A level Physical Education Year 12 Revision

Exam Title	Topic Areas	Revision List
Applied Anatomy and Physiology. Exercise Physiology. Biomechanics	Joints, Movements and Muscles	• Shoulder: flexion, extension, abduction, adduction, horizontal flexion/ extension, medial and lateral rotation, circumduction, deltoid, latissimus dorsi, pectoralis major, trapezius, teres minor • Elbow: flexion, extension, biceps brachii, triceps brachii • Wrist: flexion, extension, wrist flexors, wrist extensors • Hip: flexion, extension, abduction, adduction, medial and lateral rotation, iliopsoas, gluteus maximus, medius and minimus, adductor longus, brevis and magnus • Knee: flexion, extension, hamstring group: biceps femoris, semi-membranosus , semi-tendinosus, quadriceps group: rectus femoris, vastus lateralis, vastus intermedius and vastus medialis • Ankle: dorsi flexion, plantar flexion, tibialis anterior, soleus, gastrocnemius • planes of movement: frontal, transverse, sagittal.
Applied Anatomy and Physiology. Exercise Physiology. Biomechanics	Functional Roles of Muscles and Types of Contraction	• Roles of muscles: agonist, antagonist, fixator • Types of contraction: isotonic, concentric, eccentric, isometric.
Applied Anatomy and Physiology. Exercise Physiology. Biomechanics	Analysis of Movement	Analyse Movement with Reference to: joint type, movement produced, agonist and antagonist muscles involved, type of muscle contraction taking place.
Applied Anatomy and Physiology. Exercise Physiology. Biomechanics	Skeletal Muscle Contraction	Structure and Role of Motor units in Skeletal Muscle Contraction • Nervous Stimulation of the Motor Unit: motor neuron, action potential, neurotransmitter 'all or none' law.
Applied Anatomy and Physiology. Exercise Physiology. Biomechanics	Muscle Contraction During Exercise of Differing Intensities and During Recovery	Muscle Fibre Types: slow oxidative, fast oxidative glycolytic, fast glycolytic recruitment of different fibre types during exercise of differing intensities and during recovery.
Applied Anatomy and Physiology. Exercise Physiology. Biomechanics	Cardiovascular system at rest	the relationship between, and resting values for: heart rate stroke volume cardiac output methods of calculating the above cardiac cycle: diastole systole conduction system of the heart linked to the cardiac cycle.

Applied Anatomy and Physiology. Exercise Physiology. Biomechanics	Cardiovascular system during exercise of differing intensities and during recovery	• effects of different exercise intensisties and recovery on: heart rate stroke volume cardiac output methods of calculating the above • redistribution of cardiac output during exercise of differing intensities and during recovery: vascular shunt mechanism role of the vasomotor centre role of arterioles role of pre-capillary sphincters • mechanisms of venous return during exercise of differing intensities and during recovery • regulation of heart rate during exercise: neural factors, hormonal factors intrinsic factors.
Skill acquisition Sports Psychology	Classification of motor skills	Candidates should be able to position and justify examples of movement skills on the following continua: • muscular involvement (gross – fine); • environmental influence (open – closed); • continuity (discrete – serial – continuous); • pacing (externally paced – self paced); • difficulty (simple – complex); • organisation (low – high).
Skill acquisition	The application of classification to the organisation and determination of practice	• describe methods of manipulating skills (part and whole practice; progressive part and whole-part-whole) to facilitate learning and improve performance; • evaluate critically these methods and their effectiveness in the learning of movement skills.
Skill acquisition	Classification of abilities relating to movement skills	• characteristics of ability (innate, underlying and enduring traits); • gross motor abilities with examples; • psychomotor abilities with examples
Skill acquisition	Phases/stages of movement skill learning that affect participation and performance in physical activity	• identify characteristics of the phases of learning (Fitts and Posner) • cognitive; • associative; • autonomous. • apply these phases of learning to practical activities.
Skill acquisition	Types of guidance and their impact on effective performance and participation in a balanced, active and healthy lifestyle	• describe types of guidance used in different phases of learning to improve performance: (visual – early phase; verbal – later phases; manual and mechanical – developing kinaesthetic awareness and knowledge of safety issues); • evaluate critically these different types of guidance.
Skill acquisition	Practice methods and their impact on effective and efficient of movement skills	• describe methods of physical practice (massed; performance of distributed; fixed; varied); • explain the role of mental practice and rehearsal vs. physical practice and rehearsal; • explain the appropriate use of practice methods to maximise effectiveness (for different ability levels and for different activities;

		classification of skills; schema theory); • evaluate critically different types of practice methods and their application to the performance of movement skills.
	Schema theory and its role in developing movement skills and strategies	explain relationships with the motor programme; demonstrate knowledge and understanding of sources of information: recall schema (knowledge of initial conditions; knowledge of response specification); recognition schema (knowledge of sensory consequences; knowledge of movement outcomes);
Skill acquisition	Theories relating to the learning of movement skills and the • development of positive behaviours associated with a balanced, active and healthy lifestyle	• associationalist/connectionist theory of operant conditioning (Skinner); • the cognitive theory related to the work of Gestaltists (insight learning and ways of thinking to optimise learning);
Skill acquisition	Reinforcement of movement skill learning and behaviours associated with a balanced, active and healthy lifestyle	• discuss positive reinforcement, negative reinforcement and punishment (with examples from candidate's practical activities); • discuss Thorndike's Laws: knowledge of methods of strengthening the stimulus-response (S-R) bond through repetition (Law of exercise); satisfaction/annoyance/emotional intensity (Law of effect); through physical and mental preparedness (Law of readiness); • discuss appropriate use of reinforcement in skill learning and in promoting positive, healthy lifestyle behaviour.
Skill acquisition	Transfer of learning to develop Candidates should be able to: effectiveness in physical activity	describe types of transfer that occur in practical • performance: positive transfer; negative transfer; proactive transfer; retroactive transfer; bilateral transfer; • demonstrate knowledge and understanding of ways of optimising the effect of positive transfer; • demonstrate knowledge and understanding of ways of limiting the effect of negative transfer; • evaluate critically different types of transfer and their impact on the development of movement skills; • explain the effects of transfer of learning on schema development and the importance of variable practice. •
Sport and Society. Contemporary Issues in Physical Activity and Sport	How social and cultural factors shaped the characteristics of, and participation in, sports and pastimes in pre-industrial Britain:	social/observational learning theory; the importance of significant others in the adoption of a balanced, active and healthy lifestyle;
Sport and Society. Contemporary Issues in Physical Activity and Sport	How social and cultural factors shaped the characteristics of, and participation in, sport in post 1850 industrial Britain:	bandura's model (demonstration, attention, retention, motor reproduction, matching performance), and the factors that affect modelling (nature and perceived importance of model).

Sport and Society. Contemporary Issues in Physical Activity and Sport	How social factors shaped the characteristics of, and participation in, sport in 20th century Britain:	○ class – amateurism and professionalism ○ gender/changing role and status of women ○ law and order ○ education ○ availability of time ○ availability of money ○ transport
Sport and Society. Contemporary Issues in Physical Activity and Sport	How contemporary factors are shaping the characteristics of, and participation in, sport in the 21st century:	○ class – amateurism and professionalism ○ gender/changing role and status of women ○ law and order ○ education ○ availability of time ○ availability of money ○ transport ○ globalisation of sport – media coverage Freedom of movement for performers – greater exposure of people to sport.
	The modern Olympic Games	○ background and aims (1896) ○ political exploitation of the Olympic Games – Berlin 1936, Third Reich Ideology – Mexico City 1968 'Black Power' demonstration – Munich 1972 Palestinian terrorism – Moscow 1980 boycott lead by USA – Los Angeles 1984 boycott by Soviet Union
	Hosting global sporting events	○ positive and negative impacts on the host country/city of hosting a global sporting event (such as the Olympic Games or FIFA World Cup) – Sporting Social Economic Political.

Students Should Be Able To:

Build PE into the revision schedule, produce written timetable

Create high quality revision materials to include mind maps, revision cards

Complete activities in text book

Be able to explain key terms as listed in the text book