Chapter-9
Sports Medicine
Important Questions

VERY SHORT ANSWER TYPE QUESTION -

(1 MARK EACH)

Q.1 What is sports medicine?

Ans. Sports medicine is a branch of medicine that deals with physical fitness, treatment and prevention of injuries related to sports and exercise.

Q.2 What is sports injury?

Ans. “Sports injuries” are the type of injuries that occur during participating in sports/competition, training sessions or sports activities.

Q.3 How to classify sports injury?

Ans. 1. Soft tissue injuries:- The injury of muscles, tendons, ligaments.

2. Hard tissue injury:- The injury of bones & joints.

Q.4. What is soft tissue injury?

Ans. A soft tissue injury is the damage of muscles, ligaments and tendons throughout the body.

Q.5 Write types of soft tissue injury.

Ans. Types of soft tissue injuries include:

·Bruises (haematoma)

·Sprains (ligaments)

·Strains (tendons)

·Lacerations (skin)

·Dislocations (joints)

·Tendonitis (tendons)

Q.6 What is R.I.C.E.R. ?

Ans. The most effective, initial treatment for soft tissue injuries is the R.I.C.E.R.. (R) rest, (I) ice, (C) compression, (E) elevation and obtaining a (R) referral for appropriate medical treatment.

Q.7 Define sprain?

Ans. Sprain is a sudden stretching of ligaments of a joints & associated with the pain & de-coloration into tissues. For example:-ankle, elbow, knee

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Q.8 What is abrasion?

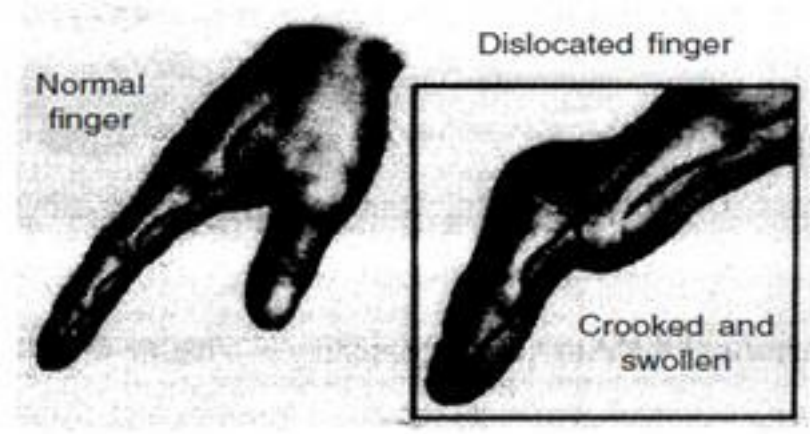
Ans. Abrasions is injury of skin or mucous membrane due to scrapping or rubbing. This injury to caused to fell on a hard rough surface.

Q.9 What is Laceration?

Ans. Laceration is a more severe injuries of tearing or ripping of the layers of skin and the fatty tissues and muscles below the wound.

Q.10 Define dislocation?

Ans. A dislocation is an injury to a joint — a place where two or more of your bones come together — in which the ends of your bones are forced from their normal positions.



Q.11 What do you mean by fracture?

Ans. A fracture is a broken bone. It can range from a thin crack to a complete break. Fracture caused by a direct blow to the bone either in a fall or a kick.

Q.12 What is FISM?

Ans. The International Federation of Sports Medicine.

SHORT ANSWER TYPE QUESTION (80 TO 90 WORDS) -

(3 MARKS EACH)

Q.1 What is the concept of sports medicine?

Ans. The modern concept of sports medicine are:-

1. The psychological aspect of performance

2. Exercise in cardio-vascular disease prevention & rehabilitation.

3. Bio-mechanics related to sports

4. Cardiac-respiratory function in relation to performance.

5. Nutrition & metabolism in relation to competitive performance.

6. Effect of altitude on endurance performance

7. Recommendations of FISM at world level.

Q.2 What are the Aims of sports medicine?

Ans. The Aims of sports medicine are:-

1. To prevent to damage to the human system caused mostly by inactivity due to sedentary habits and lack of physical exercise.

2. To concentrate on the causes of injury

3. To recover from the injury and regain maximum body functioning after an accident.

4. Advance preparation to protect athlete from physical injury occurred during play, practice or competition in a match.

Q.3 What are the most common causes of fracture?

Ans. 1. High impact sports injuries

2. Traumatic, forceful and unnatural movements

3. Overuse - prolonged long-distance walking or running

4. Falls

5. Accidents

6. Osteoporosis

Q.4 What are the differences between intrinsic and extrinsic factors of Injury?

Ans.

Intrinsic Factors of Injury	**Extrinsic Factors of Injury**
Factors present in the athlete's body Like-lack of physical and physiological Parameter.	Factors present surrounding the atheletes, like-climate, playing surfaces ,equipment and facilities.
This factors may be heredity.	This factors may be natural o r man made.
This factor may be prevented by the proper training and conditioning of the body.	This factor may be prevented by providing good environment & preventive measures.

LONG ANSWER TYPE QUESTION (150 TO 200 WORDS) -

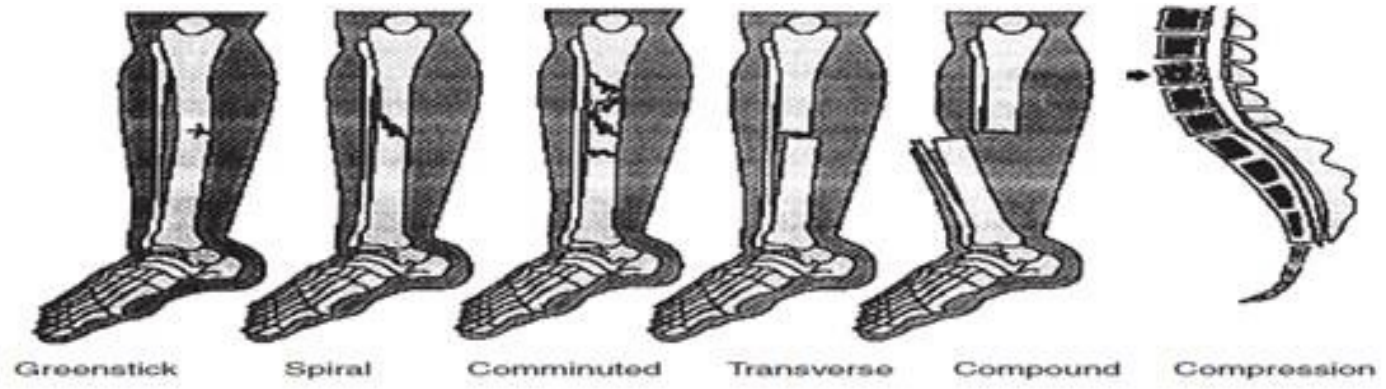
(5 MARKS EACH)

Q.1 Write down types of bone fracture?

Ans. Simple - the bone is broken in one place.

Closed - the skin over the broken bone has not been pieced.

Comminuted - the broken bone has three or more bone fragments.



Open or compound - the skin over the fracture has been pierced and the broken bone is exposed.

Undisplaced - the broken bone pieces are aligned

Displaced - the broken bone pieces are not aligned

Transverse fracture - the fracture is at a right angle to the long axis of the bone.

Greenstick fracture - the fracture is on one side of the bone, causing a bend on the other side of the bone.

Q.2. How you can avoid sports injuries?

Ans. 1. Proper coaching

2. Proper use of equipment

3. Proper conditioning

4. Proper warming up and cooling down

5. Protective sports equipment and gear

6. Avoid dehydration

7. Balanced diet

8. Use of right techniques

9. Proper knowledge of sports skills

10. Avoid overdoing training

11. Avoid working when muscle is weak because of fatigue

12. Appropriate sports environment

13. Injury management

Q.3 What are the types of injury and its possible causes?

Ans.

Type of Injury	**Structure**	**Possible Cause**
Soft Tissue		
Sprain	Ligament	Excessive movement force the joint past its maximum range of motion, or external violence such As a side push on the knee during a football kick.

Strain	Muscle or Tendon	Overstretching of muscles or tendon generally during sudden acceleration or deceleration.
Contusion(bruise or Haematoma) or a Cork **Open wound-cut, Abrasion, laceration**	Muscle, Tendon Or Skin Skin	Direct blow from a collision with A player or piece of equipment, orfrom a heavy fall. Direct blow from a collision with a player or piece of equipment.
Hare Tissue		
Fracture **Dislocation/ Subluxation**	Bone Joint	Direct trauma such as a blow: Indirect trauma such as falling on an outstretched hand Excessive movement of the Joint.

Q.4 What are the symptoms and treatment of dislocation? What are the preventive measures for dislocation?

Ans. Signs and symptoms of dislocation:

·Discoloured

·Swollen

·Mis-happen

·Limited in mobility

·Intensely Painful

·Incapable of bearing weight

FIRST AID of dislocation:-

·Call 1099 or your local emergency assistance number.

·Splint the joint in its current position to give support. Attempting to reposition the joint could cause additional damage.

ICE & REST

·Ease swelling with ice.

·Rinse the wound gently if the skin is cut.

·Elevate the injured part of body

·Rest & relax the patient

·Elevate the injured part

·Support the injured part with supporting material

·Tie and cover the injured part

Preventive measures for dislocation

1. **Awareness:** Players should be well rested and alert. The ability to recognize and avoid hazards on the field, whether from an opponent or a stationary obstacle, is critical.

2. Equipment : Gear should fit properly. Shoes should be comfortable and supportive. Helmets should never block vision. Uniforms should fit well and not restrict movement.

3. **Protective gear :** Pads and helmets are a must. Protective gear buffers the force of any impact.

4. Proper warming up and cooling down:-

5. Avoid Irregular surfaces

Rehabilitation - Refer to qualified doctors for treatment.

·Normal Movement

1. Treatment

2. Physiotherapy

3. Massage

·Fitness for Sports participations

·Measurement of Injured parts fitness component.

Q5. Explain the meaning & need of Sports Medicine in detail.

Ans. Sports medicine is a branch of medicine that deals with physical fitness, treatment and prevention of injuries related to sports and exercise.

Sports medicine is the area which creates a positive environment, so an athlete converts his all genetic potentialities into phenotypic realities.

Need of sports medicine:-

·Identification of proper sports talent with the help of medical tests.

·Selection and rejection of team members on the basis of sports medical problems.

·Helping in the preparation of training schedule

·Prescribing the balance and special diet for people and sports men.

·Suggesting coaches and trainers for modifying their training programme.

·Educating the athlete regarding first aid of some common sports medical problems.

·Educating the athlete regarding use and abuse of drugs and other medicines.

Q6. Give description of intrinsic & extrinsic factors in sports injury?

Ans. **EXTRINSIC RISK FACTOR**

Inappropriate coaching

This is given by a coach who doesn’t have up to date knowledge of the current sporting rules and are not implying these rules in training situations.

Incorrect technique

This is where the participant slips from the correct technique taught by their coach. Bad technique can then adapt into bad habits leading to injuries.

Environmental conditions

These create a risk if the sports hall is slippery or it is raining outside stopping the participant in doing attacking or defensive work making them more likely to slip and cause injury.

Other sports players

Getting injured in a contact game from tackles, e.g rugby, in non contact sport getting injured from accidental collision or foul tackles.

Equipment and clothing

This could cause someone to get injured, and there is these to help certain sports. In football they have shin pads.

INTRINSIC RISK FACTOR

Inadequate warm up

This prepares the body mentally and physically before a game. It also gets the blood moving around the body.

Poor preparation

This is due to the ability of the sport, if someone is not very fit they cannot go in and play a 90 minute football match. It is also affected by the weather conditions, for example a marathon runner in England and Africa.

Postural defects

Most people are born with this and can affect their running technique by putting more strain on a part of the body compared to the other.

Poor technique

If a athlete has been taught not using the correct method then they can allow injury due to

muscles and bones moving in the wrong direction.

Risk factor - age

This varies the type of injury to the level of competition. On one end of the scale one they can fall over lots whereas the other end the injury tends to be more overused.