GENERAL INSTRUCTIONS

1. There are TWO sections, A and B, in this Paper. Section A carries 36 marks and Section B carries 54 marks. You are advised to finish Section A in about 35 minutes.

2. Section A consists of multiple-choice questions in this question book. Section B contains short questions printed separately in Question-Answer Book B.

3. Answers to Section A should be marked on the Multiple-choice Answer Sheet while answers to Section B should be written in the spaces provided in Question-Answer Book B. The Answer Sheet for Section A and the Question-Answer Book for Section B must be handed in separately at the end of the examination.

SECTION A (MULTIPLE-CHOICE QUESTIONS)

INSTRUCTIONS FOR SECTION A

1. Read the instructions on the Answer Sheet carefully. Stick a barcode label and insert the information required in the spaces provided.

2. When told to open this book, you should check that all the questions are there. Look for the words ‘END OF SECTION A’ after the last question.

3. All questions carry equal marks.

4. ANSWER ALL QUESTIONS. You are advised to use an HB pencil to mark all your answers on the Answer Sheet, so that wrong marks can be completely erased with a clean rubber.

5. You should mark only ONE answer for each question. If you mark more than one answer, you will receive NO MARKS for that question.

6. No marks will be deducted for wrong answers.

Not to be taken away before the end of the examination session
SECTION A  (36 marks)

1. Which of the following statements are the appropriate definitions of physical recreation?

   (1) physical activity of relaxing nature
   (2) active form of leisure
   (3) learning through bodily movement
   (4) competitive sports

   A. (1), (2) and (3) only
   B. (1), (2) and (4) only
   C. (1), (3) and (4) only
   D. (2), (3) and (4) only

2. Which of the following organisations is responsible for organising recreation activities for Hong Kong citizens?

   A. Hong Kong Coaching Committee
   B. Sports Federation and Olympic Committee of Hong Kong, China
   C. Hong Kong Sports Institute
   D. Leisure and Cultural Services Department

3. Which of the following is the major function of physical training in early civilisations?

   A. To train soldiers.
   B. To contribute to the total development of individuals.
   C. To cultivate religious belief.
   D. To promote individual enjoyment.

4. Which of the following are cardiorespiratory responses during exercise?

   (1) increase of stroke volume
   (2) increase of heart rate
   (3) increase of ventilation rate
   (4) increase of maximal aerobic power

   A. (1), (2) and (3) only
   B. (1), (2) and (4) only
   C. (1), (3) and (4) only
   D. (2), (3) and (4) only

5. Which of the following is the main source of energy system when performing an activity that requires approximately 60 seconds of power and speed?

   A. ATP-PC energy system which requires high amount of oxygen.
   B. ATP-PC energy system which requires little amount of oxygen.
   C. Lactic acid system which requires little amount of oxygen.
   D. Aerobic energy system that can supply energy more than 60 seconds.
6. Which of the following are the benefits of having strong skeletal muscle?

(1) Protecting the joints.
(2) Maintaining appropriate posture.
(3) Enhancing cardiorespiratory endurance.
(4) Improving sports performance.

A. (1), (2) and (3) only
B. (1), (2) and (4) only
C. (1), (3) and (4) only
D. (1), (2), (3) and (4)

7. Which of the following persons has a relatively healthier level of resting blood pressure?

<table>
<thead>
<tr>
<th></th>
<th>Systolic blood pressure / mmHg</th>
<th>Diastolic blood pressure / mmHg</th>
</tr>
</thead>
<tbody>
<tr>
<td>John</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>Peter</td>
<td>120</td>
<td>80</td>
</tr>
<tr>
<td>Ivan</td>
<td>140</td>
<td>90</td>
</tr>
<tr>
<td>Allen</td>
<td>160</td>
<td>100</td>
</tr>
</tbody>
</table>

A. John
B. Peter
C. Ivan
D. Allen

8. Which of the following are responsible for controlling muscular movement of head, neck, body and limbs; and to transmit the nerve impulse to the central nervous system after receiving a signal respectively?

A. sympathetic nerve; parasympathetic nerve
B. central nerve; autonomic nerve
C. parasympathetic nerve; central nerve
D. motor nerve; sensory nerve

9. Which of the following is the position of the centre of gravity?

A. P
B. Q
C. R
D. S
10. Which of the following statements best describes the principle of stability?
   A. The higher the centre of gravity to the base of support, the greater the stability.
   B. The nearer the centre of gravity to the edges of the base of support, the greater the stability.
   C. The narrower the base of support, the more stable the body.
   D. The wider the base of support, the more stable the body.

11. Which of the following muscle groups is responsible for lifting up the thigh?
   A. hamstrings
   B. triceps
   C. quadriceps
   D. gluteus maximus

12. What is the minimal amount of energy that has to be consumed for reducing one pound (0.45 kg) of fat?
   A. 2500 Kcal (10460 kJ)
   B. 3000 Kcal (12552 kJ)
   C. 3500 Kcal (14664 kJ)
   D. 4500 Kcal (18828 kJ)

13. Which of the following statements best describe the relationship between fat cell and body fat?
   (1) The number of fat cell is unchangeable.
   (2) The number of fat cell is changeable after training.
   (3) The size of fat cell is unchangeable.
   (4) The size of fat cell is changeable after training.
   A. (1) and (3) only
   B. (1) and (4) only
   C. (2) and (3) only
   D. (2) and (4) only

14. Which of the following is an incorrect description of nutrient?
   A. Protein is the main source of energy supply.
   B. Vitamins are organic compounds involved in body metabolism.
   C. Water is essential for life.
   D. Minerals are essential substances for bones and teeth.

15. Which of the following are the main physical qualities required for 110 m hurdles?
   (1) speed
   (2) anaerobic power
   (3) flexibility
   (4) muscular strength
   A. (1) and (2) only
   B. (1), (2) and (4) only
   C. (2), (3) and (4) only
   D. (1), (2), (3) and (4)
16. Which of the following are the harmful effects of smoking to female?

(1) more wrinkles on the skin
(2) osteoporosis
(3) lung cancer

A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)

17. Which of the following training principle is best illustrated in the above programme?

<table>
<thead>
<tr>
<th>Week</th>
<th>Sets</th>
<th>Repetitions</th>
<th>Load (kg)</th>
<th>Rest (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>10</td>
<td>60</td>
<td>40</td>
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<tr>
<td>2</td>
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<td>65</td>
<td>35</td>
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<tr>
<td>3</td>
<td>4</td>
<td>14</td>
<td>70</td>
<td>30</td>
</tr>
</tbody>
</table>

A. specificity
B. reversibility
C. variance
D. overload

18. Which of the following is the principle of specificity training?

A. Individual differences must be taken into account.
B. Progression, based on the individual's initial level of fitness, should be gradually increased to achieve the desired benefits.
C. Particular training should be carried out based on the pre-set training target.
D. Physiological changes should be carefully monitored so that more rapid progress can be achieved.

19. Which of the following are the reasons why a sprinter frequently uses ball games in the training programme during off-season?

(1) To maintain aerobic fitness.
(2) To maintain muscular strength.
(3) To ease the psychological stress of the sprinter.

A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)

20. Which of the following are the reasons why children are not suitable for regular intensive weight training?

(1) digestive system is not fully developed
(2) bones are not fully developed
(3) muscles are not fully developed

A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)
21. Which of the following are the main factors that should be considered in designing an interval training programme?

(1) intensity of training interval
(2) duration of recovery interval
(3) repetition of interval
(4) progression of each training

A. (1), (2) and (3) only
B. (1), (2) and (4) only
C. (1), (3) and (4) only
D. (2), (3) and (4) only

22. What is the injury type of tennis elbow?

A. impact injury
B. overuse injury
C. muscle injury
D. sprains

23. Which of the following is the correct order of first aid treatment procedures for common strain and sprain?

(1) To use ice application for 10 minutes.
(2) To elevate the injured area to a position higher than the heart.
(3) To rest.
(4) To use elastic bandage to press the injured area.

A. (1), (2), (3), (4)
B. (2), (1), (4), (3)
C. (3), (1), (4), (2)
D. (3), (4), (2), (1)

24. After vigorous exercise, an untrained person usually feels muscle sore. When will the sore feeling normally begin?

A. 24 hours after concentric exercises
B. 24 hours after eccentric exercises
C. 60 hours after concentric exercises
D. 60 hours after eccentric exercises

25. Which of the following activities can be classified as an open skill?

A. sprinting
B. handball game
C. golf putting
D. discus throwing

26. Which of the following will happen when an athlete is in the autonomous phase of learning?

A. athlete starts to recognise errors
B. athlete makes frequent mistakes
C. athlete provides frequent instruction and demonstration
D. athlete makes fewer mistakes
27. Which of the following relationship can be predicted by the Inverted-U Model?
   A. arousal and heart rate
   B. arousal and body temperature
   C. arousal and hormone
   D. arousal and performance

28. Which of the following is not an internal motive for participation in competitions?
   A. opportunity to win money
   B. desire to conquer one's fears
   C. opportunity to test one's ability
   D. having fun

29. Which of the following will affect the performance of athletes?
   (1) personality
   (2) level of anxiety
   (3) ability to concentrate
   (4) moral standard
   A. (1), (2) and (3) only
   B. (1), (2) and (4) only
   C. (1), (3) and (4) only
   D. (2), (3) and (4) only

30. Which of the following are the factors influencing sports participation?
   (1) sports and physical recreation facilities
   (2) age
   (3) nationality
   (4) social-economic class
   A. (1), (2) and (3) only
   B. (1), (2) and (4) only
   C. (1), (3) and (4) only
   D. (2), (3) and (4) only

31. Which of the following is not a member of the East Asian Games?
   A. Chinese Taipei
   B. Mongolia
   C. Australia
   D. Macau

32. Which of the following is not a concern of the "wellness movement"?
   A. illness treatment
   B. health promotion
   C. disease prevention
   D. lifestyle management
33. Which of the following are the benefits of inter-school sports?

(1) To build up responsibility.
(2) To develop team spirit.
(3) To prevent sport injury.
(4) To build up friendships.

A. (1), (2) and (3) only
B. (1), (2) and (4) only
C. (1), (3) and (4) only
D. (2), (3) and (4) only

34. Which of the following provinces/cities organised the 10th National Games of China?

A. Shanghai
B. Guangdong
C. Beijing
D. Jiangsu

35. How many matches will be organised by the organising committee in a basketball competition with 8 teams if a single round-robin system is employed?

A. 26
B. 28
C. 54
D. 56

36. Which of the following are the reasons why commercial corporations in Hong Kong are willing to invest in recreational programmes to employees?

(1) To increase employees’ productivity.
(2) To nurture elite athletes.
(3) To decrease absenteeism.
(4) To improve employees’ health.

A. (1), (2) and (3) only
B. (1), (2) and (4) only
C. (1), (3) and (4) only
D. (2), (3) and (4) only

END OF SECTION A
HONG KONG EXAMINATIONS AND ASSESSMENT AUTHORITY
HONG KONG DIPLOMA OF SECONDARY EDUCATION EXAMINATION

PHYSICAL EDUCATION PAPER 1
(Sample Paper)
SECTION B : Question-Answer Book B

This paper must be answered in English.

INSTRUCTIONS

(1) Write your Candidate Number in the space provided on Page 1.

(2) Stick barcode labels in the spaces provided on Pages 1, 3 and 5.

(3) Refer to the general instructions on the cover of the Question Book for Section A.

(4) The questions in this Question-Answer Book carry 54 marks. Answer ALL questions.

(5) Write your answers to Section B in the spaces provided in this Question-Answer Book. Do not write in the margins. Answers written in the margins will not be marked.

(6) Supplementary answer sheets will be provided on request. Write your candidate number, fill in the question number and stick a barcode label on each sheet. Tie them loosely but securely with a string INSIDE this Question-Answer Book.

(7) Present your answers in paragraphs wherever appropriate.

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Marks</th>
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<tbody>
<tr>
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<td>9</td>
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<td>10</td>
<td></td>
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<tr>
<td>Total</td>
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</tbody>
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Please stick the barcode label here.

Candidate Number

<table>
<thead>
<tr>
<th>Marker's Use Only</th>
<th>Examiner's Use Only</th>
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</thead>
<tbody>
<tr>
<td>Marker No.</td>
<td>Examiner No.</td>
</tr>
</tbody>
</table>
SECTION B (54 marks)

1. State and discuss ONE historical incident in the 1980s which the Olympics were being used as a political tool.

(3 marks)
2. Figure 1 shows a man doing pull-up and Figure 2 shows a man pushing against a wall. Both actions require bicep and tricep to exert force.

**Figure 1**

**Figure 2**

(a) State and explain the types of muscle contraction involved in bicep and tricep when the man pulls himself up as shown in Figure 1.

(b) State and explain the type of muscle contractions involved in bicep and tricep when the man exerts force to push against the wall as shown in Figure 2.
3. Joe is a well-trained short distance runner with a personal best time of 10.37 seconds for the 100 m event.

(a) (i) State and explain the predominant energy system used by Joe in the event.

________________________________________________________________________

________________________________________________________________________

(ii) Explain why this energy system is used.

________________________________________________________________________

________________________________________________________________________

(iii) State ONE by-product of this energy system.

________________________________________________________________________

(3 marks)

(b) State the predominant nutrient used to provide energy for Joe in the event. Give ONE example of food that provides this nutrient.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

(1 mark)
4. In the long jump event, an athlete goes through four phases including an approach run, a takeoff, a flight and a landing.

(a) (i) Name the force applied to the athlete during takeoff.

(ii) Name the force applied to the athlete during the flight phase.

(1 mark)

(b) From movement analysis point of view, state and explain THREE factors that influence the jumping distance.

(3 marks)
5. A marathon race is held in July in Hong Kong. The ambient temperature is around 28°C and the relative humidity is around 90% in the competition day.

(a) State FOUR reasons for drinking water during this race.

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(2 marks)

(b) Peter is a very successful marathon runner who participates in the competition.

(i) What type of muscle fibre he is likely to have more? State TWO characteristics of that type of muscle fibre.

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______________________________________________________________________
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(ii) After the race, he becomes fatigue and feels sore in his muscles. State ONE possible cause of the symptom and ONE preventive strategy to reduce the possibility of the symptom to occur.

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(4 marks)
6. Several cases related to heart attack leading to sudden death are reported recently in Hong Kong.

(a) State and explain TWO uncontrollable factors that lead to coronary heart disease.

(2 marks)

(b) State FOUR controllable factors that can prevent coronary heart disease.

(2 marks)
7. Peter is a 30-year-old male. He is quite physically active but has no experience in long distance running. Peter aims at finishing a half marathon within 2 hrs after 6 months of training. He seeks advice from physical fitness professionals and Table 1 shows a 24-week training programme for him.

<table>
<thead>
<tr>
<th>Week</th>
<th>Sessions per week</th>
<th>Training distance per session</th>
<th>Exercise duration and target time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>3</td>
<td>5 km</td>
<td>30 min (6 min / km)</td>
</tr>
<tr>
<td>3-4</td>
<td>3</td>
<td>7 km</td>
<td>42 min (6 min / km)</td>
</tr>
<tr>
<td>5-8</td>
<td>4</td>
<td>8 km</td>
<td>46 min (5 min 45s / km)</td>
</tr>
<tr>
<td>9-12</td>
<td>5</td>
<td>9 km</td>
<td>51 min (5 min 40s / km)</td>
</tr>
<tr>
<td>13-16</td>
<td>5</td>
<td>10 km</td>
<td>57 min (5 min 42s / km)</td>
</tr>
<tr>
<td>17-20</td>
<td>5</td>
<td>12 km</td>
<td>1 hr 8 min (5 min 40s / km)</td>
</tr>
<tr>
<td>21-22</td>
<td>4</td>
<td>15 km</td>
<td>1 hr 27 min (5 min 48s / km)</td>
</tr>
<tr>
<td>23</td>
<td>3</td>
<td>12 km</td>
<td>1 hr 7 min (5 min 35s / km)</td>
</tr>
<tr>
<td>24</td>
<td>2</td>
<td>5 km</td>
<td>30 min (6 min / km)</td>
</tr>
</tbody>
</table>

Table 1

(a) Discuss TWO training principles applied from week 1 to week 20.

(b) To finish a half marathon within 2 hours, the target time is 6 min / km. Explain why the training speed, starting from week 5, set much faster than 6 min / km.

(c) In terms of training effect, explain why the “sessions per week” reduces from week 21.
8. John is a tennis player participating in a training programme to prepare for a local match.

(a) State and explain a ‘SMART’ goal he can set for the training.

________________________________________________________________________

________________________________________________________________________

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(5 marks)

John does not perform satisfactorily during the match due to anxiety and stress.

(b) State TWO physiological symptoms that may occur under stress.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

(1 mark)

(c) State FOUR relaxation techniques that can be used to reduce the stress.

________________________________________________________________________

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________________________________________________________________________

________________________________________________________________________

(2 marks)
9. (a) State and explain TWO pros and cons of hosting the 2009 East Asian Games in Hong Kong.

(by filling the lines)

(4 marks)

(b) Discuss “Friendship First, Competition Second”.

(by filling the lines)

(2 marks)

(c) State and discuss THREE factors in which parents influence their children’s participation in sports.

(by filling the lines)

(3 marks)
10. The basketball association of a country is planning to organise a national league to promote this sport.

(a) There is a 20-year-old multi-purpose stadium which can be used for running basketball games. Some members in the basketball association propose to build a new stadium for the league. State and explain TWO factors that need to be considered when deciding the venue of the games.

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
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(3 marks)

(b) (i) State TWO possible sources of incomes to fund the league.

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
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(ii) State TWO types of expenditure in organising the league.

____________________________________________________________________________________
____________________________________________________________________________________
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(2 marks)

END OF PAPER
INSTRUCTIONS

(1) There are THREE questions in this paper. Each carries 18 marks.
(2) Answer any TWO questions.

Time allowed: 1 hour 15 minutes
This paper must be answered in English.
The 29th Olympics Games is hosted by Beijing in 2008. Being widely recognized as the most important sports event in the world, the games attract thousands of athletes from hundreds of countries to participate. China is the third country in Asia to host the game and has made a huge investment to renovate the city infrastructure and sports facilities to prepare for the games.

(a) (i) State TWO Asian countries which have hosted the Olympics Games and also the city and the country which hosted the 1st Olympics Games in 1896.

(ii) State and explain TWO reasons why the performance of the athletes from China improves significantly in recent Olympics.

(4 marks)

(b) Discuss the THREE Olympics spirits and how the abuse of drugs in sports violating the Olympics spirits.

(5 marks)

There are many functional departments under the Beijing Organising Committee for the Games. Marketing and Olympics Village are two of these departments in charge of the fund-raising and Olympics hostel and catering management, respectively.

(c) State THREE means of fund-raising activities. Explain with examples the target commercial partners of these three activities.

(3 marks)

(d) State and explain TWO factors the Olympics Village department has to consider in providing catering services to the athletes.

(2 marks)

The equestrian event of the 2008 Olympics Games is hosted by Hong Kong. The equestrian committee has a volunteer recruitment exercise and the volunteers perform a variety of roles in the game.

(e) (i) State and explain TWO favourable factors of Hong Kong in organising this event.

(ii) Discuss TWO reasons why many people are interested in volunteering in the event.

(4 marks)
2. Long distance running has become more popular in Hong Kong. Joe, a 16-year-old student, is interested in 10km run. He is a beginner in long distance run and wants to improve his performance through systematic training.

(a) State TWO changeable and unchangeable physiological factors each that influence Joe's performance in 10km run. (2 marks)

(b) Joe designs an 8-week training programme to improve his physical fitness, and ultimately his endurance. Design a training programme for Joe and justify the TWO training methods that have been used in the programme. (4 marks)

Imagery is frequently used by athletes frequently to prepare races. Athletes try to create an experience in the mind to imagine how they are going to perform.

(c) State and explain THREE reasons why imagery can help Joe in preparing for the race and explain THREE stress management strategies. (6 marks)

Joe participates in an Open 10km run race. He is under stress on the day before the race and he accidentally twisted his left ankle and strained during the race.

(d) From movement analysis point of view, explain how injury is occurred when Joe twisted his ankle and how the understanding of movement analysis can reduce the chance of injury. (6 marks)

3. Jenny is a 30-year-old office lady who lives in a physically inactive lifestyle. She is obese with a BMI index 30. And she has an unhealthy eating habit. Recently, she attends a programme organised by a physical fitness centre. This programme aims at improving participants’ physical fitness by means of aerobic exercises and balanced diets.

(a) State FOUR health-related physical fitness elements and state ONE test for assessing each of them. (4 marks)

(b) State and explain FOUR dietary habits that are regarded as unhealthy. (4 marks)

Jenny accidentally falls on the ground during exercising. She suffers great pain in her ankle and cannot even stand. She has sprained her ankle and the injured ankle grows red swells.

(c) State and explain FOUR immediate measures to cure Jenny and explain THREE reasons why red and swelling are common in sprained ankles. (7 marks)

(d) The physical fitness centre is obligated to provide a safe exercise environment to participants. State and explain THREE precautions the centre has to take to minimize the chance of sports accidents. (3 marks)

END OF PAPER