## MULTIPLE CHOICE QUESTION PAPER

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**Title**

**MOCK PAPER**

**Level 2**

**Principles of Exercise, Fitness and Health**

**A/600/9017**

### Special Instructions

This theory paper comprises questions that are indicative of the Level 2 Principles of Exercise, Fitness and Health unit.

All questions are multiple-choice.

Answers should be recorded as either a, b, c or d.

This theory paper has 40 marks. A **minimum of 28 marks overall (70%)** are required in order to pass.

**Important: Please do not write on this paper.**

**Note:** You may use a calculator for this assessment.
Q1
**How is cardiac output calculated?**

a. Resting heart rate x maximal heart rate  

b. Heart rate + stroke volume  

c. Resting heart rate + maximal heart rate  

d. Heart rate x stroke volume  

Q2
**Which of the following is a cardiovascular adaptation to aerobic training?**

a. Increased stroke volume  

b. Decreased hypertrophy of skeletal muscles  

c. Decreased number of neuromuscular connections  

d. Increased resting heart rate  

Q3
**Which of the following is a respiratory adaptation to aerobic training?**

a. Increased heart rate during exercise  

b. Increased bone density  

c. Increased oxygen uptake by body tissues  

d. Increased breathing rate during exercise  

Q4
**Which of the following is a long-term effect of aerobic exercise on blood pressure?**

a. Reduced systolic blood pressure only  

b. Reduced systolic and diastolic blood pressure  

c. Reduced diastolic blood pressure only  

d. No change in blood pressure
Q5 Which of the following is a direct symptom of blood pooling following sudden cessation of intense exercise?

a. Heart arrhythmias
b. Dizziness/feeling faint
c. High blood pressure
d. Hyperventilation

Q6 Which of the following is a short-term effect of exercise on bones and joints?

a. Increased synovial fluid
b. Decreased range of movement
c. Increased bone density
d. Decreased stability of joints

Q7 Delayed onset of muscle soreness (DOMS) is characterised by

a. a build-up of lactic acid in the muscles
b. broken capillaries in the muscles
c. blood pooling in the muscles
d. micro tearing of muscle fibres

Q8 Which of the following is most likely to cause delayed onset of muscle soreness (DOMS)?

a. Positive phase of an exercise
b. Negative phase of an exercise
c. Low intensity aerobic exercise
d. Low intensity resistance exercise
Q9  Which of the following is a long-term effect of endurance exercise on type I muscle fibres?

a. Reduced ability to tolerate blood lactate
b. Increased rate of conversion to type II muscle fibres
c. Reduced diameter of the muscle fibres
d. Increased number and size of mitochondria

Q10  Which of the following stretches would be most beneficial for someone who has a kyphotic posture?

a. Standing chest stretch
b. Kneeling hip flexor stretch
c. Standing lower back stretch
d. Lying gluteal stretch

Q11  Diet is an example of which component of total fitness?

a. Nutritional
b. Medical
c. Spiritual
d. Social

Q12  Which of the following is a definition of muscular endurance?

a. The maximal amount of force a muscle/group of muscles can exert
b. The range of motion possible at a joint/group of joints
c. The ability of a muscle/group of muscles to continue to exert force and resist fatigue
d. The ability to maintain aerobic exercise for prolonged periods
Q13 Which one of the following is a component of skill-related fitness?

a. Muscular strength  
b. Co-ordination  
c. Flexibility  
d. Muscular endurance

Q14 Which body type is genetically advantaged in strength-based activities?

a. Ectomorph  
b. Endomorph  
c. Polymorph  
d. Mesomorph

Q15 Which principle of training does the term ‘use it or lose it’ best apply to?

a. Specificity  
b. Reversibility  
c. Individuality  
d. Progressive overload

Q16 Which component of the ‘FITT principles’ should be manipulated first to ensure specificity of training?

a. Type  
b. Frequency  
c. Intensity  
d. Time
Q17
The ability of the body to respond to increased demands placed upon it during training is known as

a. progressive overload
b. individuality
c. adaptability
d. specificity

Q18
A progressive training programme is based upon the principle that

a. overtraining is beneficial to performance
b. the potential for delayed onset of muscle soreness (DOMS) will be reduced
c. regression of an exercise programme is not appropriate
d. without gradual overload performance will not improve

Q19
In which of the following situations should a training programme be regressed?

a. After a two-day break
b. After an injury
c. When time to train is limited
d. When the intensity is achievable

Q20
Which component of the ‘FITT principle’ is more likely to need to be modified when doing home-based exercise?

a. Type
b. Frequency
c. Intensity
d. Time
Q21
Which of the following is most likely to be associated with decreasing the speed of an exercise?

a. Improvement in technique
b. Greater potential for injury
c. Poor postural position
d. Increased cardiovascular fitness

Q22
What effect will shortening the levers have on a resistance training exercise?

a. Make the agonist(s) work harder
b. Make the agonist(s) work less hard
c. Make the antagonist(s) work harder
d. Make the antagonist(s) work less hard

Q23
According to the Chief Medical Officer’s (CMO’s) ‘Start Active, Stay Active’ report how much vigorous intensity activity is comparable to the recommended total duration of moderate intensity physical activity per week for health benefits in adults aged 19-64 years?

a. 55 minutes
b. 65 minutes
c. 75 minutes
d. 85 minutes
Q24  Which of the following is a key safety guideline for working with older people (50 plus)?

a. Longer warm-up only
b. Longer warm-up and cool-down
c. Shorter cool-down only
d. Shorter warm-up and cool down

Q25  Which is the safest method of monitoring exercise intensity in antenatal clients?

a. Heart rate monitoring
b. Heart rate reserve method
c. Karvonen method
d. Talk test

Q26  Which of the following should be avoided when programming exercise for 14-16 year olds?

a. Interval aerobic training
b. Maximal weight lifting
c. Body weight exercises
d. Use of rating of perceived exertion (RPE)
Q27
In which of the following circumstances would it be appropriate to refer a disabled person to another exercise/health professional?

a. The gym wasn't specially adapted
b. The instructor did not feel they had the necessary expertise to design a safe and effective programme
c. The instructor didn’t have the time to work one-to-one
d. Other participants might not be comfortable exercising with him/her

Q28
What is a limitation of using the rating of perceived exertion (RPE) scale to monitor exercise intensity?

a. To be effective a visual RPE scale needs to be used
b. Clients don’t understand it
c. It’s highly subjective so not very effective
d. It’s not suitable for some training environments

Q29
Which of the following is a health benefit of physical activity?

a. Increased LDL (low density lipo-protein) cholesterol levels
b. Reduced risk of developing type 1 diabetes
c. Reduced risk of developing type 2 diabetes
d. Increased insulin resistance

Q30
Physical activity can help reduce the risk of coronary heart disease (CHD) by

a. increasing levels of LDL (low density lipo-protein)
b. decreasing levels of HDL (high density lipo-protein)
c. improving chances of a myocardial infarction
d. improving coronary circulation
Q31
Physical activity is beneficial for both the prevention and management of osteoporosis because it

a. decreases body mass index (BMI) and the weight being placed upon bones
b. increases peak bone mineral density and reduces the risk of fracture
c. supports the ability to take up and use calcium to strengthen bones
d. improves proprioception and range of motion at the joints commonly affected

Q32
Which of the following food groups of the ‘Eatwell Plate’ should be consumed in roughly equal quantities?

a. Bread, rice, potatoes, pasta, other starchy foods AND meat, fish, eggs and beans
b. Fruit and vegetables AND meat, fish, eggs and beans
c. Milk and dairy foods AND meat, fish, eggs and beans
d. Foods and drinks high in sugar and/or fats AND meat, fish, eggs and beans

Q33
What is the average recommended water consumption, in litres per day, for a normal healthy adult?

a. At least 1
b. At least 2
c. At least 4
d. At least 5
Q34
Severe dehydration may be caused when we lose what percentage of our normal bodily water content?

a. 10  
b. 20  
c. 30  
d. 40

Q35
When offering nutritional advice to clients fitness instructors should

a. provide detailed dietary advice following analysis of food diaries  
b. provide advice in line with current fad diets  
c. only give advice in line with national healthy eating guidelines  
d. only give detailed dietary advice related to physical activity participation

Q36
What is a key role of fat in the diet?

a. To support the production of calcium  
b. To manage cholesterol levels  
c. For repair and growth  
d. To provide insulation

Q37
Which of the following is a role of protein in the diet?

a. To provide insulation  
b. Repair and growth  
c. Storage of minerals  
d. Production of red blood cells
Q38
Which of the following foods is highest in unsaturated fats?

a. Oily fish
b. Red meat
c. Curly kale
d. Potato

Q39
Which of the following statements about the energy balance equation is true?

a. If the total energy consumed is less than the total energy expended this will result in no change in weight
b. If the total energy consumed is equal to the total energy expended this will result in weight loss
c. If the total energy consumed is more than the total energy expended this will result in weight gain
d. If the total energy consumed is equal to the total energy expended this will result in weight gain

Q40
Which of the following can be closely linked to poor nutrition?

a. Clinical depression
b. Type 1 diabetes
c. Osteoarthritis
d. Obesity