The EverLearner

National Mock Exams 2025

POWERED BY ExamSimulator

Mark Scheme

NCFE L1/2 TECHNICAL AWARD in HEALTH AND FITNESS 2024 (VCERT)

Please read before distributing to students.

Purpose of this document

This document and the associated question paper are based on the data analysis performed by The EverLearner Ltd and published within the 2025 infographics. Please, note the following:

- We believe this mark scheme has a very strong association with previous NCFE Level 2 Technical Award Health and Fitness exams in relation to command terms, skills, AO distribution, extended writing requirements and topics.
- However, this is categorically NOT a mark scheme for a predicted paper. No one can accurately predict an exam paper and we make no claim to this end.
- It is vital that you only use this document internally in your school/college. Publishing the document online or sharing it in any other way is strictly prohibited, as this will undermine the potential educational experiences of students in other schools/colleges.
- Finally, please make sure you attend the associated revision session in May.

This mark scheme contains:

- Copy of each question for reference
- Marking guidance where appropriate
- Marking points containing alternative acceptable responses plus relevant assessment objective

How should schools use this mark scheme?

The mark scheme has been constructed specifically for the exam paper used in The EverLearner's National Mock Exams from 2025. Many of these questions will be discussed in the live revision show provided by James Simms on **Wednesday 7th of May 2025 at 15:30** (available to all subscribing schools live and on demand; a shorter version for non-subscribers will be available on YouTube after the live session).

The paper is available to be set, answered and marked online via ExamSimulator. ExamSimulator is a premium resource available via TheEverLearner.com and provides immediate diagnostics of student writing performance after every exam answer. Get in touch with us to start a free trial.

I hope this helps both students and teachers in their exam preparations.

James Simms

The EverLearner

Subject	Physical Education
Course	**NCFE** Level 1 & 2 (2022): Technical Award in Health and Fitness
Time allowed	1 hour 30 minutes

Title	**NCFE** Level 1 & 2 (2022) Technical Award in Health and Fitness - National Mock Exam 2025

Guidance	• This paper is marked out of 80 marks. • You have 90 minutes (plus additional time for those who have Exam Access Arrangements). • Answer all questions. • A calculator is permitted for this exam. • This paper contains two 9-mark questions. • If the timer reaches zero prior to you submitting your paper, the software will automatically submit your responses. • Good luck.

Total marks	80

1. Which **one** of the following is the movement of a limb away from the midline of the body?

Marking points **(maximum 1)**

(1) [AO 1] C-Abduction/Abduction/C

2. Which **one** of the following is an example of a short bone?

Marking points **(maximum 1)**

(1) [AO 2] A-Carpals/Carpals/A

3. Which **one** of the following is also known as the prime mover?

Marking points **(maximum 1)**

(1) [AO 1] D-Agonist/Agonist/D

4. Fast-twitch muscle fibres are white in colour.
Identify **one other** characteristic of fast-twitch muscle fibres.

Marking points **(maximum 1)**

(1) [AO 1] Fast contraction speed

(2) [AO 1] Fast to fatigue/Fatigue easily

(3) [AO 1] Produce powerful forces over a short period of time/Produce powerful forces/Powerful forces

(4) [AO 1] Low blood supply

5. Look closely at this image.
Identify the structures of the respiratory system labelled A, B and C.

Marking points **(maximum 3)**

(1) [AO 1] A is the trachea/A- Trachea/Trachea

(2) [AO 1] B is the bronchioles/B- Bronchioles/Bronchioles

(3) [AO 1] C is the diaphragm/C- Diaphragm/Diaphragm

6. Identify **two** features of the alveoli that assist in gaseous exchange **and** explain how diffusion occurs at the alveoli.

Marking guidance

Award max two marks for features. Award max two marks for explanation of diffusion.

Marking points **(maximum 4)**

(1) [AO 1] Moist, thin walls/Moist walls/Thin walls

(2) [AO 1] Large surface area for gaseous exchange/Large surface area

(3) [AO 1] Short diffusion pathway

(4) [AO 1] Surrounded by capillaries/High number of capillaries around alveoli

(5) [AO 3] Diffusion is the movement of gases from high concentration to low concentration/High concentration to low concentration

(6) [AO 3] Oxygen in the alveoli moves from high concentration and diffuses into blood capillaries where oxygen concentration is lower/Carbon dioxide in the blood moves from high concentration and diffuses into the alveoli where carbon dioxide concentration is lower

7. Look closely at this image.
Identify the muscular contraction occurring at the biceps during the **downward** phase of a biceps curl.
Justify your choice.

Marking guidance

Award max one mark for identifying the correct contraction. Award max two marks for the justification.

Do not award justification marks if the identification of the contraction is incorrect.

Marking points **(maximum 3)**

(1) [AO 2] Isotonic eccentric contraction of the biceps/Eccentric contraction/Eccentric

(2) [AO 3] Biceps lengthens under tension whilst contracting/Biceps lengthens during downward phase

(3) [AO 3] Biceps contracts eccentrically to act as a brake when the dumbbell is lowered/Biceps acts as a brake/Acts as a brake

8. Give **two** examples of activities where a performer would use the anaerobic energy system.
Justify your choices.

Marking guidance

Award max two marks for correctly identifying anaerobic activities (AO2 - One mark each).

Award max two marks for justification points (AO3 - One mark for each) .

Accept other suitable examples of anaerobic activities.

Marking points **(maximum 4)**

(1) [AO 2] 100m sprinting/Sprint swimming/Sprinting

(2) [AO 2] Weightlifting/Single weight repetition/1 rep. max

(3) [AO 2] Discus/Javelin/Shot-put

(4) [AO 2] Vault in gymnastics/Somersault in gymnastics

(5) [AO 3] Activity is short in duration/Activity does not last long/Short activity

(6) [AO 3] Activity does not require the presence of oxygen/No oxygen required to perform the skill/No oxygen required

(7) [AO 3] Activity is high intensity/Performed at high intensity/High intensity

(8) [AO 3] Lactic acid is a waste product from completing the activity/Lactic acid is a waste product/Presence of lactic acid

9. Analyse the redistribution of blood whilst taking part in health and fitness activities.

Marking points **(maximum 3)**

(1) [AO 3] Redistribution of blood flow during exercise occurs via the vascular shunt mechanism/Vascular shunt

(2) [AO 3] Vasodilation of blood vessels towards the working muscles

(3) [AO 3] Vasoconstriction of blood vessels towards other organs in the body

(4) [AO 3] Opening of vessels leading to the muscles allows more blood through/Arteries leading to the muscles become wider/Arteries leading to the muscles open

(5) [AO 3] Narrowing of vessels leading to the other organs allows less blood through/Arteries leading to the other organs become narrow/Arteries leading to the other organs narrow

(6) [AO 3] Oxygen required to working muscles to be able to maintain performance levels so vessels vasodilate/To be able to keep playing so vessels vasodilate/To ensure muscles do not fatigue so vessels vasodilate

(7) [AO 3] Less blood to other organs is required, so vessels to other organs vasoconstrict

10. Which **one** of the following fitness components can be tested using the Bruce protocol test?

Marking points **(maximum 1)**

(1) [AO 1] C- Cardiovascular endurance/Cardiovascular endurance/C

11. Which **one** of the following training methods is **most** likely to improve power?

Marking points **(maximum 1)**

(1) [AO 1] B-Plyometric/Plyometric/B

12. Which **one** of the following is a short-term effect of exercise on the cardiovascular system?

Marking points **(maximum 1)**

(1) [AO 1] B-Increased stroke volume/Increased stroke volume/B

13. Describe the long-term effects of exercise on the muscular system from completing health and fitness activities.

Marking points **(maximum 4)**

(1) [AO 1] Muscular hypertrophy occurs/Muscular hypertrophy/Muscle mass increases

(2) [AO 1] Muscles have an increased resistance to fatigue/Muscles can work for longer without tiring

(3) [AO 1] Increase in muscular strength/More force per muscular contraction/Muscles become stronger

(4) [AO 1] Increased tendon strength/Tendons become stronger/Tendons less likely to tear

(5) [AO 1] Increase in muscle capacity to use oxygen/Muscles use oxygen more efficiently

14. Define flexibility **and** muscular endurance.
Explain how flexibility and muscular endurance are beneficial to a goalkeeper in football.

Marking guidance

Accept similar definitions. Award up to two marks for definitions and up to two marks for explanations linked to football.

Marking points (maximum 4)

(1) [AO 1] Flexibility: The range of movement possible at a joint

(2) [AO 1] Muscular endurance: The ability of a muscle or group of muscles to repeatedly contract while avoiding fatigue/Ability of muscles to work repeatedly without tiring

(3) [AO 2] Flexibility is important for a goalkeeper to stretch an arm out to make a save/To have a full range of motion in their kicking/To stretch to catch a high ball

(4) [AO 2] Muscular endurance is important for a goalkeeper to take repeated goal kicks effectively/To make a number of saves in quick succession/To make shuttle runs out of the penalty box to clear the ball and then get back into their penalty box

15. Identify a suitable fitness test for power.
Justify the use of this test for a basketball player.

Marking guidance

Award one mark for identifying test (AO1). Award max two marks for justifications (AO3).

For AO3 points to be awarded, the candidate must link to basketball.

Marking points (maximum 3)

(1) [AO 2] Vertical jump test/Vertical jump/Sargent jump

(2) [AO 2] Standing long jump/Standing broad jump

(3) [AO 3] Measures leg power, which is important for greater jump height when rebounding in basketball

(4) [AO 3] Measures leg power, which is important for executing a lay-up shot to score more points

(5) [AO 3] Measures leg power, which is important to drive up the court with greater speed when dribbling

(6) [AO 3] Measures leg power, which is important when pushing off to change direction more quickly to get past an opponent

(7) [AO 3] Measures leg power, which is important when taking a jump shot/Three-point shot to score more points

16. A 100m sprinter is carrying out a weight training programme.Explain how the sprinter can avoid **reversibility.**

Marking points **(maximum 4)**

(1) [AO 2] Must continue weight training/Keep weight training/Don't stop

(2) [AO 2] Prevent injury by lifting suitable weights/Prevent injury by having good technique/Good technique to prevent injury

(3) [AO 2] Prevent injury by using a suitable number of reps and sets/Use a suitable number of reps and sets to prevent injury/Number of reps and sets

(4) [AO 2] Avoid overtraining/Avoid overuse/Avoid burnout

(5) [AO 2] Limit rest days/Not too much rest/Not too many rest days

(6) [AO 2] Maintain motivation through type/Increased range of training types/Varied training

(7) [AO 2] Gradually apply progressive overload/Use progressive overload to avoid injury

17. Circuit training and weight training can be manipulated to help a rugby player increase their speed.
Identify **one other** training method that would benefit a winger's speed in rugby.
Justify your choice.

Marking guidance

Justifications must link to the identified training method. Award one mark for suitable training method and up to two marks for justification

Marking points **(maximum 3)**

(1) [AO 2] Fartlek training/Fartlek

(2) [AO 2] Interval training/Interval

(3) [AO 2] Plyometric training/Plyometric

(4) [AO 3] Fartlek involves varying speeds so sprint sections can be included/Explosive sprints can be included in Fartlek training

(5) [AO 3] Fartlek training is specific to a rugby player, as they will have parts of a game where they run, walk and sprint

(6) [AO 3] Interval training can be completed by doing high-intensity sprint intervals followed by rest intervals/Sprint intervals followed by rest intervals/Sprinting and resting

(7) [AO 3] Interval training is specific to a winger in rugby, as the position requires high-intensity sprints followed by rest/Winger in rugby completes short, high-intensity sprints during a game/Winger in rugby completes sprints followed by rest in a match

(8) [AO 3] Plyometric training involves hopping, bounding and jumping to improve speed/Manipulates fast-twitch muscle fibres/Improves the force of contraction in muscles

(9) [AO 3] Plyometrics improve the winger's ability to push off with force during a sidestep when running at speed/Plyometrics improve winger's ability to sprint and jump for a high ball/Plyometrics improve the winger's ability to burst through tackles at speed

18. Which **one** of the following pieces of information is gathered as part of a lifestyle questionnaire?

Marking points **(maximum 1)**

(1) [AO 1] A-Dietary choices/Dietary choices/A

19. Which **one** of the following is a negative effect of consuming alcohol?

Marking points (maximum 1)

(1) [AO 2] D-Impaired balance/Impaired balance/D

20. Which **one** of the following components of a balanced diet aids digestion?

Marking points (maximum 1)

(1) [AO 2] C-Fibre/Fibre/C

21. Describe **one** negative effects of smoking and **two** negative effects of stress on health and fitness.

Marking guidance

Award one mark for effects of smoking and two marks for effects of stress.

Marking points (maximum 3)

(1) [AO 1] Smoking leads to breathlessness, which affects ability to exercise/Leads to breathlessness

(2) [AO 1] Smoking leads to narrowing of arteries/Leads to restricted blood flow due to narrow arteries/Restricted blood flow

(3) [AO 1] Stress leads to performing anxiously/Not performing to your best/Becoming anxious when performing

(4) [AO 1] Stress leads to irritability/Feeling irritable/Becoming angry

(5) [AO 1] Stress leads to fatigue, which affects ability to exercise/Leads to fatigue

22. Name **one** component of an effective cool-down.
Explain the benefits of a cool-down to aid recovery after an exercise session.

Marking guidance

Award one mark for component (AO1). Award up to three marks for explanation (AO3).

Marking points (maximum 4)

(1) [AO 1] Pulse-lowering activity/Pulse lowering

(2) [AO 1] Static stretches/Stretches

(3) [AO 3] Cool-down allows breathing rate return to normal/Gradually lowers breathing rate

(4) [AO 3] Cool-down will lower heart rate/Heart rate gradually returns to resting rate

(5) [AO 3] Cool-down gradually decreases body temperature

(6) [AO 3] Cool-down assists in the removal of waste products/Removal of lactic acid

(7) [AO 3] Cool-down reduces chances of delayed onset of muscle soreness DOMS/Reduce chances of stiffness/Reduce chances of soreness

(8) [AO 3] Cool-down reduces recovery time, allowing performer to train again quickly/Play again quickly

23. A lifestyle questionnaire is an example of a health and fitness analysis tool.
Identify **two other** health and fitness analysis tools **and** explain how each of these can be used to benefit a performer's training programme.

Marking guidance

Award two marks for identifying analysis tools. Award two marks for explanation.

Marking points (maximum 4)

(1) [AO 1] Physical activity readiness questionnaire/PAR-Q

(2) [AO 1] Food diary

(3) [AO 2] PAR-Q can be used to assess a performer's suitability to exercise/Used to induct a performer at the start of a training programme/Assess performer's current fitness levels

(4) [AO 3] Food diary establishes performer's dietary habits before and during a training programme/Established dietary changes required to meet fitness goals/Monitors that the performer is eating a balanced diet to optimise training

24. Sleep, intake of food and completing a cool-down are all methods of recovery. Identify **three other** recovery methods **and** explain how each will benefit a marathon runner.

Marking guidance

Award up to three marks for recovery methods . Award up to three marks for explanation.

Marking points (maximum 6)

(1) [AO 1] Static stretching

(2) [AO 1] Massages

(3) [AO 1] Ice baths

(4) [AO 1] Rest

(5) [AO 1] Rehydration

(6) [AO 2] Static stretching to reduce delayed onset of muscle soreness in the days after the race/Reduce stiffness/Reduce soreness

(7) [AO 2] Massage encourages blood flow through the muscles to flush out waste products after the race/Flush out waste products/Flushing out waste products leads to quicker recovery

(8) [AO 2] Ice baths help recovery by flushing muscles with oxygen-rich blood/Aid recovery by reducing chances of DOMS

(9) [AO 2] Rest allows adaptations to occur to the runner's body/Allow muscle repair following stresses on muscles during the race

(10) [AO 2] Rehydration can help regulate body temperature during and after the race/Replenish electrolytes, which help with organ function and muscle contractions/Helps increase blood flow to aid recovery

25. Reversibility is a principle of training.
Explain how **other** principles of training can be applied to optimise performance in health and fitness activities.

Marking guidance

NCFE Level 2 Technical Award Health and Fitness (9 Marks)

Award max. three marks for AO1 points. Award max. three marks for AO2 points. Award max. three marks for AO3.

Marking points (maximum 9)

(1) [AO 1] Specificity can be applied by making training relevant to your chosen activity/Making training relevant to fitness components that are important for the activity/Relevant to the perfomer's specific position

(2) [AO 1] Progression can be applied by gradually increasing the intensity of training/Gradually increasing the amount the performer does whilst training/Gradually increases intensity

(3) [AO 1] Overload is working harder than normal/Putting stress on the body to improve fitness/Greater-than-normal stress on the body for adaptations to take place

(4) [AO 1] Tedium can be avoided by applying variations in training to avoid boredom/Changing the type of training to avoid boredom/Making training engaging and exciting

(5) [AO 2] Example of specificity is a weightlifter completing weight training/A sprinter completing interval training/A tennis player working on serving drills to improve their serve

(6) [AO 2] Example of progression is increasing a training run from 10 minutes to 12 minutes/Increasing a weight-training set by 5kg/Increasing the number of reps in weight training from 8 to 10

(7) [AO 2] Example of overload is lifting a heavier weight to put more stress on the body/Completing more sprint intervals per set to put stress on the body/Completing more reps on a station in circuit training to put stress on the body

(8) [AO 2] Example of avoiding tedium is completing continuous training by running, cycling and swimming to avoid boredom/Change the exercises completed in weight training to avoid boredom/Change the structure of the session to avoid boredom

(9) [AO 3] Applying specificity allows performer to improve on important aspects of their role or position/Allow performer to address weaknesses in their performance/Consolidate strengths within their performance

(10) [AO 3] Progression can be applied using FITT principle/Use FITT to progress training/Overload can be applied using FITT principle

(11) [AO 3] Applying progression ensures the performer sees fitness gains/Avoids the performer's fitness from plateauing/Avoids the chances of reversibility occurring

(12) [AO 3] Applying overload ensures performer puts enough stress on body to see fitness improvements/Allows muscular adaptations to occur/Allows adaptations to occur

(13) [AO 3] Avoiding tedium helps the performer stay motivated/Will train to the best of their ability/More likely to reach intended goals, as they are motivated

26. Evaluate the importance of balance **and** muscular endurance for a rower.

Marking guidance

NCFE Level 2 Technical Award Health and Fitness (9 Marks)

Award max. three marks for AO1 points. Award max. three marks for AO2 points. Award max. three marks for AO3 points.

Marking points (maximum 9)

(1) [AO 1] Balance is maintaining the centre of mass over a base of support/Centre of mass over the base of support/Centre of mass above base

(2) [AO 1] Balance can either be static or dynamic/Static balance/Dynamic balance

(3) [AO 1] Static balance is holding a position still/Maintaining stillness/Stillness

(4) [AO 1] Dynamic balance is maintaining a position whilst moving/Being balanced in motion

(5) [AO 1] Muscular endurance is the ability of a muscle or group of muscles to repeatedly contract without fatigue/Repeated contractions/Without fatigue

(6) [AO 2] Balance is required by a rower when maintaining a sitting position on the slider/Correct sitting position/Not wobbling on the slider

(7) [AO 2] Balance is needed to ensure the rower does not fall out of the boat/Stays in the boat/Doesn't fall in

(8) [AO 2] Rower needs muscular endurance to maintain force of contraction in each stroke/Continue to row with force during each stroke

(9) [AO 2] A rower needs muscular endurance in all muscles especially those of the arms and legs to row in continuous motions

(10) [AO 3] Rowers need muscular endurance in all muscles in order to complete the race quickly/Row quicker and complete the race/Row in a faster time

(11) [AO 3] Muscular endurance ensures the muscles do not fatigue early/Rowing technique does not deteriorate/Muscles only tire at the very end

(12) [AO 3] Muscular endurance of the deltoids is particularly important/Oars continue to move through the stroke/Maintain stroke rate

(13) [AO 3] Muscular endurance in the leg muscles is particularly important/Flexion and extension of the knee/Quadriceps and hamstrings for flexion and extension

(14) [AO 3] Less balance can lead to less stability which will affect the continuity of the stroke rate/Less stability/Uneven stroke pattern

(15) [AO 3] Muscular endurance is arguably more important than balance due to the endurance nature of the sport/Muscular endurance more important than balance/Muscular endurance more important

(16) [AO 3] However, balance is important to maintain stroke rate

(17) [AO 3] Other fitness components are also important such as cardiovascular endurance/Strength/Coordination