C [1]

- (i) *Flexion*
- (ii) *Extension*

20. The diagram shows performing a weight training movement



- (i) Identify the correct term for each of the movements A and B shown. [2]
(ii) Identify the plane and axis involved in these movements. [2]

Four marks for 4 from:

- (i) A = abduction
B = adduction
(ii) A = Frontal plane
B = Sagittal axis

21. The diagram shows a cricketer bowling.



Identify the **two** actions occurring at the shoulder during the sequence shown and state the name of the agonist muscle for each action. [4]

Four marks for:

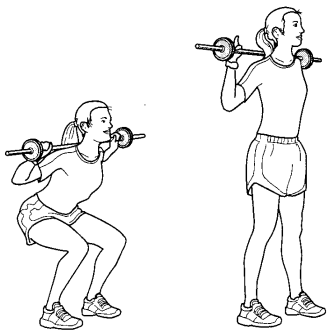
- A. Action – rotation
B. Agonist – rotator cuff
C. Action – extension
D. Agonist – latissimus dorsi

Understand the names of the muscles causing movements at different joints

22. Name the main agonist that causes extension at the knee. [1]

- A. Quadriceps

23. The diagram shows the upward phase of a squat

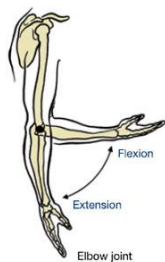


Identify the main agonist causing the movements at:

- (i) the hip [1]
- (ii) the knee [1]
- (iii) the ankle [1]

- (i) *gluteals*
- (ii) *quadriceps*
- (iii) *gastrocnemius*

24. The diagram shows the movements possible at the elbow joint



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Identify the main agonists causing the movements shown.

[2]

- A. *Flexion – biceps*
- B. *Extension - triceps*

3 Physical training

The relationship between health and fitness

1. Define health. [1]
 - A. *Complete physical, mental and social well-being*
2. Define fitness. [1]
 - A. *Ability to cope with demands of environment*
3. Explain how an individual may increase their fitness but suffer from ill health. [3]
 - A. *Fitness – ability to cope with demands*
 - B. *Health – complete physical mental and social well-being*
 - C. *Can improve physical aspect of health, but other areas/social/mental may deteriorate*

The components of fitness

4. Describe how flexibility can help you lead a healthy lifestyle. [4]

four marks for four from:

 - A. *(General) To stop danger of straining yourself / safer (e.g. lifting)*
 - B. *(Specific joint/ muscular) To prevent joint /muscle injuries/healthy joints/better posture*
 - C. *To be able to reach for things easier/greater range of movement*
 - D. *To be able to perform activities that demand flexibility such as gymnastics / enables you to want to do more exercise / enables activity in old age*
 - E. *To be able to move faster/ quicker reactions/more agile*
 - F. *To be more effective in movement technique*
 - G. *To go about everyday activities more easily/ do jobs better*

5. Speed is an important component of fitness.
Explain, using **four** different practical examples, how speed can help in the performance of physical activities. [4]

Four marks for four from: (max two marks if no examples)

- A. *To beat your opponent in a race, e.g. in a sprint race*
- B. *Get away from your opponent e.g. striker running away from defender in football*
- C. *To get to the ball or location before your opponent, e.g. winning the ball in a hockey match*
- D. *To be able to put skills into operation quickly/make skills quick/effective, e.g. quickly perform the smash in tennis*
- E. *Can hit or strike with more force/makes things/projectiles go faster, e.g. quicker run-up and arm action - quicker ball will travel when bowling in cricket*
- F. *You can receive the ball more effectively/you can prepare to receive/respond, e.g. you can get in position*

6. Name and describe a suitable test for flexibility. [2]

- A. *E.g. sit and reach test*
- B. *keeps legs straight; reach forward as far as possible to measure*

7. Describe both plyometrics and weight training. [6]

Sub max 4 per method

Plyometrics

- A. *bounding/hopping*
- B. *On off boxes*
- C. *concentric contractions of muscles*
- D. *and eccentric*
- E. *usually leg muscles*
- F. *needs warm up*
- G. *Very strenuous*

Weights

- A. *Lifting weights*
- B. *machines or free weights*
- C. *provide resistance*
- D. *Uses repetitions / sets*
- E. *needs warm up*
- F. *Targets specific muscles*
- G. *type of interval training / anaerobic*
- H. *Strenuous on muscles and joints*

8. Define agility and describe a suitable test to measure agility. [5]

Four marks for 4 from:

Sub max one mark

- A. *Ability to change direction quickly*
Sub max 4 marks
- B. *Illinois agility run*
- C. *10 metres (x 5 metres)*
- D. *Start lying down*
- E. *Run 6 lengths / 60 metres*
- F. *Weave in and out of cones*
- G. *Time to complete measures agility*

9. Compare the need for cardio-vascular endurance between a long-distance runner and a long jumper. [3]

Three marks for 3 from:

- A. *Cardio-vascular endurance – ability of heart and lungs to deliver oxygen to working muscles*
- B. *Long distance runner – required for duration of (aerobic) event*
- C. *Long jumper – event mainly anaerobic/sprint and jump*
- D. *Cardio-vascular endurance not important*

10. Define strength and identify and describe another component of fitness that is needed for weight-lifting. [2]

Sub max one mark

- A. *Strength – ability to overcome a resistance*
Sub max onemark
- B. *Flexibility – wide range of movement;*
- C. *Speed – rapid movement/move quickly;*
- D. *Co-ordination – combining movements/ arms and legs together;*
- E. *Power – strength x speed/large force quickly;*
- F. *Agility – change direction quickly;*
- G. *Balance – Remaining stable/equilibrium;*

11. Identify **two** components of fitness required by a shot putter. [2]

Two marks for two from:

- A. *Strength*
- B. *Power*
- C. *Speed*
- D. *Flexibility*
- E. *Balance*
- F. *Co-ordination*

12. Tennis players require high levels of power to be successful. State what you mean by the term power. [1]

A. *Strength x speed*

13. Balance is an important aspect of weight-training. State what you mean by the term balance. [2]

Two marks for 2 from:

A. *Maintaining/keeping stable/equilibrium;*

B. *Centre of gravity/mass over base of support;*

C. *Static or dynamic;*

How to evaluate the need for components of fitness in specific physical activities and sport

14. Name **three** components of fitness needed by a goalkeeper in a team game. [3]

Three marks for any three of:

A. *Agility*

B. *Balance*

C. *Co-ordination*

D. *Flexibility*

E. *Power*

F. *Reaction time*

G. *Speed*

15. Apart from speed, name **two** other components of fitness needed by a 100-metre sprinter. [2]

Two marks for any two of:

A. *Balance*

B. *Co-ordination*

C. *Flexibility*

D. *Muscular endurance*

E. *Power*

F. *Reaction time*

16. Using examples, suggest why team games players need power. [2]

Two marks for any two from:

A. *Power = strength x speed*

B. *Apply force quickly*

C. *Needed for e.g. tackles, shooting, heading, etc*

17. The diagram shows a gymnast performing on the asymmetric bars. Identify **three** components of fitness need for this activity. [3]



Three marks for 3 from:

- A. Agility
- B. Balance
- C. C-ordination
- D. Flexibility
- E. Muscular endurance
- F. Power
- G. Strength
- H. Speed

18. Do footballers need cardio-vascular endurance? Justify your answer. [2]

- A. Cardio-vascular endurance – ability to supply oxygen to muscles
- B. Needed by footballers because matches last 90 minutes

19. Do swimmers need to be flexible? Justify your answer. [2]

- A. Flexibility – range of movement at a joint
- B. Larger range of movement means longer application of force – quicker

20. Do tennis players need balance? Justify your answers. [2]

- A. Balance – stay in equilibrium
- B. Need dynamic balance when moving around court

Reasons for carrying out fitness tests

21. Suggest **four** reasons why fitness tests may help a performer. [4]

Four marks for any 4 from:

- A. Identify strengths and weaknesses
- B. Measure initial fitness levels
- C. Monitor improvements
- D. Compare to others
- E. Motivation
- F. Variety

The protocol and procedures that should be followed when carrying out fitness tests

22. Name and describe a suitable test to measure a person's balance. [4]

Four marks for 4 from:

Sub max one mark

A. *Stork balance*

Sub max 3 marks

B. *Stand on two feet with hands on hips*

C. *Lift one leg and place toes alongside knee*

D. *Start timing when subject raises heel off ground*

E. *Finish timing when subject loses balance*

23. Describe the Anderson wall toss test. Which component of fitness does it measure? [4]

Four marks for 4 from:

Sub max one mark

A. *Measures coordination*

Sub max 3 marks

B. *Stand 2-metres from wall*

C. *Throw and catch one-handed*

D. *Alternative hands*

E. *30 seconds duration*

24. Describe the sit and reach test for flexibility. Justify whether this is a suitable test for a swimmer. [4]

Four marks for 4 from:

Sub max 3 marks

A. *Sit on floor with legs straight*

B. *No shoes; Feet flat on sit and reach board*

C. *Reach forward as far as possible (push slider)*

D. *Measure how far past toes*

Sub max 2 marks

E. *Swimmer – limited for leg flexibility/only measures hamstrings/back flexibility*

F. *Definitely not for arms*

25. Describe the vertical jump test for anaerobic power. Justify whether this is a suitable test for a tennis player. [4]

Four marks for 4 from:

A. *Standing upright – stretch and mark reach height/push up wall ruler*

B. *Apply chalk or similar to fingers*

C. *Jump as high as possible and touch wall with fingers*

D. *Difference in standing and jumping height is measure of power*

E. *Tennis – uses legs for power – suitable test*

26. Describe the ruler drop test to measure reaction time. Justify whether this is a suitable test for a 100-metre sprinter. [4]

Four marks for 4 from:

- A. Metre rule held between thumb and index finger at 50 cms point
- B. Release without warning
- C. Subject catches falling ruler
- D. Score in cms – how far did it drop
- E. Not similar to reaction time of sprint start – not suitable

27. Describe the handgrip dynamometer test for strength. Justify whether this is a suitable test for a rugby player. [4]

Four marks for 4 from:

- A. Dynamometer held in dominant hand
- B. Adjust grip to suit size
- C. Maximum effort squeeze
- D. Record score
- E. Only suitable for to mauling/unsuitable for other areas where strength required

The limitations of carrying out fitness tests

28. Using appropriate examples, suggest **three** reasons why fitness tests are limited. [3]

Four marks for 4 from:

- A. Not sport specific / not valid – e.g. ruler drop test
- B. Do not replicate sporting actions – e.g. bleep test/sit and reach test
- C. Non-competitive/ no pressure – e.g. re-tests possible
- D. Many tests unreliable / maximal / rely on motivation – e.g. bleep test
- E. Tests require accuracy in protocol/method often not available – e.g. stork test/Illinois agility run/etc

How qualitative and quantitative data can be gained and used when fitness testing

29. Explain the difference between qualitative and quantitative data. [2]

- A. Quantitative – objective / numbers
- B. Qualitative – opinions / subjective

The principles of training and overload and how they can be applied to training programmes

30. Other than frequency, what are the other components of the FITT principle? [3]

Three marks for 3 from:

- A. *Intensity*
- B. *Time*
- C. *Type*
- D. *Tedium*

31. The main training principles are overload; specificity; progression and reversibility. Describe **three** of these training principles and give a practical example for each. [6]

Six marks for six from:

One mark max for description

One mark max for practical example/equivalent

Overload:

- A. *Work harder than normal / by increasing frequency/intensity/duration*
- B. *E.g. Lifting heavier weights*

Specificity:

- C. *Training should be particular/relevant to needs/relevant energy system used/relevant muscle groups used.*
- D. *E.g. choosing main muscle groups used in activity to train for strength.*

Progression:

- E. *(Gradually) becomes more difficult/demanding/challenging/once adapted then more demands on body (suggest time)*
- F. *E.g. Doing more repetitions of sprints at each training session*

Reversibility:

- G. *Performance/fitness can deteriorate if training/exercise stops/decreases.*
- H. *E.g. If you stop endurance training your stamina will reduce in time.*

The varying training types and the advantages and disadvantages of using them

32. Describe circuit training. [5]

Five marks for 5 of:

- A. *A series of exercises/stations of different exercises/activities*
- B. *Each exercise has its own repetitions*
- C. *A whole circuit can be repeated several times*
- D. *There may be a time limit for reps/sets/circuits*
- E. *Body weight is the main resistance factor*
- F. *Different muscle groups/parts of the body are exercised/all-body work out*
- G. *Can incorporate skills rather than just fitness type exercises*
- H. *The score/time can be recorded (for future goals)*
- I. *Periods of rest between station*

33. Describe the training method of plyometrics. What type of physical activities is plyometrics particularly good for? [4]

3 marks for 3 from:

- A. Plyometrics involves bounding/hopping / jumping/in–depth jumping
- B. When the athlete jumps onto (and off boxes)
- C. Muscles have to work concentrically (jumping up)
- D. (and) eccentrically (landing)
- E. Important that the muscles are warmed and stretched before attempting this type of training
- F. This type of training is very strenuous on the muscles and joints and a reasonable amount of fitness must be present before this training is attempted

Sub max 1 mark for (type of activity)

- G. This type of training is designed to improve dynamic strength/plyometrics improve the speed with which muscles contract/power/any sport that involves sprinting, throwing and jumping will benefit from this type of training/players of many team sports such as netball or rugby

34. Describe **four** ways in which continuous training can improve performance in physical activities. [4]

Four marks for 4 from:

- A. Improves fitness/stamina/(cv)endurance/increases energy levels
- B. Can assist weight control/weight loss
- C. Decrease in fatigue/less need for rest
- D. Increase tolerance to lactic acid
- E. Emulates/duplicates the 'real game' situation/prepares for competition
- F. Reduces resting heart rate
- G. Increases heart efficiency/or adaptations identified (other than reducing resting heart rate)
- H. Improved efficiency of vascular shunt
- I. Increases lung efficiency/better use of O₂/or adaptations identified
- J. Increases muscular efficiency or adaptations identified
- K. Reduces blood pressure
- L. Reduces risk of health problems/or examples of these problems

35. Describe **two** advantages and **two** disadvantages of circuit training. [4]

Four marks for four from:

Sub max 3 marks

Advantages

- A. *Variable*
- B. *Large numbers*
- C. *Simple*
- D. *Specific*
- E. *Easy to overload*

Disadvantages

Sub max 2 marks

- F. *Needs space*
- G. *Needs specialist equipment*
- H. *Hard to measure / track intensity*

36. Describe **two** advantages and **two** disadvantages of continuous training. [4]

Four marks for four from:

Advantages: Sub max 2 marks

- A. *Requires little or no equipment*
- B. *Improves aerobic fitness.*
- C. *Can be done virtually anywhere.*
- D. *Simple to do*

Disadvantages - Sub max 2 marks

- E. *Can be boring/tedious.*
- F. *Can cause overtraining injury due to repetitive contractions.*
- G. *Can be time consuming.*
- H. *Not specific to demands of the sport,*

37. Describe **two** advantages and **two** disadvantages of (High Intensity) interval training. [4]

Four marks for four from:

Advantages - sub max 2 marks

- A. *Burns fat / Calories quickly*
- B. *Easily altered to suit individuals*
- C. *Quick*
- D. *Improves aerobic and anaerobic systems*

Disadvantages - sub max 2 marks

- E. *Potential for injuries*
- F. *Needs high motivation*
- G. *Can cause nausea / dizziness*

38. Describe **two** advantages and **two** disadvantages of weight training. [4]

Advantages - sub max 2 marks

- A. *Easily adaptable*
- B. *Relevant to all sports*
- C. *Easy to organise*
- D. *Strength gains*

Disadvantages - sub max 2 marks

- E. *Increased blood pressure*
- F. *Danger of injuries*
- G. *Heavy weights need motivation*

39. List **four** safety principles that should be used when training. [4]

Any four from:

- A. *Warm up / cool down*
- B. *Avoid bouncing / ballistic stretching*
- C. *Wear appropriate clothing / footwear*
- D. *Use taping / bracing if needed*
- E. *Use correct technique / spotters*
- F. *Keep hydrated*
- G. *Avoid over training / use rest*

Specific training techniques – Altitude training

40. Describe the benefits of altitude training. [4]

4 marks for four from:

- A. *Less oxygen at altitude*
- B. *Body produces More red blood cells/haemoglobin*
- C. *Greater oxygen transport capacity/carry more oxygen*
- D. *Greater stamina/cardio-respiratory endurance*
- E. *E.g. marathon/endurance athletes.*

41. Suggest why is altitude training not always as effective as it should be. [3]

4 marks for three from:

- A. *Reduced oxygen concentration – unable to train as hard as previously*
- B. *Loss of fitness while at altitude*
- C. *Altitude sickness*
- D. *Psychological problems – loneliness / etc*
- E. *No benefit to anaerobic performance;*
- F. *Requires several weeks/months to be effective.*

How training can be structured into seasons

42. Describe the different aims involved when dividing the training year into 'seasons'. [3]
- A. *Pre-season / preparation – develop aerobic fitness*
 - B. *Competitive phase / season – maintain fitness / develop skills*
 - C. *Post season / transition – rest / recover*

The reasons for warming up and cooling down

43. Using a practical example, explain why a warm up is important before exercise. [4]
- 1 mark for:
- A. *an appropriate warm-up activity (jogging/stretching etc)*

Three marks for 3 from:

- B. *Increase temperature (of muscles)*
- C. *To improve performance/technique*
- D. *Raise heart rate/increase blood supply*
- E. *Rehearse skills*
- F. *Mentally prepare/get in the right mood or frame of mind/focus/increase motivation*
- G. *To increase/enable greater flexibility/loosen joints*
- H. *Reduces risk of muscle strain/reduce injury*
- I. *Improves speed/strength of muscular contractions*
- J. *Raise oxygen uptake/increase O₂ supply to muscles*

44. Describe a cool down exercise and explain why you should cool down after physical activity. [4]

One mark for:

Description:

- A. *Description of a suitable cool down exercise, e.g. jogging around the pitch after a game, followed by some stretching exercises mobilising the main muscle groups.*

Explanation:

Three marks max. One mark for each correct response.

- B. *(To speed up) remove/get rid of lactic acid/waste products*
- C. *Decreases risk of injury/pulling muscle*
- D. *Decreases risk of muscle soreness/cramp/stiffness*
- E. *Prevent blood pooling*
- F. *Prevent feeling tired*
- G. *Gradually decrease heart rate/blood pressure*
- H. *Gradually decrease body temperature*
- I. *Gradually decrease breathing rate/to stop feeling dizzy/faint/sick*
- J. *Psychological benefits/makes you calm down*

45. Describe an effective warm up in a physical activity of your choice. [5]

Five marks for five from:

- A. Raise pulse/heart rate/jogging.*
- B. Increasing body/muscle temperature*
- C. Stretch for at least 10+ seconds per main muscle group/ per stretch*
- D. Stretch main muscle groups / those muscles specifically going to be used / use flexibility or stretching exercises.*
- E. Steady breathing/keep control/calm*
- F. To include exercise movements that emulate the 'real game ' situation*
- G. Use of skill drills/practising techniques/shots*
- H. Incremental work rate in warm up/start slow and build up work ready for game/competition*
- I. Mental preparation*

SUBJECT SUPPORT

SUPPORTING YOUR CENTRE - ENHANCING YOUR TEACHING - ENABLING YOUR LEARNERS



4 Sports psychology

What is a skill and what is ability?

26. Explain the difference between skill and ability. [2]

- A. *Skills – learned*
- B. *Ability – innate / born with*

Classification of skills

2. Classify the javelin throw as [3]

- open or closed
- self-paced or externally-paced
- gross or fine

- A. *Closed*
- B. *Self-paced*
- C. *Gross*

3. Front crawl swimming may be classified on continua as open or closed, basic or complex, self-paced or externally-paced, and gross or fine. Classify the front crawl according to these **four** continua. [4]

- A. *Open*
- B. *Complex*
- C. *Self-paced*
- D. *Gross*

4. The skill of triple jumping can be classified according to various skill continua. Classify the triple jump according to the following **four** continua **and** justify each of your choices.

- open to closed
- self-paced or externally paced
- basic to complex
- gross to fine

[4]

- A. *Closed – unchanging environment*
- B. *Self-paced – performer decides when to start/how fast*
- C. *Basic – few decisions*
- D. *Gross – large muscle groups used*

5. Classify a pass in a team game on the following continua; in each case justifying your choice. [3]

- Basic to complex
- Open to closed
- Gross to fine

- A. *Complex – decisions to be made*
B. *Open – changing / unstable environment*
C. *Gross – large muscle groups*

6. Classify a sprint start on the following continua; in each case justifying your choice. [3]

- Basic to complex
- Open to closed
- Self-paced to externally-paced

- A. *Basic – few decisions to be made*
B. *Closed – unchanging / stable environment*
C. *Externally-paced – controlled by starter*

Definitions of types of goals

7. Describe, using practical examples, the difference between performance and outcome goals. [4]

Four marks for 4 from:

- A. *Performance – personal standards compared to previous standards*
B. *Based on skills and / or tactics*
C. *E.g. having a percentage success rate in shooting / passing / tackling*
D. *Outcome – concerned with results*
E. *E.g. winning race / gaining high score*

8. Explain whether performance or outcome goals are better for improving performance. [2]

- A. *Performance usually better – controllable*
B. *Outcome too dependent on other performers*

The use and evaluation of setting performance and outcome goals in sporting examples

9. Describe, using practical examples, performance and outcome goal setting when trying to improve performance in a physical activity. [6]

Six marks for 6 from:

Performance: sub max 3 marks

- A. Performance relates to techniques/skills/how well you carry out skills*
- B. Suitable practical example, e.g. set a goal to improve my forehand in tennis*
- C. Performance also relates to strategies/making the right decision at the right time*
- D. E.g. set a goal to work on when to use the dummy pass in rugby*

Outcome: sub max 3 marks

- E. Outcome relates to the result of an activity*
- F. E.g. goal is to win all the remaining home games in netball*
- G. Outcome also relates to how others rate your performance/judged*
- H. E.g. to score a high mark for the gymnastic floor routine*

Other factors:

- I. Both can be motivating*
- J. E.g. setting a goal to improve your personal best in Athletics*
- K. Make your goals relevant/achievable*
- L. E.g. In Netball scoring 9 out of 10 shots/goals*

The use of SMART targets to improve and/or optimise performance

10. Explain the SMART principle of goal setting and describe why goal setting is important for an active, healthy lifestyle. [6]

6 marks max

SMART – (must be explained not just identified - sub max of 1 if i/d only

5 Marks max

- A. S – Specific activity to your needs*
- B. M – Measurable – goals need to be assessed to see how well you are doing*
- C. A – Achievable / agreed – goals must be within reach / capabilities or they can be agreed with your teacher / coach*
- D. R – Realistic/recorded – goals must not be too challenging or you will fail or they should be recorded so that you can refer back to them to see how you are getting on*
- E. T – Time (phased) – because goals should be planned over a period of time*

Why - 3 marks max

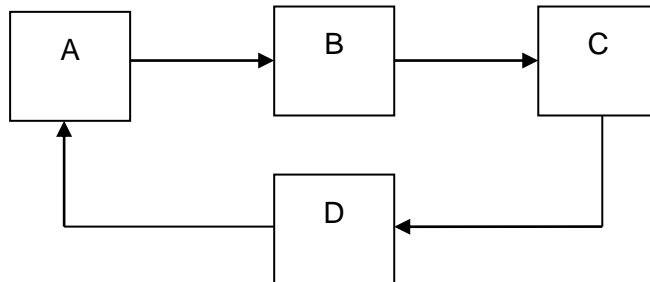
- F. To get better/increase/optimize performance/ to keep fit*
- G. To ensure participation continues/keep exercising/training/ensure exercise adherence*
- H. To control anxiety/stress*
- I. To motivate/enthusiasm / gain satisfaction / enjoyment / raises confidence / something to aim for.*

Basic information processing model

11. State what is meant by the term information processing. [1]

A. *Decision-making based on senses / stimuli*

12. Identify the **four** components of the information processing model. [4]



A. *Input*

B. *Decision-making*

C. *Output*

D. *Feedback*

13. Describe, using an example from a team game, the function of input during information processing. [2]

Sub max 1 mark if no example

A. *Information from senses*

B. *Choose most important*

C. *E.g., watch ball*

Examples of and evaluation of the effectiveness of the use of types of guidance with reference to beginners and elite level performers

14. Identify **four** types of guidance [4]

A. *Visual*

B. *Verbal*

C. *Manual*

D. *Mechanical*

15. State **two** examples of visual guidance that a PE teacher could use.

Two marks for 2 from:

A. *Demonstration*

B. *Video / DVD*

C. *Posters / diagrams / photos*

16. Identify the most important form of guidance for a beginner. [1]

A. *Visual*

17. Suggest **three** requirements for demonstrations to be effective for beginners. [3]

Any three from:

A. *Clear*

B. *Short / concise*

C. *Quick*

D. *Understandable*

E. *Realistic standard*

18. What are the **four** main forms of guidance a swimming coach can use to aid a swimmer? Use examples to explain each method. [4]

Sub max 1 mark

A. *Visual Verbal Manual Mechanical*

Sub max 3 marks

B. *Visual - use of video/ demonstration by coach, teacher or other performer;*

C. *Verbal - a spoken description of batting technique/teaching/coaching points;*

D. *Manual – guide limbs through appropriate movements*

E. *Mechanical – aid such as float / arm bands*

19. Explain why verbal guidance is not always suitable for a beginner. [2]

A. *Verbal – using words to describe*

B. *Beginners may lack understanding / only able to watch, not both*

20. Distinguish between manual and mechanical guidance. [2]

A. *Manual – hands on*

B. *Mechanical – using aids*

Examples of and evaluation of the effectiveness of the use of types of feedback with reference to beginners and elite level performers

21. Identify **four** types of feedback. [4]

4 marks for 4 from:

A. *Intrinsic*

B. *Extrinsic*

C. *Knowledge of results*

D. *Knowledge of performance*

E. *Positive*

F. *Negative*

22. Describe how the type of feedback being used by a performer will vary as they become more skilled. [3]

Any three for 3 marks

- A. *More reliance on intrinsic / kinaesthetic feedback;*
- B. *Less on extrinsic / augmented feedback/ coach/ knowledge of results;*
- C. *Less reliance on visual feedback;*
- D. *Feedback can be more detailed / specific /less general /;*
- E. *More prepared to accept negative feedback / critical.*

23. Knowledge of results and knowledge of performance are two types of feedback. Explain these **two** types of feedback. [2]

- A. *KR – outcome result of action / e.g.;*
- B. *KP – information regarding movement pattern/kinesthesia/feel of movement/intrinsic;*

24. State the **three** main benefits of feedback to a performer. [3]

- A. *Correction of errors/improve techniques/highlight weaknesses;*
- B. *Reinforcement/illustrate success/highlight strengths;*
- C. *Motivation/self-confidence;*

25. Describe the characteristics of 'effective feedback' for a beginner. [4]

Any three from:

- A. *Positive for beginners;*
- B. *Limited amount of information / succinct / short;*
- C. *Clear information / accurate / correct / relevant / simple;*
- D. *Immediate;*
- E. *Individualised;*
- F. *Different forms – verbal and visual;*

Arousal and the inverted U theory

26. Define arousal. [1]

- A. *State of excitement / activation*

27. Describe the inverted U theory of arousal. [3]

- A. *At low levels of arousal – poor performance*
- B. *At optimal levels of arousal – best performance*
- C. *At high levels of arousal – poor performance*

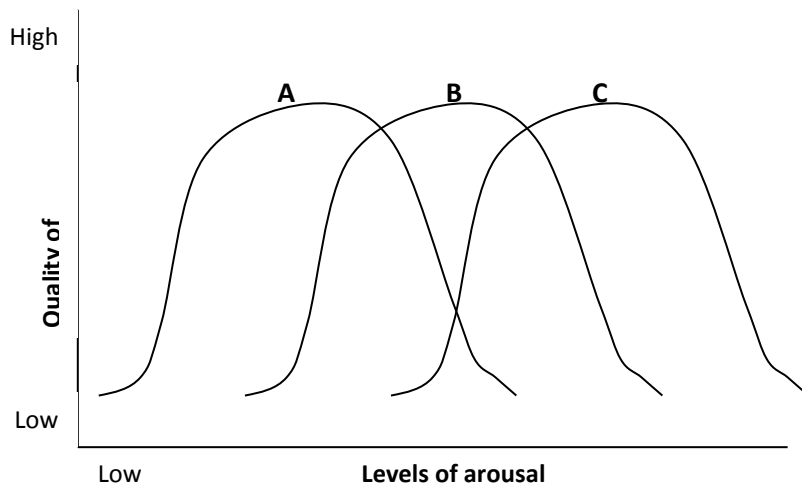
28. Sketch the inverted U theory of arousal. [2]

- A. *Axes correct – arousal on x-axis / performance on y-axis*
- B. *Shape*

How optimal arousal levels vary according to the skill being performed in a physical activity or sport

29. The inverted U theory may be used to explain how arousal may affect sports performance. The diagram shows the arousal-performance relationship for:

- passing in hockey;
- putting in golf; and
- tackling in rugby.



Using the diagram, match each of the curves **A**, **B** and **C** to one of these activities, justifying your choice. [4]

sub max 2 marks

- A. *A = golf/putting, B = passing/hockey, C = tackling/rugby; 2 marks for all 3 correct, 1 mark for 1 correct*

Sub max 2 marks

- B. *Complex skills require lower optimal levels of arousal/less complex skills require higher optimal levels of arousal;*
C. *Golf/putting complex/rugby/tackling less complex;*
D. *Too much arousal interferes with co-ordination, cognition/decision-making;*
E. *Gross skills – rugby - require higher optimal levels of arousal/fine skills – golf – require lower optimal arousal;*

30. Explain how the required levels of arousal vary between novice and elite performers. [2]

- A. *Low optimal levels of arousal for novice performers/high levels for elite performers;*
B. *Decision-making requires low optimal levels of arousal – needed for new skills/elite – automatic decision-making;*

How arousal can be controlled using stress management techniques before or during a sporting performance

31. Describe, using practical examples, how the control of emotions can help with the management of stress in physical activities. [4]

Four marks max. One mark for each correct response (Max of two marks without practical examples).

- A. *Relaxes you/takes away pressure*
- B. *Practical example, e.g. controlling anxiety in a tennis game*
- C. *Keeps you calm/ 'chilled'/ lowers / controls arousal/ positive self-talk*
- D. *Practical example, e.g. calms you down before performing a gymnastics floor routine*
- E. *Therefore, do not get carried away/over-excited/more angry*
- F. *Practical example, e.g. Less angry when someone fouls you in hockey*
- G. *Can make decisions more effectively/makes you more confident*
- H. *Practical examples, e.g. a cricket captain can set a field calmly and effectively*
- I. *Less likely to be physically abusive/violent*
- J. *Practical example, e.g. will not retaliate if punched in rugby*
- K. *Less likely to make inflammatory comments/avoid criticising others*
- L. *Practical example, e.g. no back-chat to ref in football*
- M. *Be able to see other people's point of view/weigh things up more rationally*
- N. *Practical examples, e.g. can see why another player in netball is angry because you have fouled them*
- O. *Focussing/will not miss important cues/hearing the whistle/officials decisions that might lead to foul play/to ignore the crowd/makes you work harder (on what is important)*
- P. *Practical example, e.g. being focused in basketball will enable you to react quickly to referee decisions*
- Q. *More likely to show etiquette which may lead to less stress*
- R. *Practical example, e.g. in golf letting someone through who may be a quicker player*
- S. *Official shows no favouritism therefore less likely for player stress*
- T. *Practical example, e.g. a hockey umpire will not get involved in arguments and therefore player/officials feel less stressed*
- U. *Mental rehearsal/imagery/to imagine success*
- V. *Practical example a gymnast imagines a successful floor routine*

Understand the difference between direct and indirect aggression with application to specific sporting examples

32. Using examples from a team game, explain the difference between indirect and direct aggression. [4]

Four marks for:

- A. *Direct – physical contact*
- B. *Tackle in game /*
- C. *Indirect – no physical contact*
- D. *Using power in shooting / racket strokes*

Understand the characteristics of introvert and extrovert personality types, including examples of sports that suit these particular personality types

33. Explain the difference between introvert and extrovert personality types, and provide examples of activities suited to each type. [4]

Four marks for:

- A. Introvert – quiet, passive, shy*
- B. Individual sports – cross-country running, climbing,*
- C. Extrovert – sociable, active, out-going*
- D. Team sports – rugby, football*

Intrinsic and extrinsic motivation as used in sporting examples

34. Explain, using examples, the different types of motivation. [4]

Four marks for 4 from:

- A. Motivation -the drive to succeed/desire to learn/achieve success/drive (sub max 3)*
- B. Intrinsic/internal within the performer*
- C. E.g. satisfaction/feel good factor/self-fulfilment/ self-worth for achieving PB*
- D. Extrinsic/external – outside the performer/from a coach*
- E. Tangible e.g. prize/trophy/medal/badges/certificates/money*
- F. Intangible e.g. praise from teachers or coach/pat on the back*

35. Explain how you might motivate someone to follow an active, healthy lifestyle. [5]

Five marks for 5 from:

- A. Use of intrinsic and extrinsic methods*
- B. Give rewards/badges/accolades/praise*
- C. Make it fun/enjoyable/varied/interesting/exciting/competition*
- D. Set goals (SMART)/a plan of action*
- E. Encourage/persuade/educate/enthuse/inspire*
- F. Show the positive effects/show progress made*
- G. Give success/feeling of success*
- H. Show role models/lead by example*
- I. Show or educate about the detrimental effects of a poor lifestyle/poor health*
- J. Measure fitness/health to show need to change*
- K. Punish unhealthy/inactive behaviour*
- L. More information about healthy meals/eating well*
- M. Get them to join a club/get with others who may exercise/follow a healthy lifestyle/get them a personal trainer*

5a Socio-cultural influences

Understand the engagement patterns of different social groups

1. Identify **two** positive and **two** negative effects of the family on participation in physical activity. [4]

Four marks for 4 from:

Positive - 2 sub max

- A. Give personal support/encouragement/push you*
- B. Give advice/educate you (about health and fitness)*
- C. Attend/watch events*
- D. Provide transport/lifts to venue*
- E. Get involved/participate themselves/show an interest in physical activities/they are positive role models*
- F. Give financial support/provide/buy equipment*

Negative - 2 sub max

- G. Show little support/interest/they are indifferent*
- H. Do not attend/watch events*
- I. Poor role models/they do not participate themselves*
- J. Give no/little financial support/unable to provide money*
- K. Stop/obstruct participation/concern over injury/cultural barriers*
- L. Do not have transport*
- M. They push you too hard/expectations too high*

2. The participation of women in physical activities often depends upon the opportunities available to them. Explain the term discrimination. [2]

- A. Treating people differently/unfairly through prejudice;*
- B. Based on stereotyping;*

3. What is meant by the term stereotyping **and** the term inclusiveness? [2]

- A. Stereotyping –shared image/simplistic generalisations/image/categorisation/judgement of a group of people*
- B. Inclusiveness –including all kinds of people/everyone within an activity or group/policies which aim to encourage participation based on individual's needs/make people feel part of their society (not included)*

4. Explain the potential benefits to society of increasing participation rates in physical activity. [3]

Three marks for 3 from:

- A. *Health/fitness results in reduce the costs to NHS*
- B. *People buy equipment/use facilities results in economic benefit/employment/leisure industry*
- C. *People join clubs/work together results in integration of community*
- D. *Increase skill levels results in morale of population/skilled citizens/more employable*
- E. *Keeps people occupied in acceptable activities/local authorities provide for leisure results in social control/reduce crime rates*
- F. *Wider participation base resulting in more chance of success at elite level*
- G. *Increase in medals/elite athletes results in national pride*
- H. *Social interaction results in better community*

5. Discuss whether the opportunities for women to take part in sport and physical activity are the same as for men. [4]

Yes (sub max 3 marks):

- A. *Women have more leisure time/ less tied to home/housework;*
- B. *Women have greater disposable income/greater mobility/accessibility to transport;*
- C. *Women encouraged to participate on the grounds of health/fitness/weight loss;*
- D. *Fits in with stereotypical ideals of women's physique/body image;*
- E. *Promoted by the media/fashionable activity/role model;*
- F. *Improvement in levels of provision for some activities;*
- G. *Improvement in child care facilities/crèches/ allow for more opportunities;*
- H. *School PE programmes promote healthy lifestyle/provide opportunities for aerobics/ conditioning activities;*
- I. *Positive discrimination by local leisure centres to encourage women's participation/women only sessions;*
- J. *Sport England/WSF - policy to promote sport/physical activity among under-represented groups such as women/equal opportunities;*

No (sub max 3 marks):

- L. *Lack of equal opportunities/male dominated sports;*
- M. *Limited membership rights of clubs/membership restrictions/men only section;*
- N. *Rules/regulations/preventing women/girls playing with/against men;*
- O. *Sexual harassment/verbal abuse discourages participation;*
- P. *Sexual stereotyping channelling girls/women into female appropriate sports;*
- Q. *Overlooked for top sport jobs/coaching/ management/ administration;*
- R. *School-based PE programmes limiting activities available for girls;*
- S. *Less tournament earnings e.g. Wimbledon/ lack of media coverage/ denigration by media;*

6. Over the last 20 years, women's participation in activities such as aerobics, resistance training and yoga has grown. Suggest reasons for this growth. [4]

Four marks for 4 from:

- A. *Health/fitness/weight loss;*
- B. *Stereotypical views of image from media/role model/fashionable/acceptable;*
- C. *Increased leisure time;*
- D. *More independence/less tied to home/equal opportunities;*
- E. *More disposable income;*
- F. *Greater mobility/transport;*
- G. *Greater provision/opportunities/clubs/sessions/including at home;*
- H. *Better child-care facilities/crèches;*
- I. *School PE promotes healthy lifestyle/lifelong learning;*
- J. *Women's participation encouraged/women only sessions;*
- K. *Sport England promotion;*
- L. *Indoor/non-contact/non-competitive;*

7. Badminton is a popular physical activity amongst women. Suggest reasons why female participation rates are relatively high in this activity. [4]

Four marks for 4 from:

- A. *Environmental conditions e.g. dry, warm, comfortable, indoors;*
- B. *Individual/don't rely on a team*
- C. *Can be played casually/recreationally/socially/competitively/own pace;*
- D. *Can maintain health + fitness*
- E. *Increased provision in schools/leisure centres/clubs;*
- F. *Lifetime activity/suitable for all ages;*
- G. *Non contact/not as aggressive/non strenuous;*
- H. *Socially acceptable/women traditionally played badminton/positive role models*

8. Suggest how schools can encourage more females to take part in physical activity. [4]

Four marks for 4 from:

- A. *Make PE interesting/fun/enjoyable;*
- B. *Single sex/female only groups;*
- C. *Offer a wider range of activities;*
- D. *Other roles and leadership/coaching opportunities;*
- E. *Suited to modern/fashion/cultural/image needs;*
- F. *Offer clubs/extra curricular activities;*
- G. *Advertise/posters;*
- H. *Inspirational teachers;*
- I. *Improve links with local clubs/associations;*
- J. *Emphasise importance of a healthy lifestyle;*
- K. *Sports Ambassadors/role models;*

9. Suggest possible social **and** economic barriers that may account for the lower participation rate of women in physical activity? [4]

Four marks for 4 from:

- A. *General point about sexual discrimination;*
- B. *Effects of lack of media coverage/role models/female coaches;*
- C. *Accepted gender role/stereotyping/traditional role/child care/family commitments;*
- D. *Inappropriate activity/physiological myths/poor body image;*
- E. *Sport as a male preserve/keep women out;*
- F. *Lower (disposable) income/expense;*
- G. *Less time available;*
- H. *Less resources/lower funding/prize money/sponsorship opportunities/fewer facilities/reduced access/fewer female clubs/opportunities;*

10. Suggest reasons for the lower participation rate in physical activity for people with a disability. [4]

Four marks for 4 from:

- A. *Safety concerns/medically considered dangerous;*
- B. *Stereotype/lower expectations by society;*
- C. *Self perception/low self esteem/inferior/less confident;*
- D. *Lack of specialised coaches/trained staff;*
- E. *Lack of specialist/adapted/suitable or equivalent facilities/access ramps;*
- F. *Discrimination;*
- G. *Lack of competition/clubs;*
- H. *Lack of: mobility/transport/personal income;*
- I. *Lack of information/poor media coverage lack of role models;*

11. National governing bodies' (NGBs) try to provide 'equal opportunity' through advertising campaigns and by improving access to facilities. Suggest other solutions that NGBs could use to overcome discrimination and to increase participation in physical activity. [4]

Four marks for 4 from:

- A. *Develop specific policies to target groups/community projects/sport equity targets;*
- B. *Target funding at grass roots of sport/elite sport/specific groups;*
- C. *More minority sport development officers (SDOs)/employment opportunities;*
- D. *More minority coaches;*
- E. *Concentrate resources in inner city/socially disadvantaged areas;*
- F. *Make activities more available/attractive classes for specific groups;*
- G. *Change admission/membership costs/taster days;*
- H. *Change attitudes/get rid of discrimination/ campaigns;*
- I. *Raise awareness/ role models;*

12. Opportunities for people with disabilities to participate in 'competitive sport' have increased in recent years. Suggest reasons for this increased opportunity. [3]

Four marks for 4 from:

- A. *More equal opportunities/less discrimination/Disability Discrimination Act;*
- B. *Adapted activities/modified activities/own sports/technological advances;*
- C. *Increased expectations of disabled people/raising standards of performance/Paralympics;*
- D. *More knowledge of coaches/trained staff;*
- E. *Organisations such as Disability Sport England/Sport England/English Federation of Disability Sport/specialised governing bodies;*
- F. *Growth in clubs/mainstream school-PE lessons;*
- G. *Media/increase in role models;*

13. Less than 10 per cent of disabled people regularly took part in physical activity. Discuss the suggestion that disabled participants have equal opportunities to take part in sport. [5]

Five marks for 5 from:

Yes - sub max 3 marks

- A. *Improve access to facilities/disabled sessions/*
- B. *More competition/clubs/teams;*
- C. *Increase numbers of specialised coaches/trained staff;*
- D. *Improve numbers of specialist facilities/access ramps;*
- E. *Publicity/campaigns/increase media coverage/role models/Paralympics;*
- F. *Increased awareness of needs/integrated into P.E. programmes*

No - sub max 3 marks

- G. *Insufficient clubs/teams/competitions;*
- H. *Access a problem to/within sports facilities/special times/sessions for disabled;*
- I. *Lack of qualified coaches/provision of specialist coaching;*
- J. *Need greater use of campaigns/promotion/ Paralympians/Special Olympians to inspire/role models/media coverage;*
- K. *Lack of awareness of needs/abilities in specialised training/courses/PE Programmes.*

14. Suggest reasons why opportunities for participation in activities such as climbing have increased for people with disabilities. [3]

Three marks for 3 from:

- A. *Equal opportunities/inclusion/social acceptance*
- B. *Demand from people with disabilities*
- C. *Improved technology*
- D. *Group identified as lower participation I focus group*
- E. *Adapted equipment/facilities/activities/clubs*
- F. *Specialist coaches*
- G. *More media coverage/role models/greater awareness*
- H. *Physical and mental health benefits*
- I. *PE programmes*
- J. *Additional funding*

15. Suggest how public sector providers could encourage increased participation for those in lower socio-economic groups. [3]

Three marks for 3 from:

- A. Advertising/publicity;
- B. Reduced costs/entry fees;
- C. Reduced equipment /hire fees;
- D. Taster/sampling sessions;
- E. More inner city facilities;
- F. Session run at suitable times;
- G. School extra-curricular sessions;

16. Some groups in society are less involved in sport and physical activity than other groups. Suggest **three** reasons for the lower participation rates among some ethnic minority groups. [3]

Three marks for 3 from:

- A. Racial discrimination/prejudice;
- B. Not encouraged/actively discouraged by parents/peers;
- C. Low status/priority given to sport;
- D. Links to lower socio-economic status/finance/transport;
- E. Conflict with religious customs/ observance/dress code;
- F. Lack of role models/fewer coaches;
- G. Stereotyping

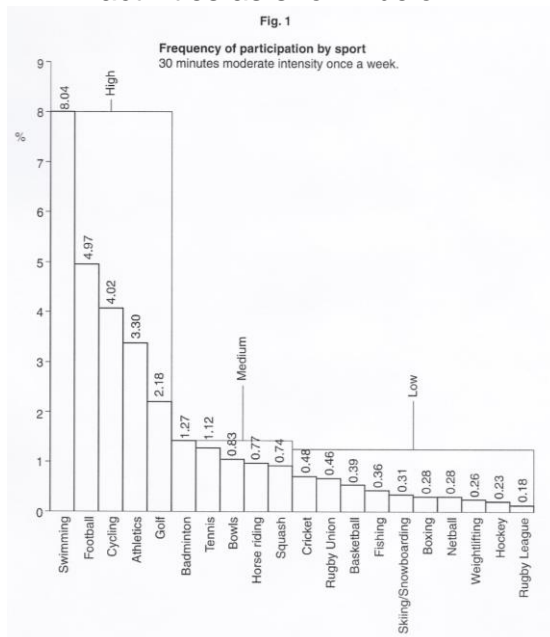
Understand the factors affecting participation

17. Describe the role schools play in influencing young people to become involved in a healthy active lifestyle. [5]

Five marks for 5 of:

- A. Teach PE as part of National Curriculum / variety of activities encourages participation
- B. Stimulate interest / excites / makes it fun / enjoyable
- C. Develop / teach motor skills
- D. Encourage decision making
- E. Develop fitness to participate
- F. Encourage self-evaluation / evaluation of others
- G. Exam courses where you have to get involved
- H. Involved as participant / coach / official
- I. Sports development officers
- J. Extra-curricular clubs / teams
- K. Links to external clubs / teams
- L. Outside coaches come into school / use of expertise
- M. Promotional material / leaflets / posters
- N. Give equipment / facilities / financial support
- O. Give good role models / lead by example / expertise of teachers
- P. Give reward / encouragement / boost confidence / self esteem f
- Q. School sports trips / visits

18. Research has shows different levels of participation in various physical activities as shown below.



Using the diagram, choose **three** activities and give **two** reasons why each has either a high, moderate or low percentage participation. [5]

Five marks total for:

Two marks sub max for each activity (x3):

- Suitable explanation for the level of participation, e.g. high participation in swimming because of availability/access of swimming pools/easy for all ages/cheapness of cycling/little equipment needed for football etc
 - Second explanation for level of participation for same activity: swimming – e.g. the importance of being able to swim for safety/survival/cycling easily learned/football has huge media interest/role models etc.
 - Possible answers for medium: Badminton indoor hall needed but fairly easy to get a game going/lots of tennis courts in parks and recreational grounds but some clubs are very exclusive etc
 - Possible answers for low: Cricket needs a decent ground to play on/not many girls play cricket/skiing not suited for our climate etc
- If choice of physical activity is wrong, then no marks can be given for reasons.

High	Medium	Low
Swimming	Badminton	Cricket / boxing
Football	Tennis	Rugby Union / hockey
Cycling	Bowls	Basketball / weight lifting
Athletics	Horse riding	Fishing / rugby league
Golf	Squash	Skiing / netball

Possible reasons drawn from – credit two:

- Cost, Access, Ethnicity, Media, Role models, Participation rates, Gender, Climate, Transport, Competiveness, Facilities, Equipment, Safety, Image, Risk of Injury, Age, Status, Child-rearing.

19. Suggest **four** ways that disability might affect participation in physical activities.

[4]

Four marks for 4 from:

- A. *May have physical/health difficulties that limit performance/ lacks strength/power/co-ordination /lacks fitness/prone to illness*
- B. *May have mental/cognitive difficulties that limit performance*
- C. *No/lack of suitable activities on offer / not many teams/ players available / lack of opportunity*
- D. *No/lack of specialist coaches/teachers/lack of support*
- E. *Lack of role models/media coverage*
- F. *Limited access to facilities/no wheelchair access/no ramps*
- G. *Difficulties in transport/getting to use facilities*
- H. *Limited specialist equipment/resources/facilities for disability participation*
- I. *Others may discriminate against participation /getting picked on*
- J. *Feeling of helplessness/lack of confidence/low self-esteem/embarrassment*
- K. *Lack of money*

20. Many people participate in physical activities but there are still those that do very little exercise. Explain the reasons why some people do not participate in physical activities.

[5]

Five marks for 5 from:

- A. *Health reasons – physical/mental / overweight / unfit*
- B. *Age*
- C. *Disability*
- D. *Injury*
- E. *Negative past experiences*
- F. *Discrimination/prejudice/gender expectations / bullying*
- G. *Peer pressure*
- H. *Cultural barriers/expectations / religious beliefs*
- I. *The pressure of other interests/work/study/responsibilities at home/caring responsibilities*
- J. *Technology makes life easy / lack of motivation/ ‘couch potato syndrome’/sport on TV rather watched than played / can’t be bothered*
- K. *Lack of confidence/self esteem / poor body image/ (perceived) lack of ability*
- L. *Don’t see the point / don’t believe in the value of participation / waste of time / lack of knowledge*
- M. *Don’t have to do it / PE not compulsory post 16*
- N. *Lack of a role model/parental support*
- O. *Lack of opportunity*
- P. *Lack of money/unemployment*
- Q. *Lack of facilities/equipment*
- R. *Lack of transport*
- S. *Environmental influences/lack of green space*

21. Describe why young people may give up participating in physical activities when they leave school. [5]

Five marks for 5 from:

- A. *Poor health/injury/medical reasons*
- B. *Disability*
- C. *Do not enjoy physical activities/had negative experiences at school with physical activities/(perceived) lack of ability/can't be bothered/lazy*
- D. *Other competing interests/social life/involved with social drugs/alcohol/other hobbies/computer games/ (part time) work too time-consuming/no time*
- E. *Discrimination by others*
- F. *Pressure from peers not to participate/no friends to participate with*
- G. *Cultural/religious reasons/frowned upon by others*
- H. *Lack of confidence/self esteem/feel embarrassed*
- I. *Lack of role model/parental support/encouragement*
- J. *Few opportunities/age limitations/lack of teams/facilities/lack of green space/access (for disabled) lack of transport*
- K. *Lack of money/equipment*
- L. *Not compulsory (after 16)*

22. Suggest **three** reasons why females are less likely than males to participate in sport. [3]

3 marks for 3 from:

- A. *(Some think that) sport is unfeminine/females not suited for sport/sport is too masculine / some sports are traditionally male*
- B. *(Some think that) sport involves physical strength/demands that females cannot cope with/females not strong enough / fear of getting hurt*
- C. *Prejudice/sexism by men/women against participation/pressure from others not to be involved or lack of family/friends support*
- D. *Not enough time/child rearing responsibilities make it difficult to find time*
- E. *Not enough child care or crèche facilities*
- F. *Not enough sports / clubs / teams for female participation*
- G. *Media representation of sport is male dominated/lack of coverage of female sports*
- H. *Too much emphasis on body image of female participants - can lead to females feeling they cannot match these images*
- I. *Not enough female role models*
- J. *Lack of privacy/inappropriate facilities / cultural demands*
- K. *Pregnancy restricts activities*

5b Commercialisation of physical activity and sport

Understand the idea of commercialisation and the relationship between sport, sponsorship and the media

1. Elite performers have the potential to earn vast sums of money. What are the characteristics of commercial sport? [4]

Four marks for 4 from:

- A. Extensive media coverage
- B. Large audiences
- C. Professional sport
- D. Winning/success is important
- E. Entertainment/viewing spectacle important/media friendly
- F. Sponsorship deals/advertising deals/extensive advertising/merchandising
- G. Gate receipts/ticket sales
- H. Players have contracts/endorsements

2. Suggest **three** ways that a sport may receive support from a commercial organisation. [3]

Three marks for 3 from:

- A. Sponsorship;
- B. Advertising contracts;
- C. Merchandising contracts / endorsements;
- D. TV rights / Media contracts;

3. Suggest three ways that a business benefits from providing commercial support to a sport. [3]

Three marks for 3 from:

- A. Increased commercial sales/company or product awareness;
- B. Improved company/ product image;
- C. Link to the image of sport/young/healthy/competitive or equivalent;
- D. Corporate hospitality.

4. Explain why major sporting events rely heavily on funding from commercial sponsorship and the media. [3]

Three marks for 3 from:

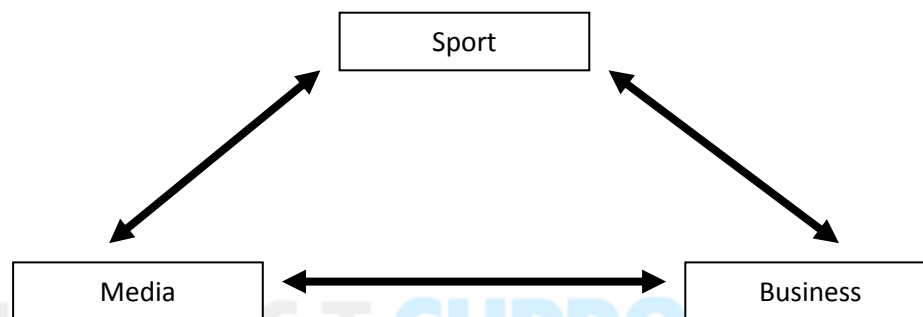
- A. Ticket sales insufficient to cover costs;
- B. Expensive to accommodate performers / officials;
- C. High cost of security;
- D. Provide high quality facilities / spectator access / regenerate facilities;
- E. Promotion of the event;
- F. Excess funds used to reinvest and develop sport further/ develop grass roots;
- G. Prize money / attract top performers and prize money.

5. Suggest reasons why a performer should consider the nature of a company's product before accepting sponsorship from them. [3]

Three marks for 3 from:

- A. *Product may be in opposition to the characteristics/values of sport/not healthy*
- B. *Performer may be criticised if product is seen to be opposed to the nature/values/ benefits of sport;*
- C. *Product may not suit the performer's image/ damage future marketability/ sponsorship;*
- D. *Performer/public may be concerned if the product is produced/sold unethically /child labour/fair trade*
- E. *Performer is seen as a role model/is expected to 'set an example'.*
- F. *Product may be against law / advertising restrictions*

6. Describe the relationships shown in the diagram. [4]



Four marks for 4 from:

- A. *Golden triangle;*
- B. *Media uses sport to gain viewers/readers;*
- C. *Media used by business for advertising;*
- D. *Business pays for media advertising space/time;*
- E. *Business pays sport to act as advertising medium;*
- F. *Sport must be in media to attract sponsorship;*

7. Elite performers can earn money through sponsorship. Outline the factors that make a performer marketable. [3]

Three marks for 3 from:

- A. *Attractive to the public/looks good*
- B. *Appeals to wide range of viewing audience/the sport is popular/belonging to a high status club*
- C. *Highly talented/skilful*
- D. *Consistent high level of performance/success/Sunday factor (always get to last stages of a competition)*
- E. *Unique/different to others of similar peer group/offers an image reflecting a product*
- F. *High level of media coverage*
- G. *Good sporting image/sporting ethics/sportsmanship/role model*

8. Explain how elite sport and governing bodies have been influenced by sponsors, the media and commerce. [4]

Four marks for 4 from:

- A. Rules/regulations/scoring systems altered/technology to ensure rules enforced /increased standard of officiating*
- B. Clothing/uniforms changed*
- C. New competitions/formats introduced*
- D. Playing times altered*
- E. Playing seasons altered*
- F. Location of events may be influenced by commercial considerations*
- G. Ticket allocations given to sponsors not fans*
- H. Increased prize money/increased wages*
- I. Funding to support elite/developing performers*
- J. Improved facilities*
- K. Increased advertising at the event/advertising or commercial breaks*
- L. Media can direct public opinion/support about sport or event*
- M. Money still directed to already popular sports e.g. male/able bodied*
- N. Implementation of codes of conduct/banns or fines to encourage fair play/use of technology to limit foul play*

Understand the positive and negative impacts of sponsorship and the media

9. Explain how the media has a positive influence on those who participate in physical activities. [4]

Four marks for 4 from:

- A. Wide/intense/regular coverage of sport on TV*
- B. Internet/web-sites encourages interest and therefore participation*
- C. Press/written media extensive coverage*
- D. Encourages general interest in sport/physical activities/exercise*
- E. Gives ideas about new/novel activities*
- F. Promotes/educates about benefits to health/well being*
- G. Show consequences of low activity levels*
- H. Can inform about how to participate*
- I. Can inform about where to participate*
- J. Entertains and therefore attracts participation (Wimbledon and tennis)*
- K. Media attracts sponsorship/funding to clubs/individuals that may then encourage more participation*
- L. Can lead to rule changes*
- M. Leading to advertising linking products with active living/draws attention to activity (via product)*
- N. Activity can be perceived as fashionable/cool thing to do/raise status*
- O. Media can attract funds for facilities/equipment participation can give prizes*
- P. Shows successful sportspeople that inspires others to participate in different ways/role models*

10. Explain how the media has a negative influence on those who do not participate in physical activities. [4]

Four marks for 4 from:

- A. Negative view that media may link activity to undesirable factors for some people/alcohol/competitiveness etc*
- B. The availability of media may stop people participating in sport/making couch potatoes*
- C. Can give activities a bad name/make it seem dangerous*
- D. Coverage can be limiting/only some sports represented*
- E. Over-emphasis on male/able bodied sport*
- F. Can encourage aggression*
- G. Can encourage nationalism/prejudice/jingoism*
- H. Can lead to events being on at different times/days-affecting participation*

11. Describe the main benefits of the relationship between business, media and sport to elite sport? [2]

Two marks for 2 from:

- A. Sport gets money for allowing events to be televised;*
- B. Business pays sports for advertising at grounds/events/sponsorship;*
- C. Sport becomes popularised/more fans;*

12. What are the main disadvantages of the relationship between business, media and sport to elite sport? [3]

Three marks for 3 from:

- A. Media sensationalise sport/reports dysfunctional aspects;*
- B. Media affects organisation/timing of sport;*
- C. Media can change nature of sport/breaks/length/method;*
- D. Only popular sports televised;*
- E. Business – players spend too much time working/appearances;*
- F. Business – more pressure to win due to sponsorship pressure;*

13. Suggest how the commercialisation of sport through the media has had a positive effect on spectators [4]

Four marks for 4 from:

- A. Increased access to watch sport / live coverage;*
- B. Higher standards of performance;*
- C. High quality stadiums;*
- D. Enhanced viewing experience / interactive technology;*
- E. Greater awareness / knowledge of the sport / creates role models;*
- F. Rules changed to become more exciting spectacle;*
- G. Influenced elimination of negative aspects of sport e.g. hooliganism / responsible reporting.*

14. Suggest how the commercialisation of sport through the media has had a negative effect on spectators [3]

Three marks for 3 from:

- A. *Increased cost / ticket prices / pay-to-view / satellite TV;*
- B. *Merchandise expensive / replica kit frequently changed;*
- C. *Events moved and scheduled depending on prime time / highest viewing figures;*
- D. *Event interrupted to accommodate adverts / commercial breaks;*
- E. *Traditional nature of the game may have to alter / rule changes / time-outs/ clothing;*
- F. *Irresponsible reporting can lead to spectator violence / deviant behaviour.*

15. Give **two** positive effects and **two** negative effects that the media may have on following an active, healthy lifestyle. [4]

4 marks for 4 from: 2 marks sub/max for positive

- A. *Positive*
- B. *Promotes sport /exercise / increases interest through sports coverage / raises profile*
- C. *Promotes healthy living*
- D. *Motivates through role models / sports stars / successful / attractive people / want to look like them*
- E. *Promotional campaigns / public service broadcasting*
- F. *Wide variety on some channels / some minority sports*
- G. *Have created funds / sponsorship that can be used to encourage health / more funding for sports*
- H. *Gives information about healthy lifestyles e.g. the internet*

2 marks max for negative (only 1-mark max for opposites)

Negative

- I. *May reinforce unhealthy lifestyle / alcohol / drugs consumption / gambling / poor role-models*
- J. *Too much contact with the media discourages activity / 'couch potato' syndrome*
- K. *Minority sports under-represented / not many sports shown or represented / only a narrow representation of sports are shown or represented*
- L. *Women's sport / activity under-represented / mis-represented*
- M. *Disability sport under-represented / mis-represented*
- N. *Campaigns against provision.*

16. Suggest how modern-day sponsorship deals have positively influenced the behaviour of elite sports performers. [2]

Two marks for 2 from:

- A. *Train harder to produce higher quality performances;*
- B. *Maintain discipline to project positive image;*
- C. *Display sportsmanship/fairplay/etiquette;*
- D. *Develop good image 'off the field/role model'.*

17. Suggest how modern-day sponsorship deals have negatively influenced the behaviour of elite sports performers. [3]

Three marks for 3 from:

- A. *Pressure to win/win at all costs/cheating;*
- B. *Aggressive play;*
- C. *Deviance/drug abuse to increase performance/mask injury;*
- D. *Negative behaviour - drinking/gambling/sex scandals/just taken the money/laziness*
- E. *Increase gamesmanship;*
- F. *Pressure to compete when injured;*
- G. *Overtraining;*
- H. *Control from sponsor*

Understand the positive and negative impacts of technology

18. Suggest ways that modern television and broadcasting technologies can give the same spectating experience as actually attending the sport event. [2]

Two marks for 2 from:

- A. *Better quality picture/sound;*
- B. *Live/player cam/hawk-eye/ref link;*
- C. *Watch as part of crowd/in pubs/etc;*
- D. *Shared experience with others;*

19. Suggest why modern television and broadcasting technologies can never give the same spectating experience as actually attending the sport event. [2]

Two marks for 2 from:

- A. *Lacks atmosphere;*
- B. *Commentator/producer shapes viewers experience;*
- C. *Less involvement with spectacle;*
- D. *No/little interaction with opposition supporters;*

20. Using examples, identify four areas of technology that can be used to improve performance. [4]

Four marks for 4 from:

- A. *Equipment, e.g. tennis rackets/cricket helmets*
- B. *Clothing, e.g. lycra shorts/lightweight protection*
- C. *Footwear, e.g. running shoes/football blades*
- D. *Surfaces, e.g. all-weather/artificial pitches*
- E. *Facilities, e.g. sport-specific venues/climate control,*
- F. *Cameras, e.g. photo-finish/action replay*
- G. *Computers, e.g. storage of information/match analysis*
- H. *Software, e.g. technique analysis/dartfish*

21. What are the advantages to the spectator of developments in technology? [3]

Three marks for 3 from:

- A. *Increased experience at home through use of more cameras/player cam*
- B. *Wider range of sports accessible/visible through technology e.g. glass walls in squash*
- C. *All-weather surfaces – improved skill, truer bounce, multiple fixtures*
- D. *Improved camera technology e.g. Hawkeye*
- E. *On-screen information/interaction e.g. shots on target*

22. What are the advantages to the performer of increased technology? [4]

Four marks for 4 from:

- A. *Increased knowledge of diet, e.g. carbo-loading*
- B. *Supplementation e.g. creatine*
- C. *Faster rehabilitation e.g. hypoxic / O₂ tents, hypobaric / cryogenic chambers, ice baths,*
- D. *Improved testing to provide feedback on effectiveness of training programmes*
- E. *Improved analysis of performance, e.g. match analysis, GPS data*
- F. *Advances in stress management techniques*
- G. *Advanced / individualised clothing/equipment design, e.g. lycra suits/prosthetics*
- H. *Facilities to recreate environments, e.g. Humidity / temperature chambers*
- I. *Instant feedback on performance, e.g. heart rate monitors*

23. Suggest ways that a coach can benefit from the use of technology. [3]

Three marks for 3 from:

- 1. *Video analysis of matches to highlight strengths/weaknesses and or tactics/strategies*
- 2. *Video analysis of technique – dartfish*
- 3. *Detail analysis of success of nutrition/training programmes*
- 4. *New training techniques/equipment to improve performance*
- 5. *Specific/detailed recording of performances/split times*

24. Using examples, suggest the potential disadvantages of increased technology in sport. [4]

Four marks for 4 from:

1. *Could lead to increased injury or violence/shorter careers*
2. *e.g. from bladed boots / use of rugby shoulder pads / players bigger / fitter / more powerful*
3. *May lead to cheating / violence*
4. *e.g. drugs*
5. *Can disrupt or slow down 'game'*
6. *e.g. time taken for playback*
7. *Could be an unfair advantage / be expensive / be dependent on sponsor*
8. *e.g. technology not equally available to all such as high tech bikes*
9. *Reduces traditional ethic or nature of sport / can lead to 'win at all costs' ethic*
10. *e.g. use of high tech equipment at junior or local level / TV or internet or modern media that has made sport a global 'product'*

25. Suggest how the increased use of technology to help officials make the correct decision has improved sporting events. [3]

Three marks for 3 from:

- A. *Ensure correct decisions are made/fair competition/less controversy/players more confident in decisions;*
- B. *Helps officials communicate with each other;*
- C. *Less pressure on official to make the final judgement/less post-match criticism;*
- D. *Timing/measurement accurate;*
- E. *Creates excitement in crowd waiting for decision/allows players to officially challenge decisions;*

26. Suggest how the increased use of technology to help officials make the correct decision has spoilt sporting events. [3]

Three marks for 3 from:

- A. *Officials using technology can still be wrong/technology can't be used for everything/officials are an integral part of the sporting contest/over reliance on technology/lose respect of official's decision being final;*
- B. *Specific technology used must be accurate/high level of reliability;*
- C. *Changes the nature of the sport;*
- D. *Cost limits use of technology at events/not consistent for all players or spectators;*
- E. *Breaks in play can be disruptive for spectators if too long;*

5c Ethical issues

Understand how the conduct of performers may vary

1. Give **three** reasons why it is important for all those involved in a physical activity to abide by rules and codes of behaviour. [3]

Three marks for three from:

- A. *To prevent injury/less dangerous*
- B. *For fair play/so that the activity/game can be played fairly/effectively/flowing*
- C. *So all can enjoy the activity*
- D. *Important to establish so that all participants know what is expected of them when playing a particular sport or engaging in exercise and physical activities/following role model behaviour*
- E. *So that behaviour is socially acceptable (in a particular culture) to have good control*
- F. *To show respect to those around you/well mannered/to care about the well-being of others/sportsmanship/good etiquette/respect*
- G. *To not be disqualified/sent off/fined*
- H. *To not let your team mates down/give them a bad name*

2. Give **three** examples of etiquette when participating in physical activities. [3]

Three marks for three from: (reward specific examples)

- A. *Shaking hands with opponents/showing respect*
- B. *Thanking officials*
- C. *Never argue/disagree with officials respect officials*
- D. *Never swear/be abusive*
- E. *Do not stretch/bend rules to your advantage*
- F. *Always sticking to the rules*
- G. *Lose gracefully/congratulate opponents who beat you*
- H. *If you hurt someone then showing concern*
- I. *Sharing resources/facilities/equipment*
- J. *Do not over-celebrate when you win/do not show arrogance*
- K. *Replacing weights or equipment after use / wiping your sweat off exercise equipment*
- L. *Any other acceptable and relevant example of etiquette*
- M. *Three cheers at the end of a game*

3. Give **three** reasons why it is important to show sportsmanship when participating in physical activities. [3]

Three marks for three from:

- A. *To play fairly/to be fair/to be generous/to show etiquette/good manners/show gratitude/maintain a positive mental attitude/feel good about yourself*
- B. *So that you can stick to the rules*
- C. *To stop/avoid injury or collision or danger/concern for the well-being of your opponent*
- D. *To show respect for your opponent/be friendly*
- E. *To ensure that everyone can play the game/to have a good game/let the game flow/help the referee/prevents anger or aggression*
- F. *To make it more enjoyable as a spectator/to watch*
- G. *To avoid arrogance/showing off/so that others will see you in a good light/to get praise/status/recognised as a fair team/otherwise you may be seen as cheating*
- H. *You may not be selected if not shown/could be banned*
- I. *To be a good role model/encourages other to show good sportsmanship.*

4. Explain, using examples, what is meant by the term gamesmanship. [3]

Three marks for 3 from:

- A. *Gamesmanship – art of winning games by cunning means without actually cheating/breaking the rules;*
- B. *Not follow the etiquette of the game;*
- C. *Not declare / admit to a foul / contradict / deceive the official / claim for a decision*
- D. *knowing it's not theirs;*
- E. *Verbal sledging / abuse / distraction of opponent;*
- F. *Time wasting / delay play;*
- G. *Pre-match psyching out tactics.*

5. Explain, using examples, the difference between sportsmanship and gamesmanship. [3]

Three marks for 3 from:

- A. *Sportsmanship – playing by the unwritten rules / code of ethics / fair play / etiquette;*
- B. *Gamesmanship – art of winning games by cunning means without actually cheating / breaking the rules;*
- C. *One example of sportsmanship;*
- D. *One example of gamesmanship.*

6. Describe how the ethic of fair play encouraged and maintained at the highest level of sport [3]

Three marks for 3 from:

- A. *Penalties within the event – bookings/free kicks/ sin bin or eq.;*
- B. *Penalties after the event – bans/fines or eq.;*
- C. *Fair play awards / allocation of place in major event based on disciplinary record;*
- D. *Clubs fined / points deducted;*
- E. *Matches played behind closed doors / spectators banned from watching;*
- F. *Fair play charters / code of conduct / campaigns;*
- G. *Drug testing*

Understand the different prohibited substances and the methods that certain types of performers may use

7. Performance enhancing drugs are used by some performers to try and gain an advantage over their opponents.
Describe the supposed beneficial effects of performance enhancing drugs on the performer. [4]

Four marks for four from:

- A. *Can increase levels of performance / play better*
- B. *More strength / builds muscle*
- C. *Have more energy / can last longer / recover faster / more stamina / train at greater intensity / be fitter*
- D. *Mask injury / can endure injury / pain better*
- E. *Increased speed / power*
- F. *Increase in red blood cells / increase in O₂ availability*
- G. *Reduce weight*
- H. *Control anxiety / calms / relaxes*
- I. *Lowers heart rate*
- J. *Speeds reactions / more alert / better concentration*
- K. *Increases confidence*

8. Suggest the type of performer who might be involved in blood doping and describe how the process works. [4]

Four marks for 4 from:

- A. *Marathon runner / equiv*
- B. *Increase red blood cells*
- C. *Remove and store sample of blood*
- D. *Body replaces lost amount*
- E. *Re-infused stored blood near event*
- F. *Body carries more oxygen*

9. Suggest what type of performer may take stimulants and why they may take them. [2]

- A. Any performer needing to increase alertness - sprinter / table tennis player, boxer, etc
- B. Increase alertness / reduce reaction time / reduce tiredness

10. Suggest why a performer might take diuretics. [3]

Three marks for 3 from:

- A. Remove excess water / dehydrates
- B. Lose weight
- C. E.g. for boxing, horse riding
- D. Mask / remove other drugs

11. Suggest why a performer might take beta-blockers. [3]

- A. Reduce heart rate / muscle tension / blood pressure
- B. Improves fine motor control / increases precision
- C. E.g. golfers / snooker players

12. Suggest what type of performer may take anabolic agents and why they might take them. [2]

- A. Power / strength performer
- B. Increase in muscle size

13. Describe the potential negative effects of performance enhancing drugs on the performer. [4]

Four marks for 4 from:

- A. Withdrawal symptoms if you stop
- B. High blood pressure
- C. Skin problems/acne
- D. More aggression/rage
- E. Addiction/you can't help but take them/a habit
- F. Anxiety/depression/lower self-esteem
- G. Can lead to being banned/fined/disqualified
- H. Labelled as a cheat by others/others have low opinion of you
- I. Can affect gender characteristics/males get female characteristics /females get male characteristics
- J. Heart disease/blood clots/kidney/internal organ damage/poor health/die
- K. Infections/AIDS
- L. Infertility
- M. Dehydration
- N. leads to more injury
- O. Lack of concentration/slower reactions

14. Suggest **three** reasons why elite sport performers should be allowed to use performance enhancing drugs just like any other training aid. [3]

Three marks for 3 from:

- A. *Battle against drugs is expensive/time consuming;*
- B. *Detection not effective/always behind chemists;*
- C. *Difficult to define drug as compared to aid/supplement;*
- D. *Sacrifices performer makes to achieve success is personal;*
- E. *High performance leads to more spectators/sponsors/money;*
- F. *Level playing field for all;*

15. Suggest **three** reasons why elite sport performers should not be allowed to use performance enhancing drugs just like any other training aid. [3]

Three marks for 3 from:

- A. *Side effects are dangerous/health risks;*
- B. *Young tempted to use them/role model effect;*
- C. *Coaches/peer pressure may force performers to use drugs;*
- D. *Sport about using natural talent;*
- E. *Drug use outside this concept;*
- F. *Cheating/unethical;*
- G. *Costly;*

Understand the positive and the negative effects of spectators at events

16. Describe **three** steps that have been taken to prevent hooliganism. [3]

Three marks for 3 from:

- A. *CCTV in grounds;*
- B. *Prevention of known troublemakers travelling to matches / reporting in to local police station/life ban / equiv;*
- C. *Banning of alcohol within grounds / moving kick off times;*
- D. *Closing local pubs / bars / equiv;*
- E. *Segregation of rival fans;*
- F. *Restriction / control of ticket sales / family areas / Identity cards;*
- G. *All seater stadia;*
- H. *Increased stewarding / policing;*
- I. *Better police intelligence;*
- J. *Better player behaviour;*
- K. *Ban/fine team / country / close stadia;*
- L. *Appeal by role models / NGBs for fans to behave*

17. Suggest **three** reasons why football should suffer from hooliganism. [3]

Three marks for 3 from:

- A. Young working class males releasing aggressive tendencies/ masculinity / macho*
- B. Tribalism / gang culture— protection from ‘invading’ opposition / religious differences / old rivalries.*
- C. Nationalism – seeing other country’s / teams fans as the enemy.*
- D. Thrill seeking/adrenaline rush*
- E. Political notions linked to racism etc. by neo-Nazi groups / media exposure.*
- F. Alcohol / status of the game/ media hype/ on pitch action/*



6 Health and fitness

Linking participation in physical activity, exercise and sport to fitness, health and well-being

1. Identify the **three** components of health. [1]

A. *Physical, Social and Mental*

2. Identify **three** benefits of exercise on physical health and well-being. [3]

Three marks for 3 from:

A. *Improve your heart function*

B. *Improve the efficiency of the body systems – cardio-vascular system*

C. *Reduce the risk of some illness, e.g. diabetes*

D. *Help to prevent the onset of obesity*

E. *Enable you to carry out everyday tasks without getting tired*

F. *Provide a feeling that you can comfortably carry out activities and enjoy them*

3. Identify **two** benefits of exercise on mental health and well-being. [2]

Two marks for 2 from:

A. *Reduce stress / tension*

B. *Release feel good hormones / serotonin*

C. *Enable person to control emotions*

4. Identify two benefits of exercise on social health and well-being. [2]

Two marks for 2 from:

A. *Basic human needs are being met (food, shelter and clothing)*

B. *Individual has friendship and support / some value in society / socially active*

C. *Individual suffers little stress in social circumstances*

5. Identify **four** ways that health and well-being could be shown to be happening. [4]

Four marks for 4 from:

A. *Satisfaction with life/contentment*

B. *Frequency of positive feelings/feeling good/positive/looking on the bright side/happy/positive mental health*

C. *The frequency of activities/how active you are/get involved in sport/exercise*

D. *Looking after yourself/drugs/alcohol/diet/following a balanced, healthy lifestyle*

E. *Self pride/self esteem/have a place in society*

F. *How lonely /amount/quality of friendships/ support of others/socially healthy*

G. *Health screening aspects/levels of blood pressure/cholesterol/BMI*

H. *Confidence/levels of stress/anxiety*

I. *Fitness tests*

J. *Good sleep patterns*

K. *Questionnaires/PARQ*

L. *Not being poor/in poverty*

6. Describe the main benefits of a healthy, active lifestyle. [5]

*Five marks max. One mark for each correct response
(look for equivalents)*

- A. *Physical health/not getting ill/less prone heart disease/other diseases*
- B. *Less prone to injury*
- C. *Live longer*
- D. *Components of physical fitness improving/keep fit*
- E. *Mental health/feel good/happy/positive feelings*
- F. *Image/self esteem/confident/feel good about yourself*
- G. *Enjoyment/as a hobby*
- H. *Social/friendship*
- I. *Sense of achievement*
- J. *Can be active/get involved/keep doing physical activities /be good at an activity/can cope with demands of everyday life*
- K. *Not getting tired easily/offsets fatigue*
- L. *Avoids obesity/being overweight*
- M. *Avoids being underweight anorexic*

7. Identify **three** benefits of improved fitness. [3]

Three marks for 3 from:

- A. *Improved ability to cope with the demands of environment*
- B. *Reduce chances of suffering injuries*
- C. *Easier to complete physical work*
- D. *Feel more content/happy / increased well-being*

How exercise can suit the varying needs of different people

8. Explain why older people may not participate in physical activities as much as other age groups. [5]

6 marks for 6 from:

- A. *Health reasons may stop them / illness / bones become weaker / mental illness*
- B. *Injury/disability/lack of mobility may prevent effective movement*
- C. *Lack of fitness so unable to be active / lack of energy*
- D. *Lack of ability/skill so cannot do the activity*
- E. *Lack of confidence/low self-esteem so give up easily*
- F. *Other pressures from other interests/hobbies/ work so unlikely to participate / family responsibilities*
- G. *Lack of older role models to stimulate participation*
- H. *Lack of appropriate facilities/equipment so cannot get involved*
- I. *Lack of transport so unable to get to facilities to facilities*

The consequences of a sedentary lifestyle

9. List **four** lifestyle choices. [4]

Four marks for 4 from:

- A. *Smoke or not*
- B. *Drink alcohol or not*
- C. *To exercise or not*
- D. *Eat a balanced diet or not*
- E. *Actively seek an education or not*

10. Identify four potential consequences of a sedentary lifestyle. [4]

Four marks for 4 from:

- A. *Gaining weight/becoming obese*
- B. *Suffering from heart disease*
- C. *Suffering from hypertension / high blood pressure*
- D. *Suffering from diabetes*
- E. *Suffering from poor sleep / insomnia*
- F. *Suffering from poor self-esteem / confidence*
- G. *Feeling tired / lethargic*
- H. *Lack of friends / poor communication skills*

Obesity and how it may affect performance in physical activity and sport

11. Suggest how obesity may affect fitness. [3]

Three marks for 3 from:

- A. *Limits stamina/cardio-vascular endurance / difficult to perform any long duration activities*
- B. *Limits flexibility / difficult to use full range of movement at joints*
- C. *Limits agility / difficult to change direction quickly*
- D. *Limit speed/power / hard to react quickly or produce force.*

12. Identify **three** diseases associated with obesity. [3]

Three marks for 3 from:

- A. *Cancer*
- B. *Heart disease/heart attacks*
- C. *Increase in blood pressure / hypertension*
- D. *Diabetes*
- E. *High cholesterol / atherosclerosis / arteriosclerosis*

13. Describe how you would use the body mass index (BMI) to assess a young person's readiness for exercise. [4]

Four marks max. One mark for each correct response.

- A. *To indicate how fit you are*
- B. *To recognise that they are overweight*
- C. *Indicates how much exercise should be done/need for an exercise programme*
- D. *This is a measurement of your weight (kg)/weigh them*
- E. *Divided by your height (m)/measure their height*
- F. *Compare score to national norms/check against BMI chart/graph*
- G. *Age/body composition is another variable/factor*
- H. *High score then overweight/undesirable/a BMI greater than 25 indicates being overweight*
- I. *A score between 18-25 more desirable*
- J. *Over 40 a serious health risk*
- K. *30 indicates obesity (in adults)/health risk*
- L. *BMI should not be the only measure for readiness to exercise*
- M. *Should not be used to assess those who are pregnant/highly trained athletes*

14. Explain how over-eating can limit participation in physical activities. [4]

4 marks for 4 from

- A. *Not fit enough to participate - carrying too much weight to be involved in physical activities*
- B. *Tiredness - lethargy/lack of motivation / laziness to participate*
- C. *Lack of mobility/speed - cannot move efficiently*
- D. *Related health issues - such as diabetes etc may limit participation*
- E. *Feeling of embarrassment - low self-esteem/not wanting to participate because of feeling hopeless/don't feel you're any good / lack of confidence*
- F. *The negative views of others /discrimination - others may mock/bully/don't think that you are any good.*
- G. *Increased risk of injury therefore limits participation /*
- H. *increase pressure on joints can lead to conditions such as arthritis.*
- I. *Short term effects of overeating such as sickness and feeling bloated*

The most suitable body type (somatotypes) for particular sports (or positions within a sport)

15. Suggest two activities that might suit an ectomorph, giving reasons for your answer. [3]

- A. *Thin, lean and tall body shape*
Two marks for 3 from:
- B. *High jump / long jump*
- C. *Tennis*
- D. *Basketball*
- E. *Endurance activities, e.g. marathon.*

How energy is gained from food and used

16. The average adult male requires 2500 kcal per day. Suggest **three** factors that may affect that figure. [3]

Three marks for 3 from:

- A. Age
- B. Height
- C. Activity / exercise level / energy expenditure
- D. Basal metabolic rate / BMR

Reasons for having a balanced diet

17. Describe characteristics of a balanced diet. [5]

Five marks for 5 from:

- A. Eating the right amount (for energy expended) / the right amount of calories / eating according to how much you work/exercise.
- B. Have an appropriate portion size/not too much or too little food
- C. Eat breakfast
- D. Sufficient water
- E. Limit or non-use of alcohol
- F. (Approx 50%) carbohydrates / carbs
- G. Not too much sugar
- H. Not too much salt
- I. (About 30-35%) fats/not too many (saturated) fats
- J. (About 15-20%) protein (needed for repair)
- K. Fibre / roughage intake sufficient
- L. Sufficient minerals
- M. Sufficient vitamins
- N. Plenty of fruit/vegetables/at least 5 a day / variety of foods / different food groups/Eat well plate/healthy eating plate.

The role of carbohydrates, fat, protein, vitamins and minerals

18. Explain the role of vitamins and minerals in keeping us healthy. [4]

*Four marks for 4 of:
(Vitamins) sub max 3 marks*

- A. Prevent infections/illness
- B. Help to produce energy
- C. Helps with metabolism/with body systems working effectively

(Minerals) sub max 3 marks

- D. Needed for strong/healthy bones/teeth/skin
- E. Essential for blood/helps with carrying oxygen
- F. Essential for effective growth/development

19. Give a food example of each of the following:

- Carbohydrates
- Fats
- Protein
- Vitamins

and explain why each is important for a healthy lifestyle. [4]

Four marks for:

- A. *Carbohydrates - cereals/ pasta /etc - for energy*
- B. *Fats - meat / dairy /etc for energy / protection*
- C. *Proteins - meat / fish / etc for growth /repair*
- D. *Vitamins - fruit vegetables - combat disease / keep healthy*

Reasons for maintaining water balance

20. Explain why water is an important component of a balanced diet. [2]

Two marks for 2 from:

- A. *(Water) Can carry nutrients*
- B. *(Water) helps to remove waste products*
- C. *(Water) helps to regulate body temperature/prevent heat exhaustion*
- D. *(Water) to replace lost fluid due to sweat/urine/to re-hydrate*
- E. *(Water) to help blood flow/reduce viscosity*
- F. *(Water) to maintain efficient brain function / prevent dizziness*

