Subject	**BTEC TECH Award in Sport**
Exam Board	**Edexcel Pearson BTEC**
Topic	**Component 3: Developing Fitness to Improve Other Participants Performance in Sport and Physical Activity**
Marks available	**60**
Exam Length	**1.5 hours**

PLC	**Component 3**				
Topic	**Key information related to topic**	**Resources/Information related to topic**	**How well do you understand this topic?**		
			Red	Amber	Green
A1 Components of Fitness	Define the physical and skill related components of fitness				
	Explain the use of the components of fitness on sports and activities				
A2 Fitness training principles	The basic principles of training frequency, intensity, time, and type (FITT)				
	Additional principles of training				
A3 Exercise	Intensity				

intensity and how it can be determined	Target zones and training thresholds				
	The Borg (6–20) Rating of Perceived Exertion (RPE) Scale				
	Calculate 1RM for strength and 15RM for muscular endurance.				
	Technology to measure exercise intensity				
B1 Importance of fitness testing and requirements for administration of each fitness test	Reasons for fitness testing				
	Pre-test procedures				
	Knowledge of published standard test methods and equipment./ Accurate measurement and recording of test results				
	Basic processing of test results for interpretation / Ability to safely select appropriate test				
	Reliability, validity and practicality of tests				
B2 Fitness test methods for components of physical fitness	Aerobic endurance Muscular endurance Flexibility Speed Muscular Strength Body Composition				
B3 Fitness test methods for components of skill-related fitness	Agility Balance Coordination Power Reaction Time				

B4 Interpretation of fitness test results	Comparison to normative published data. Analyse and evaluate test results. Recommendations for improvements to fitness performer based on test results.				
C1 Requirements for each of the following fitness training methods	Warm up				
	Cooldown				
	Linking each fitness training method to the associated component of fitness				
	Application of the basic (FITT) and additional principles of training to each fitness training method.				
	Application of appropriate training intensities to fitness training methods				
C2 Fitness training methods for physical components of fitness	Aerobic Endurance Flexibility Muscular Endurance Muscular Strength Speed				
C3 Fitness training methods for skill-related components of fitness	Agility Power Balance Coordination Reaction Time				
C4 Additional requirements for each of the fitness training methods	Advantages and disadvantages				

C5 Provision for taking part in fitness training methods	Public provision – advantages and disadvantages.				
	Private provision – advantages and disadvantages				
	Voluntary provision – advantages and disadvantages.				
C6 The effects of long-term fitness training on the body systems	Aerobic endurance training: o adaptations to the cardiovascular and respiratory systems o cardiac hypertrophy o decreased resting heart rate o increased strength of respiratory muscles o capillarisation around alveoli.				
	Flexibility training: o adaptations to the muscular and skeletal systems o increased range of movement permitted at a joint o increased flexibility of ligament and tendons o increased muscle length.				
	Muscular endurance training: o adaptations to the muscular system o capillarisation around muscle tissues increased muscle tone				
	Muscular strength and power training: o adaptations to the muscular and skeletal systems o muscle hypertrophy o increased tendon and liga				
	Speed training: o adaptations to the muscular system o increased tolerance to lactic acid				
D1 Personal information to aid	Aims Objectives				

fitness training programme design	Lifestyle and physical activity history Attitudes, the mind and personal motivation for training				
D2 Fitness programme design	Use personal information to aid training programme design. ● Selection of appropriate training method/activity for improving/maintaining the selected components of physical and/or skill-related fitness. ● Application of the FITT principles and additional principles of training.				
D3 Motivational techniques for fitness programming	Definition of motivation – the internal mechanisms and external stimuli that arouse and direct behaviour.				
	Types of motivation: o intrinsic o extrinsic				
	Principles of setting goals to increase and direct motivation				
	Personal goals – specific, measurable, achievable, realistic, time-related, exciting, recorded (SMARTER)				
	Influence of goal setting on motivation				
	Benefits of motivation on the sports performer				