GCSE PE 1.1.3 Mock Exam Paper

Q1 As a result of adopting an active lifestyle an individual may improve aspects of health-related exercise. **Which** of the following is **not** an **aspect** of **health-related exercise**?

(1)

- ☒ **A** Cardiovascular endurance
- ☒ **B** Muscular strength
- ☒ **C** **Power**
- ☒ **D** Muscular endurance

Q2 Which one of the following would be **most important** to a **rower 8 minutes** into a **12-minute race**?

(1)

- ☒ **A** Muscular strength
- ☒ **B** **Muscular endurance**
- ☒ **C** Flexibility
- ☒ **D** Body composition

Q3 GCSE PE students were determined to help their parents, Janet and John, become involved in sport so that Janet and John could benefit from a healthy, active lifestyle. Janet wants to increase her fitness.

(i) Define the term "**fitness**". **(1)**

Fitness is the **ability** to **meet** the **demands** of the **environment**

(ii) How does **fitness relate** to a **balanced**, **healthy lifestyle**? **(2)**

Fitness relate to a **balanced**, **healthy lifestyle because** it **allows** you to **meet** the **demands** of **your job. For example** a **bricklayer** would need **muscular strength** to **carry** the **bricks.**

Q4 Identify three components of **skill-related fitness** that would be **relevant** to **all** the **performers in Figure 1**.

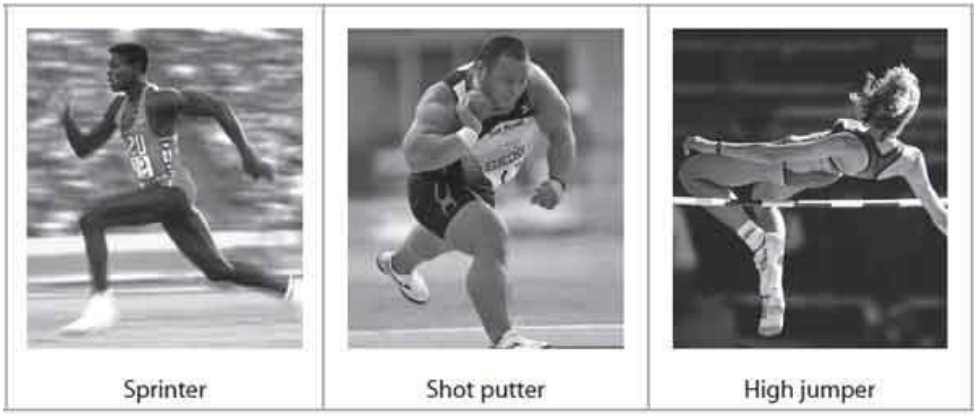

Figure 1

(3)

One component of **skill-related fitness** that **would** be **relevant** to the **sprinter** is **speed. One component** that **would** be **relevant** to the **shot putter** is **power. One component** that **would** be **relevant** to the **high jumper** is **coordination.**

Q5 Explain how exercise relates to **performance** in **physical activities** **(3)**

One way exercise relates to **performance** in **physical activities** is through **participation** in **training**. This is **exercising** to **improve** a **particular component** of **fitness. For example**, a **footballer** would use **interval training** to **improve** their **speed** in order to be **quicker** at **sprinting past defenders.**

Q6 Explain how exercise relates to a **balanced healthy lifestyle** **(3)**

One way exercise relates to a **balanced healthy lifestyle** is through **participation** in an **activity** that requires **physical effort**. This would release the **chemical serotonin** which would **improve** your **mental health**. An **example** would be an **individual** who **regularly works out on the treadmill** at the **gym** and it **improves** their **image** and their **self esteem**

Q7 **Explain one effect** that a **lack of exercise** can have on **performance** **(3)**

One effect that a **lack of exercise** can have on **performance** is **reduced aerobic capacity**. This would mean that they would **not be able** to **exercise** for **long periods** of **time. For example** an **individual** who **stops cycling** to school would find that this may mean they **fatigued quicker during** a **football match** and **couldn't last** the **whole match**.

Q8 **Explain how health relates** to **performance** in **physical activities**. **(3)**

One way health relates to **performance** in **physical activities** is through being **able** to **train harder**. If you have **good general health** you will be able to **train harder** to **improve** your **performance. For example a gymnast** who has **good general health** will be able to **spend longer practising** how to **perfect** the **backwards somersault.**

Q9 Fitness requirements vary for different activities. The performers in **Figures 3** and **4** need power, muscular endurance, strength and cardiovascular fitness for their activity, but the importance of each component varies depending on the activity. In the table:

identify the **two most important components** for **each performer** (**select** from: **power**, **muscular endurance**, **strength** and **cardiovascular fitness**) **(4)**

explain how your **first chosen component** for **each performer** is **used** in his/her **activity**. **(2)**

	 **Figure 3** Long Distance Runner	 **Figure 4** Sprinter
Important component used by performer	**Choice 1** **Cardiovascular fitness**	**Choice 1** **Power**
Important component used by performer	**Choice 2** **Muscular endurance**	**Choice 2** **Strength**
How **first** chosen component (Choice 1) for each performer is used in his/her activity	The performer uses **CV fitness** to **exercise** the **heart** for **long periods** of **time at a moderate to high working heart rate** to **finish** the **race** in a **quick time without tiring**	The performer uses **power** to **push** with **speed** and **strength** a **resistance** from their **legs** against the **starting blocks**

Q10 Performance in a game of rugby requires the application of health related and skill related fitness components.

Discuss the **relative importance** of the **different components** in a **game** of **rugby** **(6)**

Plan **Relative importance**

CARDIO-VASCULAR FITNESS; is the **ABILITY** to **EXERCISE** the **WHOLE BODY** for **LONG PERIODS** of **TIME**.	**1**
MUSCULAR STRENGTH; is the **AMOUNT** of **FORCE** a **MUSCLE** can **EXERT** against a **RESISTANCE**	**1**
MUSCULAR ENDURANCE; is the **ABILITY** to use **VOLUNTARY MUSCLES MANY TIMES WITHOUT** getting **TIRED**	**2**
FLEXIBILITY; is the **RANGE** of **MOVEMENT** at a **JOINT**	**2**
BODY COMPOSITION; is the **PERCENTAGE** of **BODY WEIGHT** which is **FAT**, **MUSCLE** and **BONE**. There is an **IDEAL BODY SHAPE** for each activity (**SOMATOTYPE**)	2
AGILITY; is the **ABILITY** to **CHANGE DIRECTION** with **SPEED** and **CONTROL**	**1**
BALANCE; is the **ABILITY** to **KEEP** the **BODY STABLE** by **MAINTAINING** the **CENTRE** of **MASS ABOVE** a **SUPPORT BASE**	**2**
COORDINATION; is the **ABILITY** to use **TWO** or **MORE BODY PARTS** at the **SAME TIME**	**1**
POWER; is the **ABILITY** to **APPLY** a **COMBINATION** of **SPEED** and **STRENGTH**	**1**
REACTION TIME; is the **TIME TAKEN** to **RESPOND** to a **STIMULUS**	**2**
SPEED; is the **FASTEST RATE** at which a **PERSON** can **COMPLETE** a **TASK** or **COVER** a specific **DISTANCE**	**2**

There are **two health related fitness components** which are **most important** in a **game** of **rugby**. These include; **cardiovascular fitness** (the **ability** to **exercise** the **whole body** for **long periods** of **time**) and **muscular strength** (the **amount** of **force** a **muscle** can **apply against** a **resistance**). **Cardiovascular fitness** is **very important** in order to engage the **whole body** to be **involved** in **sprinting**, **jogging**, **rucking**, **mauling** and **passing** for the **whole 80 minutes whereas muscular strength** is **very important** to be able to **apply** a **force against** the **opposition** in the **tackle**, in the **scrum** and in the **maul**.

There are **three skill related fitness components** which are **most important** in a **game** of **rugby**. These include; **agility** (the **ability** to **change direction** with **speed**), **coordination** (the **ability** to use **two** or **more body parts** at the **same time**) and **power** (the **ability** to **apply** a **combination** of **speed** and **power**). **Agility** is **very important** in using **side steps** to **dodge around** the **opposition** when you are **trying** to **score whereas coordination** is **very important** in **order** to **catch** and **pass** the **ball** (**hand eye coordination**) and **power** is **very important** in using your **force against** an **opponent** with **speed** in a **tackle**.

There are **three health related fitness components** which have **lesser importance** in a **game** of **rugby** but are **still required**. These include; **muscular endurance** (the **ability to** use **voluntary muscles many times without tiring**), **flexibility** (the **range** of **movement** at a **joint**) and **body composition** which refers to your **somatotype** (the **percentage** of your **weight** which is **fat**, **muscle** and **bone**). **Muscular endurance** has **importance** when involved in a **game** with **repeated scrums whereas flexibility** is required for the **rugby player** to have **good range** of **movement** within the **shoulder joint** when **jumping** at the **line out**, and finally **body composition** is **important** in often **determining** which **position** the **individual** will **play** (for example a **mesomorph** would probably **play scrum half**)

There are **3 skill related fitness components** which have **lesser importance** in a **game** of **rugby** but are **still required**. These include; **balance** (the **ability** to **maintain stability**), **reaction time** (the **time taken** to **respond** to a **stimulus**) and **speed** (which is the **fastest rate** at which a person can **cover** a **specified distance**). **Balance** is required by the **players** in the **lineout** when using **teammates** to **jump** for the **ball whereas reaction time** may be required by a **defender** who needs to **respond** to the **stimulus** of an **attacker's side step** and **speed** will be required by **backs** who are trying to **reach** the **try line** to **score**.