

# 國立彰化師範大學 102 學年度碩士班招生考試試題

系所：運動學系應用運動科學碩士班

科目：運動英文

☆☆請在答案紙上作答☆☆

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請注意：答題時應註明題號，並完整回答，否則不予給分。

- I. Please translate the following terms into Chinese. In addition, you have to give examples, news, events, activities, or research studies that are related to those terms. Each for 10% (2% for translation, 8% for explanation), 70% in total. For example,

Guangzhou 2010 Asian Games

Ans:

Translation: 2010 廣州亞洲運動會。

Explanation: 這是去年在廣州舉辦的運動會，我中華台北代表在這此取得相當好的成績，以 13 金 16 銀 38 銅獲得總獎牌數第五名。其中值得注意的是，我國在網球、跆拳道、自由車等奧運項目都獲得相當好的成績，這對我國備戰 2012 倫敦奧運是個相當重要的指標和具有意義的前哨戰。

1. Excess Post-exercise Oxygen Consumption
2. Randomized Controlled Trial
3. Flow Theory
4. Sport Guidance and Counseling
5. Overtraining for Young Athletes
6. Fusion Workout
7. Mainstreaming in Adapted Physical Education

## II. Reading and Critical Thinking (30%)

Please read the blog article in next pages and answer the following questions (Each for 10%):

8. Please SUMMARIZE this blog article in CHINESE (please do not translate).
9. This is a Blog article from a personal trainer, a fitness blogger and author, a competitive athlete, and a student of nutrition and exercise science. Since 2008, This writer has expanded his impact by bringing his real-world experience online via his health & fitness blog, Health Habits. As a sport professional, do you have any experience in sharing your professional knowledge with your family members or friends? How did you share? Please answer this question in ENGLISH.
10. As a sport professional, how will you use this information to your friends? Please answer this question in CHINESE.

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## HIIT – The “Aerobic” Version

So what is “Aerobic” HIIT training? Well, to be honest, if you perform it correctly, there is very little aerobic about this type of training. Like Part 5, these HIIT workouts are anaerobic in nature. They will be as intense as the workouts in Part 5, but unlike Part 5, I will be using traditional aerobic exercises and pieces of traditional aerobic exercise equipment instead of the dumbbells and rubber bands.

		EXERCISE ZONES										
		AGE										
		20	25	30	35	40	45	50	55	65	70	
BEATS PER MINUTE	100%	VO2 Max (Maximum effort)										
	90%	180	176	171	167	162	158	153	149	140	135	
	Anaerobic (Hardcore training)											
	80%	160	159	152	148	144	140	136	132	124	120	
	Aerobic (Cardio training / Endurance)											
	70%	140	137	133	130	126	123	119	116	109	105	
Weight control (Fitness / Fat burn)												
60%	120	117	114	111	108	105	102	99	93	90		
Moderate activity (Maintenance / Warm up)												
50%	100	98	95	93	90	88	85	83	78	75		

And like Part 5, this HIIT workout will provide the same benefits:

- Increase your metabolism for up to 36 hours
- Burn maximum fat in minimum time
- Increase strength
- Increase muscular endurance
- Give you lean, firm muscles
- Improve your anaerobic endurance
- Shorten your workout times, and
- Increase your free time

Here are the basics of this HIIT – Aerobic Training Program

- With HIIT, you try to work as hard as possible for the assigned time period.
- Each HIIT- Aerobic workout is made up of an equal number of short duration sprints and longer duration recovery periods.
- During each sprint, you try to pedal / run / climb as fast as you can.
- I usually start beginners with a 10 minute workout. That 10 minute workout is usually made up of 10 – 10 second sprints and 10 – 50 second recovery periods.

### HIIT VOLUME PROGRESSION

WORKOUT 1	WORKOUT 2	WORKOUT 3	TOTAL WEEKLY TIME
20 minutes	0 minutes	0 minutes	20 minutes
20 minutes	20 minutes	0 minutes	40 minutes
20 minutes	20 minutes	20 minutes	60 minutes
30 minutes	30 minutes	0 minutes	60 minutes
30 minutes	30 minutes	30 minutes	90 minutes

### HIIT INTENSITY PROGRESSION

#### 1:9 SPRINT:RECOVERY RATIO

SPRINT	RECOVERY	TIME FOR 1 SET	SPRINTS PER WORKOUT
30 seconds	270 seconds	300 seconds	4 to 6 SPRINTS
20 seconds	180 seconds	200 seconds	6 to 9 SPRINTS
15 seconds	135 seconds	150 seconds	8 to 12 SPRINTS
10 seconds	90 seconds	100 seconds	12 to 18 SPRINTS

#### 1:6 SPRINT:RECOVERY RATIO

SPRINT	RECOVERY	TIME FOR 1 SET	SPRINTS PER WORKOUT
30 seconds	180 seconds	210 seconds	5 to 8 SPRINTS
20 seconds	120 seconds	140 seconds	8 to 12 SPRINTS
15 seconds	90 seconds	105 seconds	11 to 17 SPRINTS
10 seconds	60 seconds	70 seconds	17 to 25 SPRINTS

#### 1:3 SPRINT:RECOVERY RATIO

SPRINT	RECOVERY	TIME FOR 1 SET	SPRINTS PER WORKOUT
30 seconds	90 seconds	120 seconds	10 to 15 SPRINTS
20 seconds	60 seconds	80 seconds	15 to 22 SPRINTS
15 seconds	45 seconds	60 seconds	20 to 30 SPRINTS
10 seconds	30 seconds	40 seconds	30 to 45 SPRINTS

The Exercises: Just about any “aerobic” exercise can be modified to perform a HIIT workout. Due to safety concerns however, some exercises are a little less desirable than others. For example, HIIT training on a treadmill does have the potential for a very embarrassing and potentially painful accident.

(Adapted from the Source:

<http://www.healthhabits.ca/2008/10/09/hiit-the-aerobic-version-or-part-6-of-the-why-cant-i-lose-this-fat-saga/>)