



UNIVERSITY OF THE PUNJAB

M.A./M.Sc. Part – I Annual Exam – 2019

Subject: Sport Science & Physical Education

Time: 30 Min. Marks: 17

Paper: I (Sports Management and Planning Sports Facilities)

Roll No. in Fig.

Roll No. in Words.

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Q No 1 Choose the correct answer..... Cutting and overwriting is not allowed

1. Management is the combination of _____
(a) Drawing (b) Philosophy (c) Art or Science (d) trading (e) None of these
2. The Design of Golf Club would refer to which area of the study _____?
(a) Koniology (b) Quantitative Biomechanics (c) Equipment Analysis (d) Both A & B (e) None
3. There are _____ kind of artificial surfaces
(a) 2 (b) 3 (c) 4 (d) None of these
4. Top level management is occupied by _____
(a) Foreman (b) Managers (c) Directors (d) All Of them (e) None of these
5. S.W.O.T Analysis is to identify _____
(b) Strength work Oppose and try
(c) Strength Workshop opposite Terrified
(d) Strength Weakness opportunity Threats
(e) None of them
6. Function of management is classified by Gulck Unwick in _____
(a) 1911 (b) 1937 (c) 1965 (d) 1943 (e) None of these
7. The standard size (length and width) swimming pool is _____
(a) 100-75 meters (b) 100-50 meters (c) 100-25 meters (d) 100-45 meters (e) None of these

P.T.O.

8. Planning is deciding in advance what to do how to do According to _____
(a) Sir Issac (b) Koontz (c) Peter (d) effective manager (e) None of these
9. Which process was listed by Gulick and Unwick
(a) Planning and organizing (b) Leadership (c) Staffing directing and controlling (d) A and C
10. Which one is not considered as organization?
(a) Clubs (b) Society (c) Schools (d) Organization
11. The planning process has ____ steps
(a) 3 (b) 4 (c) 5 (d) A and C
12. The temperature of water in international swimming pool is _____
(a) 20-24 C° (b) 25-28 C° (c) 29-32 C° (d) 15-19 C°
13. Staffing in sports management involves _____
(a) Supervision (b) Motivation (c) Communication (d) None of these
14. Management is concerned with the _____ of policies?
(a) Determination (b) Implementation (c) Both A and B (d) None of these
15. What is Asiad
(a) A person name (b) An Animal (c) A sports event (d) A disease (e) None of these
16. Mostly funds should be generated through _____ for sports events
(a) Donation (b) Gifts (c) Funds from Public Sectors (d) All of these
17. _____ is a managing program that involves arranging and structure of work to accomplish goals
(a) Planning (b) Leading (c) Controlling (d) Organizing



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ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Note: Attempt any FOUR questions. All questions carry equal marks.

Q No 2 Define and explain the following terms in sports management and planning?

- | | | |
|---------------|---------------------|-------------------------|
| (a) Unit plan | (b) Functional Plan | (c) Awards of the event |
| (d) Customs | (e) Budgeting | (f) Equipment's |

Q No 3 Define management? Write down its importance in sports era?

Q No 4 (a) Define Artificial surfaces? Write a detail note on indoor artificial surfaces?

(b) Write down importance of artificial surfaces in sports

Q No 5 Write a comprehensive note on biomechanics research laboratory?

Q No 6 Explain and define importance of inventories in sports?

Q No 7 Write a detailed note on Planning Commission 1?

Q NO 8 Write a detail note on Co-operative Structure of Pakistan Cricket Board (PCB)?



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M.A./M.Sc. Part – I Annual Exam – 2019

Subject: Sport Science & Physical Education
Paper: II (Sports Nutrition)

Time: 30 Min. Marks: 17

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Q.1. Encircle the right answer cutting and overwriting is not allowed.

1. ----- are those that are needed in minute quantities
A. Macro Nutrients B. Micro Nutrients C. Vitamins D. Minerals
2. ----- is the process by which plants use the energy from sunlight to produce glucose from carbon dioxide and water. This glucose can be converted into pyruvate which releases adenosine triphosphate (ATP) by cellular respiration. Oxygen is also formed
A. Osmosis B. Diffusion C. Photosynthesis D. Both A & B
3. ----- Play a vital in regulating body processes like growth, eyesight, health of the skin and good digestion
A. Fats B. Minerals C. Protein D. Vitamins E. Carbohydrates
4. Rectum is about ----- long
A. 15 Inches B. 15 mm C. 15 Meters D. 15 cm
5. In Carbohydrates Maltose are considered as
A. Disaccharides B. Monosaccharides C. Polysaccharides D. Oligosaccharides
6. Fibers are Beneficial for weight control by contributing to satiety & delay gastric emptying which is also called
A. Gastroparesis B. Ketosis C. Dialysis D. Hydrolysis
7. Saliva contains amylase Converts polysaccharides, starch, into oligosaccharides, maltose, and glucose Broken down by ----- reaction
A. Hydrolysis B. Ketosis C. Acidosis D. Both A & C
8. Proteins are ----- of smaller units called amino acids, some of which can be manufactured in the body (so-called "non-essential"), and others must be provided pre-formed by food (the essential amino acids)
A. Tumors B. Polymers C. Producers D. Enzymes

P.T.O.

9. Protein recommended for strength athletes is -----
 A. 0.8 gm/kg/day B. 1.8 gm/kg/day C. 1.4 gm/kg/day D. 1.2 gm/kg/day
10. Without adequate protein
 A. Cells lining the GI tract are not sufficiently replaced as they slough off
 B. Digestive function is inhibited
 C. Absorption of food is reduced
 D. Immune system is compromised due to malnutrition and cannot fight infection
 E. All of the above
11. People choose vegetarian diets for a reason of
 A. Ethical B. Religious C. Both A & B D. Health E. A, B & D
12. Severe protein deficiency leads to
 A. Kwashiorkor B. Marasmus C. Marasmic Kwashiorkor D. All of the above
13. Dietary fiber is provided in
 A. Whole grains B. Legumes C. Vegetables D. Fruits E. All of the Above
14. Calcium, Phosphorus & Magnesium are:
 A. Major Minerals B. Trace Minerals C. Micro Nutrient D. Macro Nutrient
15. Smokers have increased needs thought to be 2 oxidative stress caused by cigarette smoke.
 A. Vitamin B12 B. Thiamin (Vitamin B1) C. Riboflavin (Vitamin B2) D. Vitamin C
16. ----- is A layer at the back of the eyeball that contains cells sensitive to light, which trigger nerve impulses that pass via the optic nerve to the brain, where a visual image is formed
 A. Membrane B. Portal Vein C. Retina D. Lense
17. Vitamin D helps to balance of ----- in our body
 A. Phosphate B. Calcium C. Iron D. Both A & B E. Both B & C



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ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Note: Attempt any FOUR questions. All questions carry equal marks.

- 2 Briefly describe the followings
 - A. Non-Essential Amino Acid
 - B. Cholesterol
 - C. Body Mass Index
 - D. Hyponatremia
 - E. Glycemic Index
 - F. Hypotonic Drinks
- 3 What are lipids? Explain different functions of fats in human body in detail
- 4 How eating disorders hurt an athlete badly and suggest its treatment?
- 5 Explain how Carbohydrates provide energy to athletes through Oxidative Independent Energy system?
- 6 Explain in detail Caffeine's effects on metabolism
- 7 Write a detail note on the following
 - (a) Vitamin K
 - (b) Sodium (Na)
- 8 Define protein and discuss in detail the functions of protein



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M.A./M.Sc. Part – I Annual Exam – 2019

Subject: Sport Science & Physical Education

Time: 30 Min. Marks: 17

Paper: III (Sports Biomechanics)

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Q.1

1 x 17=17

1. Which of the following affects the time that a horizontally projected object remains in the air?
 - a) weight of projectile
 - b) mass of projectile
 - c) projection height
 - d) all of the above
2. All of the following quantities except one represents a type of force. Which quantity is not a force?
 - a) Friction
 - b) mass
 - c) weight
 - d) gravity
3. If an object of constant mass travels with a constant velocity, which statement is true?
 - a) momentum is constant
 - b) acceleration is zero
 - c) both a and b are true
 - d) none of the above are true
4. The product of force and the time during which the force acts defines what?
 - a) linear momentum
 - b) linear impulse
 - c) linear velocity
 - d) linear acceleration
5. How does *adding weight to the back of a pickup* increase the friction between the tires and the icy road?
 - A. changes μ_k
 - B. changes μ_s
 - C. changes R
 - D. friction is not increased
6. How does *wearing gloves* increase the friction between the hands and the bat?
 - A. changes μ_k
 - B. changes μ_s
 - C. changes R
 - D. friction is not increased
- 7-Which of the following would not be measured in a kinematic analysis of a tennis serve?
 - A. angular velocity
 - B. linear velocity
 - C. muscular force
 - D. angular acceleration

P.T.O.

8-Which of the following motions occurs primarily in the sagittal plane?

- A. running B. a cartwheel C. Lateral Flexion D. all of the above

9.Which of the following is associated with kinematics?

- a) Force b) displacement c) mass d) torque

10. Terms such as "good", "long", "flexed", and "heavy" are used in what type of biomechanical analysis?

- A. Quantitative B. qualitative C. anthropometric D. kinetic

11. Which of the following relationships is always true?

- A. $\mu_k < \mu_s$
B. $\mu_s < \mu_k$
C. $\mu_k = \mu_s$
D. none of the above

12. Which of the following questions about the long jump should be answered quantitatively?

- a) What is the horizontal velocity at take-off?
b) What is the angle at take-off?
c) both a & b
d) neither a nor b

13. Running is an example of which form of motion?

- a) Angular b) general c) rectilinear d) curvilinear

14. If velocity is constant, then acceleration is what?

- a) zero
b) constant, but not necessarily zero
c) constant
d) not need more information

15. If acceleration is constant and positive, velocity is what?

- a) zero
b) increasing
c) decreasing
d) need more information

16. In which of the following track events is distance equal to displacement?

- a) 400 m dash
b) 200 m dash
c) 100 m dash
d) 5K road race (starting line is finish line)

17. The most important condition for maximum horizontal displacement of a projectile is what?

- a) velocity at release or takeoff
b) height of release or takeoff
c) angle of projection
d) all of the above are of equal importance



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M.A./M.Sc. Part – I Annual Exam – 2019

Subject: Sport Science & Physical Education
Paper: III (Sports Biomechanics)

Roll No.

Time: 2 Hrs. 30 Min. Marks: 48

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Note: Attempt any FOUR questions. All questions carry equal marks.

- Q.2. Define the following terms in 2 – 3 lines. (6 x 2 = 12)
- | | | |
|-------------|-------------|-----------------------|
| i. Kinetics | ii. Inertia | iii. Impulse |
| iv. Impact | v. Momentum | vi. Moment of Inertia |
- Q.3. Define Sports Biomechanics, in the recent years how sports scientists use the knowledge of Sports Biomechanics in different sports. (12)
- Q.4. Explain the Newton's law of motion and relate with sports. (12)
- Q.5. Discuss Balance and Stability which factors effect on stability. (12)
- Q.6. Define drag force and types of drag force, how can we reduce it? (12)
- Q.7. (a) Write the names of planes and axes of the Human movements. (6)
- (b) Walking, running, back role, side bend, forward role and longitudinal twisting these movements in which plane write the names separately. (6)



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M.A./M.Sc. Part – I Annual Exam – 2019

Subject: Sport Science & Physical Education
Paper: IV (Methodology of Scientific Coaching)

Roll No.

Time: 2 Hrs. 30 Min. Marks: 48

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Note: Attempt any FOUR questions. All questions carry equal marks.

2. Attempt these short questions? 2x6
- Write any four communicational skill of a coach?
 - What the three stages of learning?
 - What are the steps for teaching sports skills?
 - Write the difference between exercise and physical activity?
 - Define BMI?
 - Name different skill relate fitness components?
3. What is the Philosophy of a Sports Coach according to Martens (2004)? Describe peculiar and crew tenets of a sports coach? What are the different discrepancies Lyle (2002) found between domineering and egalitarian coaching activities? (3+3+3+3)
4. Briefly explain the milieu of training frequency, intensity, quantity and rest with stamina, strength hypertrophy and power for a 100m sprinter? (12)
5. How Principal of individual difference vary in different body parameters for strength and endurance sports? What are different type of warm up and what purpose they serve? Why cool down is important for athletes? (6+6)
6. Briefly define the different components of Physical Fitness? Write detailed note on balance and Agility? (6+3+3)
7. Differentiate between Principal of Progression, Progressive overload and Retrogression with special reference to strength and endurance sports? (4+4+4)
8. Write not on the following training strategies for contact sport: (4+4+4)
- Physical
 - Technical
 - Tactical



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Q.1. Attempt all multiple-choice questions.

- i. 'Cybex' Machine is based on the principle of:
(a) Isometric contraction (b) Isotonic contraction (c) Isokinetic contraction (d) None of these
- ii. Body fat ratio is measured by
(a) Stadiometer (b) Spiro meter (c) Lactometer (d) Goniometer
- iii. Body adjustment to training load is known as:
(a) Strength (b) Acclimatization (c) Super Compensation (d) None of these
- iv. Basic principle of fartlek training:
(a) Variation in space (b) Variation in load (c) Variation in place (d) Variation in speed
- v. Power is denoted by:
(a) Maximum Strength with maximum speed (b) Speed Ability (c) Explosive Strength (d) None of these
- vi. Isotonic exercises are used best to develop:
(a) Endurance (b) Speed (c) Strength (d) Agility
- vii. The reasons of low sports performance in strength sports is
(a) Weak muscles (b) Low Muscle Power (c) Muscular fragility (d) All above
- viii. The name of training cycle of one month to six months is:
(a) Micro cycle (b) Meso cycle (c) Macro cycle (d) All of above

P.T.O.

- ix. Circuit training is an effective method for developing:
 (a) Speed (b) Flexibility (c) Strength Endurance (d) Agility
- x. Plyometric is also called:
 (a) Reflex phenomena (b) Reactive Jumps (c) Agility Training (d) All of these
- xi. Components effect on the speed of recovery:
 (a) Water and Mineral replenishment (b) Nutrition replenishment (c) Health & physical fitness
 (d) All of these
- xii. "Fartlek Training" was devised and adopted in:
 (a) Japan (b) England (c) Sweden (d) USA
- xiii. Speed play is also known as :
 (a) Weight Training (b) Pressure Training (c) Fartlek Training (d) Interval Training
- xiv. Interval Training is good for:
 (a) Off Season (b) Pre-Season (c) Competition Period (d) Both a & b
- xv. Who invented pyramid training:
 (a) Russians (b) Aristotle (c) Herbert Spencer (d) C. A Bucher
- xvi. Transition period aims at:
 (a) Stabilization (b) Super Compensation (c) Recovery (d) Both a & c
- xvii. Power is denoted by:
 (a) Strength & Endurance (b) Strength and Body composition (c) Strength & speed
 (d) Maximum strength with maximum speed



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M.A./M.Sc. Part – I Annual Exam – 2019

Subject: Sport Science & Physical Education

Paper: V (Sports Psychology)

Roll No.

Time: 2 Hrs. 30 Min. Marks: 48

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Note: Attempt any FOUR questions. All questions carry equal marks.

- Q.2. Write the short answers of the following: 6x2=12
- i. Define cognitive Psychology?
 - ii. Define Stress Management?
 - iii. Write down the strategies to relief stress?
 - iv. How will you use imagery in sports?
 - v. Write names of principles of goal setting?
 - vi. Write down the procedure of putting positive thinking into practice?
- Q.3. Define Sports Psychology? Explain the braches of Sports Psychology? 4+8
- Q.4. Explain Management Teaching used by coaches and players. 12
- Q.5. Explain the 6 Key components of commitment? 12
- Q.6. How you can develop safe confidence through self talk? 12
- Q.7. Explain the types of aggression in detail 12
- Q.8. Describe internal and external factors of attention. 12



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M.A./M.Sc. Part – I Annual Exam – 2019

Subject: Sport Science & Physical Education
Paper: VI (Human Anatomy)

Roll No.

Time: 2 Hrs. 30 Min. Marks: 48

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Note: Attempt any FOUR questions. All questions carry equal marks.

Q.2: Write short notes on the following. (4 x 3)

- i. Functions of Liver
- ii. Name the tarsal bones
- iii. Difference between Myoglobin and Haemoglobin
- iv. Motor Unit

Q.3: Name the parts of Digestive system and explain the digestion of food? (3, 9)

Q.4: Give difference between the following. (10, 2)

- i. ST & FT skeletal muscle fiber
- ii. Glucagon & Insulin

Q.5: Discuss the structure and movements of knee joint? (10, 2)

Q.6: Discuss the mechanism of inspiration and expiration in detail? (6, 6)

Q.7: Name different muscle movements and explain the following with examples.

- i. Prime movers
- ii. Action of Paradox
- iii. Syngist muscles

(3 x 4 = 12)

Q.8: Discuss the structure of a typical spinal nerve? (12)