

रोल नं. 

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Roll No.

परीक्षार्थी कोड को उत्तर-पुस्तिका के मुख-पृष्ठ पर अवश्य लिखें ।

Candidates must write the Code on the title page of the answer-book.

- कृपया जाँच कर लें कि इस प्रश्न-पत्र में मुद्रित पृष्ठ 5 हैं ।
- प्रश्न-पत्र में दाहिने हाथ की ओर दिए गए कोड नम्बर को छात्र उत्तर-पुस्तिका के मुख-पृष्ठ पर लिखें ।
- कृपया जाँच कर लें कि इस प्रश्न-पत्र में 26 प्रश्न हैं ।
- कृपया प्रश्न का उत्तर लिखना शुरू करने से पहले, प्रश्न का क्रमांक अवश्य लिखें ।
- इस प्रश्न-पत्र को पढ़ने के लिए 15 मिनट का समय दिया गया है । प्रश्न-पत्र का वितरण पूर्वाह्न में 10.15 बजे किया जाएगा । 10.15 बजे से 10.30 बजे तक छात्र केवल प्रश्न-पत्र को पढ़ेंगे और इस अवधि के दौरान वे उत्तर-पुस्तिका पर कोई उत्तर नहीं लिखेंगे ।
- Please check that this question paper contains 5 printed pages.
- Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains 26 questions.
- **Please write down the Serial Number of the question before attempting it.**
- 15 minute time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the students will read the question paper only and will not write any answer on the answer-book during this period.

## शारीरिक शिक्षा (सैद्धान्तिक)

### PHYSICAL EDUCATION (Theory)

निर्धारित समय : 3 घण्टे

Time allowed : 3 hours

अधिकतम अंक : 70

Maximum Marks : 70

## सामान्य निर्देश :

- (i) इस प्रश्न-पत्र में 26 प्रश्न हैं ।
- (ii) सभी प्रश्न अनिवार्य हैं ।
- (iii) प्रश्न संख्या 1 से 11 तक प्रत्येक प्रश्न 1 अंक का है । इनमें प्रत्येक प्रश्न का उत्तर लगभग 10 – 20 शब्दों में देना चाहिए ।
- (iv) प्रश्न संख्या 12 से 19 तक प्रत्येक प्रश्न 3 अंक का है । इनमें प्रत्येक प्रश्न का उत्तर लगभग 30 – 50 शब्दों में देना चाहिए ।
- (v) प्रश्न संख्या 20 से 26 तक प्रत्येक प्रश्न 5 अंक का है । इनमें प्रत्येक प्रश्न का उत्तर लगभग 75 – 100 शब्दों में देना चाहिए ।

## General Instructions :

- (i) The question paper contains 26 questions.
- (ii) All questions are compulsory.
- (iii) Questions no. 1 to 11 carry 1 mark each. Answers to these questions should be in approximately 10 – 20 words each.
- (iv) Questions no. 12 to 19 carry 3 marks each. Answers to these questions should be in approximately 30 – 50 words each.
- (v) Questions no. 20 to 26 carry 5 marks each. Answers to these questions should be in approximately 75 – 100 words each.

1. राउंड-रॉबिन टूर्नामेंट दो प्रकार का होता है । उनका नाम बताइए तथा उनके बीच एक प्रमुख अंतर दीजिए । 1  
Round-Robin Tournament is of two types. Name them and give one major difference between them.
2. नेतृत्व को परिभाषित कीजिए । 1  
Define leadership.
3. खाद्य असहिष्णुता से आपका क्या तात्पर्य है ? 1  
What do you mean by food intolerance ?
4. सामान्य आसन सम्बन्धी विकृतियाँ कौन-कौन सी होती हैं ? 1  
State the common postural deformities.
5. बच्चों में गामक विकास की अवस्थाओं के नाम बताइए । 1  
Name the motor development stages in children.



6. आपकी दादी/नानी यह महसूस करती हैं कि उनके शरीर के ऊपरी भाग की लचक कम हो गई है और इसलिए वह अपना परीक्षण करना चाहती हैं। आप उन्हें कौन-सा टेस्ट सुझाएँगे ? 1  
Your grandmother feels that she has reduced her upper body flexibility and therefore she wants to test herself. Which test would you suggest to her ?
7. ऑक्सीजन अंतःग्रहण क्या है ? 1  
What is oxygen uptake ?
8. 'चीरा' अथवा 'भेदन' क्या है ? 1  
What is incision ?
9. जब किसी वस्तु को आकाश में क्षैतिज-दिशा अथवा न्यूनकोण पर, गुरुत्वाकर्षण की शक्ति के अनुरूप फेंका जाता है, उसे प्रक्षेप्य कहते हैं। प्रक्षेप्य को प्रभावित करने वाले दो बलों के नाम बताइए। 1  
An object thrown into the space either horizontally or at an acute angle under the action of gravity is called a projectile. Name the two forces which act on a projectile.
10. शारीरिक छवि (प्रतिबिम्ब) से क्या तात्पर्य है ? 1  
What do you mean by body image ?
11. 'फार्टलेक' पद से क्या तात्पर्य है तथा इस प्रशिक्षण विधि को किसने विकसित किया ? 1  
What does the term 'Fartlek' mean and who developed this training method ?
12. विशिष्ट खेल कार्यक्रम क्या हैं ? उदाहरण सहित व्याख्या कीजिए। 3  
What are specific sports programmes ? Explain with suitable example.
13. साहसिक खेलों में सहभागिता द्वारा विकसित नेतृत्व के गुणों के बारे में संक्षेप में लिखिए। 3  
Write in brief about the leadership qualities that one inculcates by participating in adventure sports.
14. भारत में महिलाओं की खेलों में भागीदारी को आप किस प्रकार प्रोत्साहित करेंगे ? समझाइए। 3  
How can women's participation in sports and games be encouraged in India ? Explain.

15. अस्थिसुषिरता के बारे में संक्षेप में लिखिए । महिलाओं में अस्थिसुषिरता की समस्या के क्या कारण हैं ? 3  
Write in brief about osteoporosis. What are the causes of osteoporosis in women ?
16. 'रॉकपोर्ट टेस्ट' को समझाइए । 3  
Explain the Rockport test.
17. एक प्रसिद्ध क्रिकेट स्टार फिलिप ह्यूस को, बैटिंग करते हुए कान के पिछले हिस्से (कनपटी) में ज़ोर से बॉल लगी और उस चोट के दो दिन पश्चात् उसकी मृत्यु हो गई । यद्यपि उसने हेलमेट पहना था, परन्तु ऐसा माना गया कि गर्दन का एक महत्वपूर्ण हिस्सा खुला था, तभी बॉल कनपटी पर लगी । आजकल विश्व के सभी उच्च स्तर के क्रिकेट खिलाड़ी उत्तम सुरक्षात्मक उपकरणों का प्रयोग करने लगे हैं । 3
- (अ) क्या आपको लगता है कि सुरक्षात्मक उपकरणों का प्रयोग महत्वपूर्ण है ? अपने विचारों को व्यक्त करते हुए, उन पर बल दीजिए ।
- (ब) त्वचा के ऊपरी भाग पर रगड़ या छिलने पर, चोटग्रस्त होने पर आप किस प्रकार की प्राथमिक सहायता प्रदान करेंगे ?
- A famous cricket star Phillip Hughes was struck behind the ear by a ball while batting and died two days after the injury. He was wearing a helmet but the possible reason mentioned was that even when using a helmet, possibly a significant part of the neck remained exposed and the ball hit him there. And now most of the top cricketers across the world use deeper protection.
- (a) Do you feel protective gears are important ? Lay stress on your views.
- (b) What first aid should be provided during injury at the superficial layer of the skin ?
18. 'अभिप्रेरण' से क्या अभिप्राय है ? खेलों में उत्तम प्रदर्शन के लिए अभिप्रेरण की विभिन्न तकनीकों को स्पष्ट कीजिए । 3  
What is meant by 'motivation' ? Explain the different techniques of motivation to achieve high goals in sports.
19. अंतराल प्रशिक्षण विधि की व्याख्या कीजिए । 3  
Explain Interval training method.
20. आहार के पोषक एवं गैर-पोषक तत्व क्या हैं ? स्पष्ट कीजिए । 5  
What are the Nutritive and Non-nutritive components of diet ? Explain.



21. उचित मुद्रा (आसन) से आपका क्या अभिप्राय है ? खड़े होने व बैठने की उचित मुद्राओं (आसनों) को समझाइए । अनुचित मुद्रा (आसन) के क्या कारण हैं ? 5  
What do you mean by correct posture ? Explain the standing and sitting postures. What are the causes of bad posture ?
22. 'भार प्रशिक्षण' शक्ति को विकसित करने की अत्यंत पुरानी विधियों में से एक है । व्याख्या कीजिए । इसके लाभ व हानियों का वर्णन कीजिए । 5  
Explain 'weight training' as one of the oldest methods for development of strength. Describe its advantages and disadvantages.
23. गति को निर्धारित करने वाले शरीरक्रियात्मक घटकों की व्याख्या कीजिए । 5  
Explain the physiological factors determining speed.
24. खेल चोटों का वर्गीकरण कीजिए । कोमल ऊतकों की चोटों के उपचार हेतु 'पी.आर.आई.सी.ई.' विधि की व्याख्या कीजिए । 5  
Classify sports injuries. Explain 'P.R.I.C.E.' procedure as a treatment of soft tissue injuries.
25. व्यक्तित्व क्या होता है ? इसके विभिन्न आयामों की व्याख्या कीजिए । 5  
What is personality ? Explain its different dimensions.
26. घर्षण के विभिन्न प्रकारों का उल्लेख कीजिए । खेलों के क्षेत्र में घर्षण के लाभ तथा हानियों की उपयुक्त उदाहरणों सहित व्याख्या कीजिए । 5  
What are the various types of friction ? How is friction advantageous or disadvantageous in the field of games and sports ? Explain with suitable examples.



# SENIOR SCHOOL CERTIFICATE EXAMINATION

## MARKING SCHEME -2017

### PHYSICAL EDUCATION

(Outside)

#### Instructions

code-75

1. Marking Scheme carries only suggested value points for the answers. These are only Guidelines and do not constitute the complete answer. The students can have their own expression and if the expression is correct, the marks be awarded accordingly.
2. As orders of the Hon'ble Supreme Court, the candidates would now be permitted to obtain photocopy of the Answer Book on request on payment of the prescribed fee. All examiners/Head Examiners are once again reminded that they must ensure that the evaluation is carried out strictly as per value points for each answer as given in the Marking Scheme.
3. All the Head Examiners/Examiners are instructed that while Evaluating the answer scripts, if the answer is found to be totally incorrect, the (x) should be marked on the incorrect answer and awarded '0' marks.



## PHYSICAL EDUCATION

Max. marks- 70

75

Q.1 Round-Robin Tournament is of two types. Name them and give one major difference between them.

**Ans.** There are two types of round robin tournament

- i) Single league tournament ( $\frac{1}{2} + \frac{1}{2} = 1$ )
- ii) Double league tournament

### Difference

- i) In single league tournament every team plays with every other team once in its pool+  
$$\frac{N(N-1)}{2}$$
- ii) In double league tournament every team plays with every other team twice in its pool  
$$N(N-1)$$

Q.2 Define leadership.

**Ans.** Leadership may be defined as the quality of the person to lead others or direct others. (1)

Q.3 What do you mean by food intolerance?

**Ans.** Food intolerance means elements of food cannot be properly processed and absorbed by our digestive system. (1)

### OR

A sensitivity , or an inability to digest a particular food ingredient or substance is called food intolerance.

Q.4 State the common postural deformities.

**Ans.** i) Round shoulder (Any two  $\frac{1}{2} + \frac{1}{2} = 1$ )  
ii) Spinal curvature  
    a. Khyphosis  
    b. Lordosis  
    c. Scoliosis  
iii) Knock-Knees  
iv) Bow legs  
v) Flat foot

Q.5 Name the motor development stages in children.

**Ans.** i) Infant (0 to 2 years) (1)  
ii) Early Childhood (2 to 6 years)



iii) Middle Childhood (7 to 10 Years)

iv) Latter childhood (11 to 12 years)

Q.6 Your grandmother feels that she has reduced her upper body flexibility and therefore she wants to test herself. Which test would you suggest to her?

**Ans.** Back Scratch Test. (1)

Q.7 What is oxygen uptake?

**Ans.** The amount of oxygen which can be consumed by the working muscles from the blood. (1)

Q.8 What is incision?

**Ans.** Incision is a soft tissue injury. It may occur due to sharp edged object of sports Equipment or spikes etc. Sometimes arteries or veins may be cut. Blood usually comes out freely from incision (1)

Q.9 An object thrown into the space either horizontally or at an acute angle under the action of gravity is called a projectile. Name the two forces which act on a projectile.

**Ans.** i) Gravitational force (1/2 + 1/2 = 1)

ii) Air Resistance

iii) Initial velocity

iv) Spin

Q.10 What do you mean by body image?

**Ans.** Body image is how and what you feel about your body (1)

**OR**

The perception that a person has of their physical self.

Q.11 What does the term 'Fartlek' mean, and who developed this training method?

**Ans.** The word 'Fartlek' is Swedish word means 'speed play'. Gosta holmer developed it in 1937. (1/2 + 1/2 = 1)

Q.12 What are specific sports programmes? Explain with suitable example.

**Ans.** Specific sports programmes are for specific cause like awareness, unity health or any social cause.

(Explanation of any Two) (1+1+1=3)

i) Health run

ii) Run for fun

iii) Run for specific cause

iv) Run for unity

v) Annual sports day/National sports day

Q.13 Write in brief about the leadership qualities that one inculcates by participating in adventure sports.

**Ans.** i) Energetic (Explanation of any Three or any other relevant quality) (1+1+1=3)

ii) Decision maker

iii) Intelligent





- iv) Social
- v) Co-operative
- vi) Commanding
- vii) Determination
- viii) Dedication
- ix) Skillful
- x) Good Speaker

Q.14 How can women's participation in sports and games be encouraged in India ? Explain.

- Ans.** i) Self confidence must be developed in women (Explanation of any Three) (1+1+1=3)
- ii) Female role model to be highlighted
  - iii) More time and facilities to be given to women participation
  - iv) Women should be aware regarding the benefits of sports.(Job opportunities, Personality development etc.)
  - v) Better safety measures to be implemented.
  - vi) Legislation regarding women in sports should be more flexible.
  - vii) Attitude of spectators and media should be motivating
  - viii) Women coaches should be appointed in more number
  - ix) Equal importance to be given to female in sports

Q.15 Write in brief about osteoporosis. What are the causes of osteoporosis in women?

**Ans.** Osteoporosis is weakening of bone due to the loss of bone density (Explain any two cause)

**Causes**

(1+2=3)

- i) Insufficient calcium in diet
- ii) Amenorrhea
- iii) Poor nutrition
- iv) Sedentary life style
- v) Thyroid condition
- vi) Lack of vitamin D

Q. 16 Explain the Rockport test.

**Ans.** Rock Port (Explanation of the test in detail) (3)

- i) Purpose –To measure cardiovascular fitness
- ii) Equipment required- Stop watch, weighing scale, Track
- iii) Procedure- Measure Body weight, run one mile, timing taken, measure heart rate
- iv) Calculation- Using this data cardiovascular endurance is calculated



Q.17 A famous cricket star Phillip Hughes was struck behind the ear by a ball while batting and died two days after the injury. He was wearing a helmet but the possible reason mentioned was that even when using a helmet, possibly a significant part of the neck remained exposed and the ball hit him there. And now most of the top cricketers across the world use deeper protection.

(a) Do you feel protective gears -are important ? Lay stress on your views.

(b) What first aid should be provided during injury at the superficial layer of the skin?

**Ans.** I) Yes, protective gears are important to prevent a sportsperson from injuries (1+2=3)

II) i) Clean the affected part with fresh water

ii) Use clean sterilized gauze to wipe the affected part

iii) Antiseptic ointment should be used

iv) Refer to the doctor in case of serious injury

Q.18 What is meant by ‘motivation’? Explain the different techniques of motivation to achieve high goals in sports.

**Ans.** Motivation means to be inspired to do something to achieve the desired goals.

**OR**

Motivation is an internal force on which our behaviour or activity depends.

Techniques of Motivation (Explanation of any two) (1+2=3)

i) Intrinsic

- Goal setting
- Self appraisal
- Auto suggestion
- Positive attitude

ii) Eccentric

- Praise ,appreciation and criticism
- Record of success and achievement
- Better facilities
- Pep talk by coaches/trainer
- Cash prizes, Certificates and trophies
- Role of pear group and society
- Role of spectators
- Role model

Q.19 Explain Interval training method.

**Ans.** Interval training method:-Interval training method is also called terrace training. It is training of heart, through endurance training .If you run your heart beats at a faster rate. (3)



Dr. Woldemar and Gerschler, introduced this training method in 1930. In this method the athlete used to run 400m. race, 10 to 20 times daily, instead of running 10 to 20 miles daily. In fact this training method

is based on effort and recovery principle. During interval training recovery period is given to the athlete after each speedy workout. Recovery period can be adjusted according to the efficiency of the athlete. The load can be increased by reducing the recovery period or by increasing the workout.

For an athlete of 400 m. following Examples are applicable in his training

- 1) 400m. race with 80% speed
- 2) Walking or jogging until his heart rate comes down to 120 to 140 approximately.
- 3) 400m. race with 80% speed.(repetition)

Q.20 What are the Nutritive and Non-nutritive components of diet? Explain.

**Ans.** Nutritive components of diet (brief explanation of each)

i) Carbohydrate

(2 ½ + 2 ½ = 5)

ii) Fats

iii) Proteins

iv) Vitamins

v) Mineral

Non Nutritive components of diet (brief explanation of each)

i) Fibre or Roughage

ii) Water

iii) Colour Compounds

iv) Flavour Compounds

v) Plant Compounds

Q.21 What do you mean by correct posture? Explain the standing and sitting postures. What are the causes of bad posture?

**Ans.** Correct posture means the balancing of body in accurate and proper manner while sitting, standing, reading, writing or during any other action of body. (1+2+2=5)

**OR**

Any other definition

Explanation of sitting and standing posture.

Standing-Heels together, toes apart, body erect. Knee straight, chin inside, chest forward, belly backward, body weight equally on both feet.

Sitting-Hips as far back as possible on the chair, legs rest on the floor, thigh horizontal head spinal column, shoulder and hips should be in straight line and erect.



Causes of bad posture (Explain any two)

- i) Improper diet
- ii) Heredity
- iii) Accident
- iv) Disease
- v) Obesity
- vi) Due to improper exercise
- vii) Nature of job
- viii) Fatigue
- ix) wearing tight clothes
- x) Unsuitable furniture
- xi) Muscle weakness
- xii) unawareness of correct footwear /Improper footwear

Q.22 Explain 'weight training' as one of the oldest methods for development of strength.

Describe its advantages and disadvantages.

**Ans.** Weight Training are those exercise which are designed to strengthen specific muscles by causing them to overcome a fixed resistance, usually in the form of bar –bells or dumb-bells. (1+2+2=5)

Advantages of Weight Training (explanation of any two)

- i) Help in getting good shape
- ii) Increase in muscle strength
- iii) Increase in bone strength
- iv) Better appearance and correct body posture
- v) Reduces stress and tension
- vi) Best means of providing fitness

**Disadvantage of Weight Training** ( explanation of any two)

- i) Risk of Injuries
- ii) Less flexibility
- iii) Risk of doing in early age

Q.23 Explain the physiological factors determining speed.

**Ans .** Physiological factors determining speed are – (with brief explanation of all)

- i) Mobility of the nervous system /Reaction time (1+1+1+1+1=5)
- ii) Muscle composition



- iii) Explosive strength
- iv) Cardiovascular efficiency
- v) Bio-chemical reserves and metabolic power

Q.24 Classify sports injuries . Explain ‘P.R.I.C.E.’ procedure as a treatment of soft tissue injuries.

**Ans.** Sports injuries (2+3=5)

- i) Soft tissue injuries
  - ii) Bone injuries
  - iii) Joint injuries
- ‘P.R.I.C.E.’ procedure as a treatment of soft injuries

- i) P-Protection
  - ii) R-Rest
  - iii) I-Ice
  - iv) C-Compression
  - v) E-Elevation
- (Explanation of each)

Q.25 What is personality? Explain its different dimensions.

**Ans.** Personality usually means that an individual is much more than his outer appearance.

Personality also refer

to the pattern of thoughts, feeling, social adjustment and behaviour etc. (1+4=5)

Different of personality (Explanation of each)

- i) Physical dimension
- ii) Mental dimension
- iii) Social dimension
- iv) Emotional dimension

Q.26 What are the various types of friction ? How is friction advantageous or disadvantageous in the field of games and sports ? Explain with suitable examples.

**Ans.** Types of friction (2+3=5)

- i) Static friction

ii)Dynamic friction

a)Sliding friction

b)Rolling friction

Friction : advantageous or disadvantageous with example.

Friction is usually called a necessary evil. It means that it is essential in games and sports.

Without friction we cannot give a better performance for example athletes use spikes and football players use studs to have appropriate friction, without friction they are unable to run fast. Even gymnasts use lime powder on their palms to perform on horizontal bar, Uneven bar and roman rings. On the other hand friction is disadvantageous in some games. In cycling there should not be more friction between road and the tyres of the cycle. If there is more friction there will be more wastage of energy of the rider and leads to damage of equipments.

