

# CUET 2023 Physical Education Question Paper with Answer Key and Solutions June 1 Shift 2 (Memory-based)

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**Question 1. What is the formula of number of byes in lower half?**

**Answer.** Number of Byes =  $2^{(\text{Ceiling}(\text{Log}_2(\text{Total Number of Participants})) - 1)} - \text{Number of Participants}$

**Solution.** To calculate the number of byes in the lower half of a tournament bracket, you can use the following formula:

Number of Byes =  $2^{(\text{Ceiling}(\text{Log}_2(\text{Total Number of Participants})) - 1)} - \text{Number of Participants}$

In this formula:

- "Ceiling" represents rounding up to the nearest whole number.
- "Log<sub>2</sub>" refers to the logarithm base 2.
- "Total Number of Participants" represents the total number of participants in the tournament.

By using this formula, you can determine the number of byes required in the lower half of the bracket to accommodate an optimal power-of-two structure. This formula assumes that the total number of participants is a power of two or a multiple of a power of two. If the total number of participants is not a power of two, the formula helps identify the number of byes needed to balance the bracket.

**Question 2. What is the SI unit of force?**

**Answer.** The SI unit of force is the **newton**, symbol **N**.

### **Question 3. Which equipments are required for partial curl up?**

**Answer.** a leveled, cleansed, cushioned surface, linen sheets, pen, a metronome, etc.

### **Question 4. What is the objective of first aid?**

**Answer.** Saving life by timely medical intervention.

**Solution.** The objective of first aid is to provide immediate assistance and care to an injured or ill person until professional medical help arrives. It aims to preserve life, prevent the condition from worsening, and promote recovery. First aid is typically administered by trained individuals or bystanders who are present at the scene of an accident, emergency, or sudden illness.

The primary objectives of first aid can be summarized as follows:

1. **Preserve Life:** The immediate goal of first aid is to assess the situation and take actions to preserve the life of the affected person. This includes ensuring their airway is open, checking for breathing and circulation, and providing appropriate interventions such as cardiopulmonary resuscitation (CPR) if necessary.
2. **Prevent Further Injury:** First aid aims to prevent the condition from worsening and minimize the risk of additional harm. This involves immobilizing injured body parts, controlling bleeding, applying splints, or providing support to stabilize fractures or dislocations.
3. **Alleviate Pain and Promote Comfort:** First aid may involve providing pain relief measures to help reduce discomfort and distress. This can include simple interventions like applying cold packs to reduce swelling or offering reassurance and emotional support to the affected person.
4. **Promote Recovery and Prevent Complications:** Early intervention through first aid can contribute to better recovery outcomes. Actions such

as administering appropriate medications, providing basic wound care, and supporting the person's overall well-being can help minimize complications and improve the chances of a full recovery.

5. Facilitate Professional Medical Care: First aid acts as a bridge between the occurrence of an injury or illness and the arrival of professional medical help. By providing immediate assistance, first aid buys crucial time for the person until advanced medical care is available. First aiders also play a role in communicating relevant information to healthcare professionals when they arrive.

It is important to note that first aid is not a substitute for professional medical care, but rather serves as an initial response to mitigate the impact of an injury or illness. The specific actions taken during first aid can vary depending on the nature of the emergency and the resources available. Training in first aid techniques equips individuals with the knowledge and skills to respond effectively and promptly in emergency situations.

**Question 5. First bye is given to which team?**

**Answer.** lower half bottom team

**Question 6. What is the formula of fitness index score?**

**Answer.** Fitness Index =  $(100 \times \text{test duration in seconds}) \div (2 \times \text{sum of heart beats in the recovery periods})$ .