Roll No.		Signature of Invigilators
(Write Roll Number from left side exactly as in the Admit Card)		1 2
2017		Question Booklet Series X
	PAPER-III	Question Booklet No.

Subject Code: 20

(Identical with OMR Answer Sheet Number)

## PHYSICAL EDUCATION

Time: 2 Hours 30 Minutes Maximum Marks: 150

# Instructions for the Candidates

- 1. Write your Roll Number in the space provided on the top of this page as well as on the OMR Sheet provided.
- 2. At the commencement of the examination, the question booklet will be given to you. In the first 5 minutes, you are requested to open the booklet and verify it:
  - (i) To have access to the Question Booklet, tear off the paper seal on the edge of this cover page.
  - (ii) Faulty booklet, if detected, should be get replaced immediately by a correct booklet from the invigilator within the period of 5 minutes. Afterwards, neither the Question Booklet will be replaced nor any extra time will be given.
  - (iii) Verify whether the Question Booklet No. is identical with OMR Answer Sheet No.; if not, the full set to be replaced.
  - (iv) After this verification is over, the Question Booklet Series and Question Booklet Number should be entered on the OMR Sheet.
- 3. This paper consists of seventy-five (75) multiple-choice type questions. All the questions are compulsory. Each question carries *two* marks.
- 4. Each Question has four alternative responses marked: (A) (B) (C) (D). You have to darken the circle as indicated below on the correct response against each question.

Example: (A) (B) (D), where (C) is the correct response.

- 5. Your responses to the questions are to be indicated correctly in the OMR Sheet. If you mark your response at any place other than in the circle in the OMR Sheet, it will not be evaluated.
- 6. Rough work is to be done at the end of this booklet.
- 7. If you write your Name, Roll Number, Phone Number or put any mark on any part of the OMR Sheet, except the space allotted for the relevant entries, which may disclose your identity, or use abusive language or employ any other unfair means, such as change of response by scratching or using white fluid, you will render yourself liable to disqualification.
- 8. Do not tamper or fold the OMR Sheet in any way. If you do so, your OMR Sheet will not be evaluated.
- 9. You have to return the Original OMR Sheet to the invigilator at the end of the examination compulsorily and must not carry it with you outside the Examination Hall. You are, however, allowed to carry question booklet and duplicate copy of OMR Sheet after completion of examination.
- 10. Use only Black Ball point pen.
- 11. Use of any calculator or mobile phone etc. is strictly prohibited.
- 12. There are no negative marks for incorrect answers.

[Please Turn Over]

### PHYSICAL EDUCATION

#### PAPER III

- **1.** Biologically which of the following systems of the body is called the primary system?
  - (A) Nervous system
  - (B) Skeleton system
  - (C) Muscular system
  - (D) Digestive system
- **2.** Which Philosophy of Education defines teacher as a role model of students?
  - (A) Idealism
  - (B) Realism
  - (C) Naturalism
  - (D) Existentialism
- **3.** During training the sensation of vomiting is caused due to
  - (A) accumulation of Lactic Acid
  - (B) adrenaline
  - (C) more oxygen intake
  - (D) carbon dioxide
- **4.** Which are the major subcellular adaptations that enhances the oxidation of Carbohydrate in muscle cells
  - (1) increase in the number and size of mitochondria.
  - (2) increase in the ATP ase enzymatic activity in sarcoplasm of cell.
  - (3) increase in enzymatic activity of Krebs cycle and Electron transport system.
  - (4) increase in the capacity of phosphagen system.

### Codes:

- (A) 1, 2 & 3
- (B) 1 & 2
- (C) 1, 3 & 4
- (D) 1 & 3

- **5.** Macro trauma is:
  - (A) blow to previous injured tissue
  - (B) blow on healthy tissue
  - (C) repeated sub-maximal trauma
  - (D) None of the above
- **6.** PPBES stands for:
  - (A) Planning, Programming, Budgeting, Education and System
  - (B) Planning, Programming, Budgeting, Entry and System
  - (C) Planning, Preparation, Balancing, Education and System
  - (D) Planning, Programming, Budgeting, Evaluation and System
- 7. Skinner propounded:
  - (A) Feedback theory of learning
  - (B) Gestalt theory of learning
  - (C) Stimulus response theory of learning
  - (D) Operant conditioning theory of learning
- **8.** Roger's strength test consists of:
  - (i) Hand grip test
  - (ii) Leg strength test
  - (iii) Back strength test
  - (iv) Arm strength test

- (A) (i) & (ii) are correct
- (B) (i) & (iii) are correct
- (C) (iii) & (iv) are correct
- (D) All of the above are correct

- **9.** The Psychomotor domain of Physical Education is concerned with
  - (A) Knowledge
  - (B) Attitude
  - (C) Motor skill
  - (D) Values
- 10. In second class lever, resistance is located between
  - (A) Fulcrum and force
  - (B) Force and resistance
  - (C) Fulcrum and resistence
  - (D) None of the above
- 11. In development process the terms 'gang-age' occurs during
  - (A) early childhood
  - (B) puberty
  - (C) infancy
  - (D) later childhood
- **12.** Match *List I* with *List II* and select the correct answer from the codes given below:

## List I

List II

- I. Hinge joint
- 1. Wrist
- II. Pivot joint
- 2. Hip
- III. Ball & Socket joint
- 3. Elbow
- IV. Gliding joint
- 4. Neck

#### Codes:

	I	II	III	IV
(A)	1	3	4	2
(B)	2	1	3	4

- 4 (C) 3
- 2
- (D) 4
- 1

- 13. Linear velocity depends on
  - I. angular velocity directly.
  - II. redius of rotation inversely.
  - III. both angular velocity and radius of rotation directly.
  - IV. both angular velocity and radius of rotation inversely.

Find the correct combination:

- (A) I, II
- (B) I, III
- (C) II, IV
- (D) III, IV
- **14.** Match List I with List II and select the correct option using the codes given below:

### List I

List II

- I. Circuit Training
- 1. Winter Bottom
- II. Fartlek Training
- 2. Reindell and Greschler 3. Gosta Halmar
- III. Interval Training IV. Pressure Training
- 4. Morgan and Adamson

	Ι	II	III	IV
(A)	3	4	1	2
(B)	4	3	2	1

- (C) 2
- 2 3 4 (D) 1
- 15. When a tennis player attempts to learn Golf, it is
  - (A) Positive transfer
  - (B) Negative transfer
  - (C) Zero transfer
  - (D) None of the above
- **16.** IQ is measured by the formula

(A) 
$$IQ = \frac{Mental age}{Chronological age} \times 100$$

(B) 
$$IQ = \frac{Chronological age}{Mental age} \times 100$$

(C) 
$$IQ = \frac{Mental age}{Physiological age} \times 100$$

(D) 
$$IQ = \frac{Physiological age}{Mental age} \times 100$$

X-5 2017-III

<b>17.</b> What is the number of officials in a volleyball match?	22. The cognitive reason of plateau in motor learning is
(A) 5	(A) lack of concentration
(B) 8	(B) change of teaching method
(C) 7	(C) overloading
(D) 9	(D) chronic injury
<b>18.</b> The term Hypokinetics refers to that phase of Physical Education when amount of muscular activity	
is	<b>23.</b> Assertion(A): Sodium bicarbonate supplement
(A) sufficient	can delay the onset of fatigue.
(B) insufficient	Reason(R): A dose of 300mg/kg body weight taken almost 2–3 hours before
(C) more than required	exercise appears to be both
(D) None of the above	effective and medically safe.
	(A) Both $(A)$ and $(R)$ are false.
<b>19.</b> Test for motor ability are	(B) Both $(A)$ and $(R)$ are true.
(A) Roger's test, Barrow's test, Mcloy's test,	(C) $(A)$ is true but $(R)$ is false.
Scott's test	(D) $(A)$ is false but $(R)$ is true.
(B) Krans Weber test, Harvard step test, Sargent test, J.C.R. test	
(C) Cooper's test, AAHPER's test, Canadian test, Harvard's test	<b>24.</b> Match <i>List I</i> with <i>List II</i> and select the correct
(D) Oregon's test, Johnson's test, Adam's test,	answer using the codes given below:
Fleishman's test battery	List I List II
	(a) Burpee Squat Thurst (i) Growth measurement
<b>20.</b> The highest score point in Judo is	(b) Harvard Step Test (ii) Agility
(A) Ippon	(c) Wetzel Gride Test (iii) Endurance
(B) Wazari	measurement
(C) Hansoku Make	(d) Bass Stick Test (iv) Balance
(D) Yuko	measurement
	Codes:
<b>21.</b> The term 'double fault' is used in	(a) (b) (c) (d)
(A) Badminton	(A) (iii) (iv) (i)
(B) Table Tennis	(B) (ii) (iii) (i) (iv)
(C) Tennis	(C) (iv) (i) (ii) (iii)

(D) (i)

(iv)

(iii)

(ii)

(D) Basketball

**25.** Match *List A* with *List B* and chose the correct answer from the codes given below:

List A

List B

- (a) Historical Method
- (i) Past events
- (b) Survey Method
- (ii) Vision

(d)

(v)

(v)

- (c) Philosophical Method
- (iii) Present events
- (d) Experimental Method
- (iv) Exceptional case
  - (v) Future action

Codes:

- (a)
- (b)
- (c)
- (A) (i)
- (iii) (ii)
- (ii) (iv)
- (B) (i) (C) (i)

(D) (i)

- (ii)
- (iv) (ii)
- (v) (iii) (iv)
- **26.** The cognitive intervention strategy to improve performance does not include
  - (A) Autogenic Training
  - (B) Mental Rehearsal
  - (C) Self Talk
  - (D) Imagery Training
- 27. The Aerial Tumbling is the best example of a projectile principle for
  - (A) accuracy
  - (B) frequency
  - (C) distance
  - (D) height
- 28. Arrange in correct sequential order the approaches adopted to study personality in sports:
  - I. Trait approach
  - II. Situation approach
  - III. Psychodynamic approach
  - IV. Interactional approach

Codes:

- (A) I, III, IV, II
- (B) IV, II, I, III
- (C) II, IV, III, I
- (D) III, I, II, IV

- 29. Given below are two statements one is Assertion (A) and the other is Reason (R).
  - Assertion(A): 't' test can be used to test the significance of difference between mean values of two groups.
  - Reason(R): 't' test is a parametric inferential statistical test of null hypothesis for a sample where population variance is not known.

In the context of the above two statements which one of the following is correct?

- (A) Both (A) and (R) are true and (R) is the correct explanation of (A).
- (B) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
- (C) (A) is true but (R) is false.
- (D) (A) is false but (R) is true.
- **30.** The overall effect of an independent variable on a dependent variable is known as
  - (A) Direct effect
  - (B) Indirect effect
  - (C) Main effect
  - (D) Interaction effect
- 31. Who among the following, propounded the concept of paradigm?
  - (A) Von Thunen
  - (B) John K. Wright
  - (C) Thomas Kuhn
  - (D) Peter Haggett
  - **32.** In a mesokurtic curve, the Kurtosis is
    - (A) 3
    - (B) 0
    - (C) less than 3
    - (D) more than 3

X-7 2017-III

- 33. Aquisition of Motor skill mainly depends on
  - (A) Co-ordinative ability
  - (B) Flexibility
  - (C) Speed
  - (D) Endurance
- **34.** When the reliability and validity of a test have already been established, it is called
  - (A) Objective test
  - (B) Teacher made test
  - (C) Standardized test
  - (D) Subjective test
  - **35.** Which of the following is not a test of Volleyball?
    - (A) Miller Wall Volley Test
    - (B) Brady Volleyball Test
    - (C) Russel lange Test
    - (D) French Cooper Volleyball Test
- **36.** Test, Measurement and Evaluation are related with one another in the following way:
  - (A) Measurement and Evaluation are parts of test
  - (B) Evaluation and test are parts of Measurement
  - (C) Test and Measurement are parts of Evaluation
  - (D) Evaluation is a part of both test and Measurement
- **37.** Which of the following is against the principles of organisation?
  - (A) Overlapping of authority
  - (B) Proper Decentralization
  - (C) Delegation of Power
  - (D) Proper Communication

- **38.** Getting the right facts to the right people at right time in the right way is called
  - (A) Game Management
  - (B) Public relation in sports
  - (C) Motivation in sports
  - (D) Leadership in sports
- **39.** Emotional skills to develop emotional maturity are
  - I. Self awareness
  - II. Controlling impulses
  - III. Resisting negative influences
  - IV. Delaying gratification

Find the correct combination:

Codes:

- (A) II & III
- (B) III & I
- (C) II & IV
- (D) I & IV

(C) 2

**40.** Match *List-II* with *List-III* and select the correct option from the codes given below:

puon	i iroin	tne	codes given	bei	ow:
	List I				List II
			c Training Fraining		Explosive strenght Hemoglobin count
			Training Training		Ventricular size
		Plyometric Training			Myocardial thickness
	Code	?s:			
		I	II	III	IV
	(A)	4	3	2	1
	(B)	1	4	3	2

3

**41.** Given below are two statements, one is labelled as *Assertion (A)* and other labblled as *Reason (R)*.

Assertion(A): Test and Measurement are means which are helpfull in the achievement of specific objectives.

Reason(R) : Test and Measurement are not an end in themselves.

Which one of the following statement is correct?

#### Codes:

- (A) Both (A) and (R) are right and (R) is correct explanation of (A).
- (B) Both (A) and (R) are not true.
- (C) (A) is true, but (R) is not right explanation of (A).
- (D) (A) is true but (R) is not true.
- **42.** Select correct option:

Protraction and retraction takes place in

- (A) Hip joint
- (B) Sholder joint
- (C) Elbow joint
- (D) Knee joint
- **43.** Given below are two statements, one is labelled as *Assertion* (A) and other labelled as *Reason* (R).

Assertion(A): Insuline is ineffective when taken by mouth.

Reason(R): Insuline is destroyed in alimentary canal and size of the molecule is two large for intestinal absorption.

In context of the above two statements, which one of the following is correct?

- (A) (A) is true, but (R) is false.
- (B) (A) is false, but (R) is true.
- (C) Both (A) and (R) are true.
- (D) Both (A) and (R) are false.

- **44.** Which of the following is a macronutrient?
  - (A) Sodium
  - (B) Calcium
  - (C) Water
  - (D) Iron
- **45.** Peptic ulcer is a disease of
  - (A) Biological origin
  - (B) Psychological origin
  - (C) Physical origin
  - (D) Chemical origin
- **46.** The leading cause of death in human today is
  - (A) Communicable disease
  - (B) Contageous disease
  - (C) Lockjaw
  - (D) Lifestyle disease
- **47.** Sports performance is the most intensely related to
  - (A) Motor skill related fitness
  - (B) Health related fitness
  - (C) Physiological fitness
  - (D) Psychological fitness
- **48.** The prime objective of wellness providing agencies is
  - (A) Producing sports persons
  - (B) Developing Physical fitness
  - (C) Stress reduction
  - (D) Rehabilitation therapy
  - **49.** The aim of recreation is
    - (A) Development of wholesome personality
    - (B) Utilization of free time in constructive way
    - (C) Deriving satisfaction by any means
    - (D) Promote total health

X-9 2017-III

- **50.** Which of the following has all through been the format of professional Physical Education courses in India?
  - (A) Theory, Practicals and Teaching Ability
  - (B) Theory, Practical Skills and Performance
  - (C) Theory, Practical Skills, Teaching Skills and Specialization
  - (D) Theory, Practical Skills and Practical Experiments
- **51.** The physical activity programme for adolescents must necessarily be
  - (A) Development oriented
  - (B) Competition oriented
  - (C) Recreation oriented
  - (D) Achievement oriented
- **52.** Given below are two statements, one labelled as *Assertion (A)* and the other labelled as *Reason (R)*.
  - Assertion(A): It is evident from various research studies that a greater arterial venous oxygen difference exist in trained persons than untrained ones.
  - Reason(R): This is due to lower extraction of oxygen from blood by working muscles of trained persons because of their enhanced mechanical efficiency.

In the context of the above two statements, which one of the following is correct.

- (A) (A) is right, but (R) is wrong.
- (B) (A) is wrong, but (R) is right.
- (C) Both (A) and (R) are right and (R) is correct explanation of (A).
- (D) Both (A) and (R) are right but (R) is not correct explanation of (A).

**53.** The recommended dose of glucose during activity to an athlete is

- (A) 2.0 to 2.5 grams per 100 ml of water.
- (B) 4.0 to 5.0 grams per 100 ml of water.
- (C) not more than 20 gms per 500 ml of water.
- (D) 9.0 to 12.0 gms per 100 ml of water.
- **54.** Given below are two statements, one labelled as *Assertion (A)* and the other labelled as *Reason (R)*.
  - Assertion(A): Glycogen loading leads to decreased niacin intake carbohydrate rich diet.
  - Reason(R): The decreased niacin intake during glycogen loading increases maximal aerobic power.

In the context of the above two statements, which one of the following is correct?

- (A) (A) is right, but (R) is wrong.
- (B) (A) is wrong, but (R) is right.
- (C) Both (A) and (R) are right and (R) is right explanation of (A).
- (D) Both (A) and (R) are right but (R) is not right explanation of (A).
- **55.** During exhaustive exercise, how many moles of ATP can be produced from the anaerobic glycolysis of one mole carbohydrate?
  - (A) 1 mole
  - (B) 3 moles
  - (C) 2 moles
  - (D) 2.5 moles
- **56.** To produce one mole of ATP via fatty acid oxidation than to produce one mole of ATP by complete degradation of glycogen requires
  - (A) 40% more oxygen
  - (B) 60% more oxygen
  - (C) 15% more oxygen
  - (D) 30% more oxygen

- **57.** After exhaustive bout of exercise, complete Intramuscular phosphogen restoration during recovery period requires only
  - (A) 3 to 5 minutes
  - (B) 9 to 12 minutes
  - (C) 15 to 20 minutes
  - (D) 45 to 50 minutes

- **58.** The minimal voltage in which neuron will transmit an impulse is
  - (A) 07 millivolts
  - (B) 11 millivolts
  - (C) 20 millivolts
  - (D) 21 millivolts

- **59.** The larger motor nerves innervating the extra fusal fibers are called
  - (A) Gamma motor nerves
  - (B) Fusimotor nerves
  - (C) Alpha motor nerves
  - (D) Beta motor nerves

**60.** Given below are two statements, one labelled as *Assertion (A)* and the other labelled as *Reason (R)*.

Assertion(A): Several studies had reported only small biochemical changes followed by several weeks of weight training.

Reason(R): During weight training a reduction in blood flow to muscles is caused by high levels of intramuscular pressure during muscular contraction resulting in the decrease of stimulus for biochemical adaptation at local muscular level.

In the context of the above two statements, which one of the following is correct?

- (A) (A) is right, but (R) is wrong.
- (B) (A) is wrong, but (R) is right.
- (C) Both (A) and (R) are right and (R) is the correct explanation of (A).
- (D) Both (A) and (R) are right but (R) is not the correct explanation of (A).
- **61.** Match the items of *List-I* with the items of *List-II* and select the correct options from the code given below:

		L	ist I		List II
I.	Axo	1		1	. Heart
II.	Neph	nron		2	. Muscle
III.	Z-lin	ie		3	. Kidney
IV.	IV. Bundle of his 4.				. Lungs
				5	. Nerve
	Code	es:			
		I	II	III	IV
	(A)	5	3	1	2
	(B)	5	3	2	1
	(C)	2	3	5	1
	(D)	2	5	2	4

X-11 2017-III

- **62.** Which law states that stroke volume increases in response to an increase in the volume of blood filling the ventricle during diastole?
  - (A) Gradient reaction law of the heart
  - (B) Pearlman's law of the heart
  - (C) Responsive fill law of heart
  - (D) Starling's law of the heart

- **63.** Which of the following is not a stage of General Adaptation Syndrome?
  - (A) Alarm-Reaction
  - (B) The stage of Resistance
  - (C) State of Supercompensation
  - (D) State of Exhaustion

**64.** Given below are two statements, one labelled as Assertion(A) and the other labelled as Reason(R).

Assertion(A): Fitness is that state which characterized the degree to which person is able to function.

Reason(R): Fitness is an individual matter implies the ability to live most effectively with potential.

In the context of the above two statements, which of the following is correct?

- (A) Both (A) and (R) are true and (R) is the correct explanation of (A).
- (B) Both (A) and (R) are true and (R) is not correct explanation of (A).
- (C) (A) is true and (R) is false.
- (D) (A) is false and (R) is true.

- **65.** A forward upward movement of the foot at the ankle joint is
  - (A) Planter flexion
  - (B) Dorsi flexion
  - (C) Inversion
  - (D) Eversion
- **66.** Given below are two statements one is Assertion(A) and the other is Reason(R).

Assertion (A): Providing some basic knowledge about the human nervous system and facts about locomotion will enhance the capabilities of the

learner to learn a motor skill.

Reason (R): Learning of motor skill will

be more effective if the individual feels that there is need to learn it.

Select the correct answer form the codes given below:

- (A) Both (A) and (R) are true and (R) is the correct explanation of (A).
- (B) Both (A) and (R) are true but (R) is not the correct explanation of (A).
- (C) (A) is true and (R) is false.
- (D) (A) is false and (R) is true.
- **67.** The degree of uniformity with which various testers score the same test is found out through
  - (A) Validity
  - (B) Reliability
  - (C) Objectivity
  - (D) All of the above

List II

4. Obesity

**68.** Match *List-I* with *List-II* and select the correct answer from the codes given below:

List I

- I. The ratio of the body-weight 1. Somatotyping in air to its volume
- II. A body shape classification 2. Reliability system of external appearance
- III. A process by which there 3. Body density is gradual accumulation of fat over a period
- IV. Dependability of a test which is related to its performance

Codes:

	I	II	III	IV
(A)	3	1	4	2
(B)	1	3	2	4
(C)	2	4	3	1
(D)	4	2	1	3

- **69.** Build-up competition are also known by the name of
  - (A) simulated competitions
  - (B) principal competitions
  - (C) training competitions
  - (D) major competitions
- **70.** As a measure of rehabilitation, contrast baths may be given
  - (A) immediately after injury.
  - (B) after application of compression.
  - (C) after complete disappearance of swelling.
  - (D) only when swelling has stabilized.

- **71.** Young children are less prove to fracture after bad fall because
  - (A) their muscles are supple.
  - (B) they learn falling techniques by nature.
  - (C) they are naturally agile.
  - (D) their bones are pretty elastic.
- **72.** Match the following expressions in the two *Lists I* and *II* in a meaningful way:

					J -			
List I						List	II	
I.	Roun	d back			1.	Torque		
II.	Balar	Balance point			2.	Centre of gravity		ity
III.	Force of rotation				3.	Accele	Acceleration	
IV.	7. Change in velocity				4.	Kyphosis		
V.	Lever's fixed point				5.	Fulcrum		
	Code	es:						
		I	II	III		IV	V	
	(A)	4	2	1		3	5	
	(B)	5	4	2		3	1	
	(C)	1	2	3		5	4	
	(D)	3	1	5		4	2	

- **73.** Match the following in a meaningful way:
  - I. Source of energy during 1. Haemoglobin all out sprints
- II. A storage depot for oxygen 2. Aerobic power in the muscle
- III. Maximum rate of oxygen 3. Myoglobin consumption during exercise
- IV. Factor determining the oxygen carrying capacity metabolism of the blood

	Ι	II	III	IV
(A)	3	1	4	2
(B)	2	1	4	3
(C)	1	2	3	4
(D)	4	3	2	1

X-13

- **74.** Which of the following measures represents scatter of scores around median?
  - (A) Standard Deviation
  - (B) Average Deviation
  - (C) Quartile Deviation
  - (D) None of the above

**75.** 
$$\frac{Q_3 + Q_1 - 2 \text{ Med}}{Q_3 - Q_1}$$
 is

(A) Karl Parsson's Coefficient of skewness

2017-III

- (B) Bowley's Coefficient of skewness
- (C) Kelly's Coefficient of skewness
- (D) Measure of skewness based on moments

2017-III X-14

# **ROUGH WORK**

X-15 2017-III

# **ROUGH WORK**

2017-III X-16

# **ROUGH WORK**