

# Physical Activity and Leadership Training

## PART 1

### Objective Questions

#### • Multiple Choice Questions

1. Which of the following is not an element of leadership?

- (a) Creating
- (b) Managing
- (c) Building
- (d) Teaching

**Ans.** (d) Teaching is not an element of leadership. Leaders create new ideas, manage people and build relations with team members.

2. Which of the following is not a quality of a leader?

- (a) Good personality
- (b) Pride
- (c) Passion, determination and dedication
- (d) Good communication skills

**Ans.** (b) Pride is not a quality of a leader. Leaders should have attractive personality, they should be dedicated and determined. They should have good communication skills.

3. Arun is made the group leader of a mountaineering expedition. On the first day he told about all the group activities to his team. Arun and his group members executed all the plans nicely.

Which among the following is the role of a leader?

- (a) Planning for the group
- (b) Logical decision making
- (c) Be a representative of his team
- (d) All of the above

**Ans.** (d) The role of a leader is to make plans for the whole group, to take logical decisions on behalf of the group and the leader is also a representative of his team. So, Arun is a good group leader.

4. The main objective of adventure sports is

- (a) To carefully provide an environment that helps an individual to create a base for learning and independence.
- (b) To develop self worth and self confidence while being in the lap of nature.

(c) To aid a holistic development of an individual.

(d) To direct the abundant energy towards a proper aim.

**Ans.** (a) The main objective of adventure sports is to carefully provide an environment that helps an individual to create a base for learning and independence.

5. Which safety measure is used for the adventure sport shown in the below image?



- (a) Fix a running rope
- (b) Do not eat wayside leaves or flowers
- (c) Always wear a life jacket
- (d) Keep close watch on visible wind indicators

**Ans.** (a) Fixing a running rope around the waist of the climber is a safety measure used for this adventure sport.

6. Adventure sports are activities that are risky and involve some sort of danger. They are performed in natural environment and do not harm the nature. These type of sports have become very popular.

Which of the following is not an adventure sports?

- (a) Handball
- (b) Scuba diving
- (c) Skiing
- (d) Rock climbing

**Ans.** (a) Handball is not an adventure sport. It is played by two teams. Scuba diving, skiing and rock climbing are adventure sports.

7. In rock climbing, the hands serve the purpose of

- (a) hanging properly
- (b) being stable while holding the rocks
- (c) shifting weight
- (d) None of the above

**Ans.** (c) In rock climbing, the hands serve the purpose of shifting weight.

**8.** You and your friends planned for camping to countryside near a lake. You have carefully planned for the outing and packed all the essentials.

Which of the following is not an equipment needed for trekking?

- (a) Sleeping bag
- (b) Ropes
- (c) Surfing board
- (d) Mountain axe

**Ans.** (c) Surfing board is not an equipment needed for trekking. Sleeping bag, ropes and mountain axe may be required in it but surfing board is not needed in trekking.

**9.** River rafting is divided into grades on the basis of

- (a) roughness of river
- (b) type of boat
- (c) level of experience of participants
- (d) None of the above

**Ans.** (a) River rafting is divided into grades on the basis of roughness of river. i.e. some where the river water flows slowly and some where it is very fast.

**10.** What is the European name of the sport shown in the image below?



- (a) Rock climbing
- (b) Alpinism
- (c) Mountaineering
- (d) Surf Mating

**Ans.** (b) The European name of the sports shown in the image is Alpinism as Alps mountains are present in Europe. Mountaineering is done on these mountains.

**11.** Identify the adventure sports shown in the image.



- (a) Trekking
- (b) Rock Climbing
- (c) Surfing
- (d) River Rafting

**Ans.** (c) The adventure sports shown in the image is surfing. It is a water sport.

**12.** The pilot or the individual is suspended through a harness attached to a fabric that acts like a wing. Wing shape is maintained by the suspension lines. The sport consist of only three equipments i.e, the harness, a wing and a helmet.

The adventure sport that is described here is.....

- (a) Surfing
- (b) Sky diving
- (c) Paragliding
- (d) Sailing

**Ans.** (c) The adventure sport that is described here is paragliding. It is a recreational and competitive adventure sport.

**13.** Match the following.

List I	List II
A. Moderate trekking	1. Experienced trekkers
B. Difficult trekking	2. Beginners
C. Easy trekking	3. Trekkers with experience and endurance
D. Strenuous trekking	4. Energetic trekkers

- |     |   |   |   |   |     |   |   |   |   |
|-----|---|---|---|---|-----|---|---|---|---|
|     | A | B | C | D |     | A | B | C | D |
| (a) | 4 | 3 | 2 | 1 | (b) | 1 | 4 | 3 | 2 |
| (c) | 3 | 1 | 4 | 2 | (d) | 4 | 2 | 1 | 3 |

**Ans.** (a) The correct match is A-4, B-3, C-2 and D-1.

**14.** Match the following.

List I	List II
A. River Rafting	1. Climbing boots
B. Paragliding	2. Life Jacket
C. Mountaineering	3. Helmet
D. Surfing	4. Body suit (wet)

- |     |   |   |   |   |     |   |   |   |   |
|-----|---|---|---|---|-----|---|---|---|---|
|     | A | B | C | D |     | A | B | C | D |
| (a) | 1 | 4 | 2 | 3 | (b) | 3 | 1 | 4 | 2 |
| (c) | 2 | 3 | 1 | 4 | (d) | 4 | 1 | 2 | 3 |

**Ans.** (c) The correct match is A-2, B-3, C-1 and D-4.

## • Assertion and Reasoning

**Directions** (Q. Nos. 1-4) Each of these questions contains two statements, Assertion (A) and Reason (R). Each of these questions also has four alternative choices, any one of which is the correct answer. You have to select one of the codes (a), (b), (c) and (d) given below.

### Codes

- (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

**1. Assertion (A)** Leadership is a unique skill that cannot be taught but can be learned through observing others.

**Reason (R)** Every individual has leadership quality.

**Ans.** (c) The assertion is true as leadership can be learnt by observing others. It is a skill that is acquired. Reason is false as every person do not have leadership qualities. Thus, A is true, but R is false.

**2. Assertion (A)** A leader has a capacity to change the society.

**Reason (R)** Leaders helps in guiding people on the right path.

**Ans.** (a) Assertion is true as a leader has power and the ability by which he can make followers. Thus, he can change the society. Reason is true as leaders also act as guide to show the right path to the people. Reason correctly explains assertion. Thus, both A and R are true and R is the correct explanation of A.

**3. Assertion (A)** A good leader in sports is also a good organiser.

**Reason (R)** The role of a leader is to integrate the individual goal with that of the organisation or team.

**Ans.** (b) Assertion is true as a good leader organises the activities also so leader is an organiser too. Reason is also true as a true leader integrates individual goals with that of the team or organisation. Reason donot explains assertion. Thus, both A and R are true, but R is not the correct explanation of A.

**4. Assertion (A)** Adventure games do not improve social relation.

**Reason (R)** Surfing is a famous adventure game.

**Ans.** (d) Assertion is false as adventure games actually improves social relation. It helps in mixing with people. Reason is true as surfing is a famous adventure sports. It is done on waves. Thus, A is false, but R is true.

## • Case Based MCQs

**1.** The main aim of physical eduction is overall development of a student. Through the participation in physical education programmes, the qualities of a student can be developed. Organising trips, camps and similar activities in natural environment helps in developing the latent abilities in students.

(i) Which of the following takes place through physical education?

- (a) Growth (b) Development  
(c) Emotional stabality (d) All of these

**Ans.** (d) Through physical education, proper growth and development of a person along with emotional stablity takes place in an individual.

(ii) Physical education helps in developing which of the following qualities?

- (a) Determination  
(b) Intelligence  
(c) Dedication  
(d) All of these

**Ans.** (d) Physical education helps in developing the qualities of determination, intelligence, dedication etc. It makes a person physically and mentally strong.

(iii) Camping is part of which adventure sports?

- (a) Trekking (b) Surfing  
(c) Paragliding (d) All of these

**Ans.** (a) Camping is part of the adventure sports 'trekking'. In trekking, people walk for long distances.

**2.** Surfing is a sport of riding on the waves in the standing position. Sometimes surfers like to surf in lying position also. Raman is a surfer, he has done surfing in the Arabian sea. Now, he is a lifeguard on the beach and also coaches young surfers. Based on this information answer the following questions.

(i) Which of the following is a necessary item needed for surfing?

- (a) Wet suit (b) Sun glasses  
(c) Paddle raft (d) Helmet

**Ans.** (a) Wet suit is a necessary item needed for surfing. It provides protection while wet.

(ii) The surf board is made up of which material?

- (a) Iron (b) Aluminium  
(c) Fibreglass (d) Thick cloth

**Ans.** (c) The surf board is made up of fibreglass. It is very lightweight and strong material.

(iii) Surfing activity can be done in \_\_\_\_\_ .

- (a) Oceans  
(b) Seas  
(c) Rivers  
(d) All of the above

**Ans.** (d) Surfing can be done in oceans, seas or rivers. Thus, option (d) is the correct answer.

## PART 2

# Subjective Questions

### • Short Answer (SA) Type Questions

1. What is the importance of leadership in sports?

**Ans.** Leadership is referred to as the activity of inspiring people to perform and engage in achieving a goal. In sports, leadership is very important because sports requires a clear objective, a definite goal and team spirit. A person with leadership skills builds a strong team and gives a clear vision which helps the teammates to focus on the target.

Creating a clear vision helps to fix a definite goal and achieve it. For instance, in a hockey match, leadership skills shown by the team captain will help the team to focus on scoring goals and achieving success.

2. Why are strong interpersonal skills required in a leader?

**Ans.** In terpersonal skills means the ability to communicate and interact well with people. For a leader, it is important to process strong interpersonal skills so that there is proper interaction with the other members of his team. This helps in increasing cooperation, building support and motivating teammates. A leader has to work harmoniously with others; for that effective communication is needed. A leader with strong interpersonal skills brings success for his team.

3. Briefly explain any three objectives of adventure sports.

**Ans.** Three objectives of adventure sports are as follows

- (i) **To develop Mental and Physical Fitness** Adventure sports involves fitness skills like jumping, climbing and swimming etc. These activities thus help us building mental and physical fitness.
- (ii) **To Improve Social Relations** During participation in adventure sports, qualities like sympathy, cooperation, helpfulness, adjustment, sincerity, patience, are developed between two individuals.
- (iii) **To Provide Amusement and Excitement** It is the vital objective of adventure sports to provide amusement, excitement, exhilaration, recreation and enjoyment.

4. Enlist the safety measures that should be taken while rock climbing.

**Ans.** The safety measures that should be taken while rock climbing are as follows

- Don't climb higher than you are supposed to.
- Put the harness on the body correctly, so that you do not get tangled in the rope if you fall.

- If you are new to rock climbing, belay (i.e., fix a running rope round a rock to secure it) with an experienced climber.

- Use the right equipment like shoes, ropes, slings etc.

- Practise falling away from the rock wall (so you do not hit any rocks on the way down). You will fall sometimes, especially if you want to get better.

5. Define rock climbing. Why is it considered as a dangerous sport?

**Ans.** Rock climbing is an activity in which participants climb up, down or across natural rock formations or artificial rock walls with the objective of reaching the summit of a formation or the end point of a pre-defined route without falling.

Rock climbing is considered a dangerous sport because knowledge of proper climbing techniques and usage of specialised climbing equipment is crucial for the safe completion of routes.

The duration and length of climb may be too tiring and high level of endurance is required otherwise it may lead to accidents.

6. Differentiate between rock climbing and trekking on basis of their nature.

**Ans.** The differences between rock climbing and trekking are as follows

Rock Climbing	Trekking
Rock climbing is an activity in which participants climb up, down or across natural rock formation or artificial rockwalls.	Trekking is a form of walk, undertaken with the specific purpose of exploring and enjoying the scenery.
The goal is to reach the summit of a formation or the end point of a pre-defined route without falling.	It involves carrying bag with all the things that may be required for a journey of more than a day.
This activity can be done only after practice as it involves climbing techniques.	This can be done by anyone even old people as it involves walking.

7. What are the safety measures that should be used while trekking?

**Ans.** The following safety measures should be used in trekking

- Avoid trekking during the rainy season or during bad weather. Before starting, check the weather report for the area where you are going and prepare yourself accordingly.

- Take all the required materials like water, matchbox, food items, rope, sleeping bags, etc.
- To avoid insect bites, wear full sleeve shirts and full pants.
- Wear proper footwear so that you do not slip while trekking in hilly areas.
- Do not eat leaves, flowers etc found on the wayside, as they may be poisonous.
- Take along a multi-pocket carry bag which is large enough to carry all the essential items.

**8.** What are the different types of raft used in river rafting? Also describe the modern raft.

**Ans.** Three different types of rafts are used in river rafting. They are as follows

- A symmetrical raft with a double bladed paddle.
- A symmetrical rudder-controlled raft
- A symmetrical raft with central helm and the stern mounted with the oar frame located at the rear of the raft.

Three modern raft used in river rafting is an inflatable boat consisting of very durable, multilayered rubberised (hypalon or vinyl) PVC fabric with several independent air chambers. It is usually propelled with ordinary paddles and typically holds 4 to 12 persons.

**9.** Write a short note on the adventure sports of mountaineering.

**Ans.** Mountaineering, also referred to as 'mountain climbing' or 'Alpinism' in Europe, is the sport of climbing or ascending a high mountain.

Often confused with rock climbing and hiking, mountaineering differs from these sports. The adventurous sport is a combination of the skills required in hiking as well as rock climbing.

Also, the mountains generally have a mixed terrain with the presence of rock, ice and snow, so climbers need to be able to navigate through a wide variety of conditions.

Besides reaching a summit, the main objective of a mountaineering trip lies on overcoming safely every hazard along the route.

Depending on the case, mountaineering involves using technical equipment and combining a series of related skills.

It tests one's courage, resourcefulness, cunning, strength, ability and stamina to the utmost in a situation of inherent risk.

**10.** What safety measures should be followed while mountaineering?

**Ans.** The safety measures followed while mountaineering are as follows

Before each excursion, look at the latest weather forecast for the area and keep close watch on local weather changes.

Check all the equipments, ropes, slings, boots, protective clothes and gears. They should be in proper condition.

Eat right amount of food and monitor your fitness levels before starting any mountaineering expedition.

Put on proper warm clothes and shoes according to the terrain.

Carry some high energy giving foods and water.

Drink plenty of liquids to avoid dehydration.

**11.** What should be the dimensions of long and short boards in surfing?

**Ans.** The longboards used in surfing have a length of more than 7 feet. Its width should be 23 inches (58 cm) and the thickness of 2.5 inches (6 cm). The average weight of a long board should be 15-17 pounds (7-8 kg).

The short board used in surfing should have a length of 7 feet (2 m), width of about 20 inches (51 cm) and a thickness of 2 inches (5 cm). The short board should weigh from 6 to 8 pounds (2.5 – 3.5 kgs). Both long and short boards are made up of strong but lightweight plastic called fibreglass or polyurethane.

**12.** Enlist three safety measures while surfing.

**Ans.** Surfing is a surface water sport in which the wave rider, referred to as a surfer, rides on the forward part or face of a moving wave on the surface of the water, which is usually carrying the surfer towards the shore.

The three safety measures are as follows

- Use the correct equipment like surfboard with nose guards, a wetsuit for buoyancy, sun protection etc.
- Take lessons from an approved trainer, agency to learn appropriate lessons, skills and techniques.
- Warm up before starting to surf. Do body warm up exercises.

**13.** What are the distances and durations which paragliders normally fly before landing? By what techniques can they extend these distances and times?

**Ans.** Paragliders normally fly for one to two hours and cover tens of kilometres before landing despite not using an engine.

By skillful exploitation of lift, the pilot of the paraglider may gain height, often climbing to altitudes of a few thousand metres so that the flight can even last many hours and cover many hundreds of kilometres (in rare cases).

As wind is the main factor here, paragliders can identify the direction of the wind and sail accordingly.

## • Long Answer (LA) Type Questions

1. Explain in detail six qualities a leader should possess.

**Ans.** The qualities which a leader should possess are as follows

- (i) **Self-awareness** Leaders must possess vision along with knowledge about their own strengths and weaknesses, knowledge about skills and complete information about the vision.
- (ii) **Determination and Dedication** Leaders should have the confidence to meet the challenges with firm determination and dedication. He/She should be devoted to the profession and must be able to face even the worst situations.
- (iii) **Intelligence** Wisdom is very important for a leader to develop intuition and insight for future events. A leader should be intelligent enough to find out all possible solutions for a complex set of problems.
- (iv) **Strong Interpersonal Skills** A leader must be social. He/She should possess essential social qualities such as cooperation, affections, brotherhood, sympathy, empathy, respect etc.  
He/She must have the ability to interact and work harmoniously with all team members.
- (v) **Decision Making** A leader of physical education should be able to take decision spontaneously.  
He/She should be able to look at the problems logically and must take decisions at the right time.
- (vi) **Energy and Enthusiasm** A leader should be energetic and enthusiastic. He/She should be able to motivate and excite the players to give their best to the game.

2. Describe the role of a leader in the success of his/her team.

**Ans.** A leader has immense responsibility for his team. A leader is a guide, a counsellor, a supporter, a team builder and a representative of his/her team. A leader is also a major decisions maker.

The role of a leader is as follows

- (i) **Guidance and Counselling** The role of a leader is to mentor or guide the team members and counsel them from time to time so that they do not forget the vision.
- (ii) **Representation** The role of a leader is to represent the team or the organisation at different places such as in competitions, seminars, conferences etc.  
He/She is the spokesperson of the team who communicates their feelings and problems to the higher authorities and works for their benefit.  
An effective representation increases the confidence of the entire team.

- (iii) **Integrate Goals** The role of a leader is to integrate the individual goals with that of the organisation or team. In this way, a leader brings people closer to work for a common goal or a common purpose.

- (iv) **Support and Cooperation** The leader, with his intelligence, maturity and pleasing personality, helps the team members by providing them support and increasing cooperation.

He/She deals with matters related to disciplines and settles all internal differences. He/She controls internal relationships and increases the morale of the team.

- (v) **Decision Maker** The role of a leader is to make strategic decisions for the success of the team as well as develop plans to realise those decisions.
- (vi) **Team Builder** An important role of a leader is to make an impressive team that consists of people with different talents so that the team members assist each other instead of competing with each other.

3. Explain how the adventure sport of river rafting is carried out. Why is it considered an extreme sport?

**Ans.** River rafting or white water rafting is the challenging recreational outdoor activity of using an inflatable raft to navigate a river or other water body.

This is often done on white water (meaning different degrees or rough water), in order to thrill and excite the passengers on the raft.

This activity as a leisure sport has become popular in the mid-1970s, evolving from individuals padding 3 metre long rafts with double bladed paddles to multi person rafts propelled by single bladed paddles and steered by a tour guide at the stern.

The modern raft is an inflatable boat consisting of very durable, multilayered rubberised (hypalon) or vinyl (PVC) fabric with several independent air chambers. It is usually propelled with ordinary paddles and typically propelled with ordinary paddles and typically holds 4 to 12 persons.

Extreme sports are recreational activities perceived as involving a high degree of risk. These activities often involve speed, height, a high level of physical exertion and highly specialised gear. As river rafting meets all these conditions, it is considered an extreme sports.

4. What is surfing? Explain any five types of surfing in detail.

**Ans.** Surfing is a surface water sport in which the wave rider, referred to as surfer, rides on the forward or deep face of a moving wave on the surface of the water, which usually carries the surfer towards the shore. Five types of surfing are as follows

- (i) **Stand-up Surfing** The modern-day definition of surfing most often refers to stand up surfing. In this, a surfer rides a wave by standing up on a surfboard. It is the most popular and easiest method of surfing.

- (ii) **Body Boarding** In this form of surfing, a surfer rides a wave on a body board (full body length board), either lying on the belly, on a dropped knee, or standing up.
- (iii) **Knee Boarding** This is a type of surfing done from a kneeling position, usually on a small, wide, blunt-nosed board. People doing this form of surfing prefer it because of the increased sensation of speed that comes from riding closer to the water surface.
- (iv) **Surf Matting** This is also called Mat surfing. It is a type of surfing performed on a soft, inflatable, rectangular surf mat consisting of four pontoons stuck together. It is suitable for beginners, so children start learning surfing with it.
- (v) **Body Surfing** In this, the wave is surfed without a board, using the surfer's own body to catch and ride the wave. It is considered by some to be the purest form of surfing, but it is the most difficult, requiring much practice.

**5.** Explain how paragliding is carried out. Suggest three precautions to be followed before and while engaging in this sport.

**Ans.** The paraglider is a lightweight, free flying, foot-launched glider aircraft with no rigid primary structure. Paragliding is carried out with the pilot sitting in harness suspended below a fabric wing comprising a large number of interconnected cells.

Three precautions to be followed before and while engaging in paragliding are as follows

- (i) **Knowledge, Ability and Mental Strength** It is advisable to practise for endurance and physical strength, as these will have great impact on your success.  
A quicker way to enhance your ability is to take your glider to a field and tirelessly work on your ground handling.  
Knowledge is gained by searching websites, reading blogs and books, through which one can have knowledge about the basics, flying, weather and also about performing first aid.
- (ii) **Favourable Weather** It is the most important constraint to manage even for people with a high level of experience.  
It is always important to watch the forecast from a reliable source before leaving for paragliding.  
Wind is the main factor, whereby strong and straight wind can turn out to be very disastrous.
- (iii) **Good Landing Site** Visibility and accessibility are some of the factors that should be considered when looking for a good paragliding site. Irregular and rough landings may lead to fractured bones.  
It is also advisable to go for paragliding spots with visible wind indicators to assist you on which direction to take.

## • Case Based Questions

**1.** Students of Doon Public School are going for the adventure sports 'Trekking'. You are the team leader and incharge of all the students. You have told the students about the safety measures that they should follow during trekking. In your group, there are 20 boys in the age group of 14 to 16 years.

Based on this case, answer the following questions.

- (i) Which type of trekking will you choose for your students?
- Ans.** As a team leader, I will choose easy trekking as the school students are the beginners. Easy trekking includes easy climbing to hills of low elevation.
- (ii) What things should be carried while going for trekking?
- Ans.** Food, water, bedding, tent, clothes, stove, cooking kit and medical kit should be carried for trekking.

**2.** Ravi is a trainer for the adventure sport river rafting. He often takes river rafting activities on the mountain rivers. A group of 5 boys aged between 15-18 years asked him to train them. Based on this case, answer the following questions

- (i) Which grade should be chosen by Ravi to train those boys?
- Ans.** Grade I or II should be chosen by Ravi as the river has small waves, almost flat water and free or very little obstacles. These grades are done by beginners.
- (ii) If one of the boys do not know swimming, should Ravi train him?
- Ans.** It is not advisable as having adequate capabilities of swimming is a safety measure during river rafting.
- 3.** Sports is one of the most effective physical activities that provide innumerable health benefits. Ensuring safety in sports is essential to prevent any sports injuries. It is important that we take care of our body in performing sports and even fitness related activities.
- (i) What are the protective gears that a person should wear in paragliding?
- Ans.** In paragliding, the helmet, mouth guards, gloves, protective pads and proper shoes are essential to wear.
- (ii) How adventure sports is different from sports?
- Ans.** Adventure sports involve outdoor sports that have high level of risks or danger. Sports are the forms of organised activities that are played for recreation and do not involve risks or danger.

# Chapter Test

## Multiple Choice Questions

- The board whose length is less than 7 feet is called
  - Long board
  - Mat board
  - Knee board
  - Short board
- The leaders of physical education has both \_\_\_\_\_ and \_\_\_\_\_ qualities.
  - Acquired
  - Innate
  - Both (a) and (b)
  - None of these
- Choose the incorrect option
  - A good leader executes the plans well
  - Mountain biking is an example of mountain sports
  - Rock climbing is also done on artificial walls
  - Trekking is also known as backpacking
- Find the odd one out
  - Surfing
  - Skating
  - Mountaineering
  - Skiing
- In this grade, the river has huge waves. The level is tough and thus rafting requires great physical endurance and mental toughness. People may also face severe injuries or even death.  
Which grade of river rafting is being talked about?
  - Grade II
  - Grade I
  - Grade IV
  - Grade VI

## Short Answer (SA) Type Questions

- Why is it essential to wear protective gears in adventure sports?
- List three ways of preventing injuries in paragliding.
- Write a short note on the adventure activity of trekking.
- Why mountaineering is so popular as an adventure activity?
- Mention three qualities developed by participating in adventure sports.

## Long Answer (LA) Type Questions

- Explain the different grades of river rafting.
- What safety precautions or measures should be taken to prevent any sport injury?

## Answers

1. (d)    2. (c)    3. (b)    4. (a)    5. (d)