



परमाणु ऊर्जा शिक्षण संस्था
Atomic Energy Education Society
उत्तर कुंजी / Answer Key (2025-26)

कक्षा /Class: VII विषय /Subject: SOCIAL SCIENCE माह/ Month: AUGUST अंक/Marks: 40
दिया गया पाठ्यक्रम/Portion covered Chap 2- Understanding the weather

SECTION A - MULTIPLE CHOICE QUESTIONS (1×10=10 Marks)

1. (b) Troposphere
2. (b) 1875
3. (b) 1013 mb
4. (c) Rain gauge
5. (b) Pressure below 1000 mb
6. (b) From sun arises rain
7. (b) Air saturated with water vapour
8. (b) High pressure to low pressure
9. (b) The tropical zone
10. (c) Automated Weather Station

SECTION B - VERY SHORT ANSWER QUESTIONS (2×2=4 Marks)

11. Definition of weather (1 mark): Weather is the day-to-day atmospheric conditions of a place, including changes in temperature, humidity, rainfall, wind speed and direction.

Two elements (1 mark - ½ mark each): Any two from:

- Temperature
- Humidity
- Atmospheric pressure
- Wind (speed and direction)
- Rainfall/Precipitation

12. At high altitudes, atmospheric pressure decreases/becomes lower than at sea level. (1 mark)

- Due to lower atmospheric pressure, the air becomes thinner with less oxygen content, making it difficult to breathe and causing breathlessness. (1 mark)

SECTION C - SHORT ANSWER QUESTIONS (2×3=6 Marks)

13. Traditional weather prediction methods (1 mark): People used natural signs, animal behavior, and environmental observations to predict weather.

Three examples (2 marks - ⅔ mark each): Any three from:

- Observing cloud formations and their movement
- Watching animal behavior (birds flying low indicates rain)
- Observing wind direction changes
- Studying phases of the moon

- Observing plant behavior (flowers closing before rain)
- Traditional sayings and folklore based on natural observations

14. Maximum temperature (1 mark): The highest temperature recorded during a day, usually occurs in the afternoon.

- Minimum temperature (1 mark): The lowest temperature recorded during a day, usually occurs just before sunrise.

- Mean daily temperature calculation (1 mark): $\text{Mean daily temperature} = (\text{Maximum temperature} + \text{Minimum temperature}) \div 2$

SECTION D - LONG ANSWER QUESTIONS (2×5=10 Marks)

15. Students should describe all five elements (1 mark each):

1. Temperature:

- Definition: Degree of hotness or coldness of air
- Daily life impact: Affects clothing choices, food preferences, activities

2. Humidity:

- Definition: Amount of water vapor in the atmosphere
- Daily life impact: Affects comfort levels, health, preservation of goods

3. Atmospheric Pressure:

- Definition: Weight of air pressing down on Earth's surface
- Daily life impact: Affects breathing, weather changes, flight operations

4. Wind:

- Definition: Moving air from high to low pressure areas
- Daily life impact: Affects transportation, agriculture, energy generation

5. Rainfall/Precipitation:

- Definition: Water falling from clouds in various forms
- Daily life impact: Affects agriculture, water supply, daily activities, transportation

16. Importance of weather forecasting (1 mark): Helps in planning and decision-making, saves lives and property.

- Four situations (4 marks - 1 mark each): Any four from:

- Agriculture: Farmers plan sowing, harvesting, and irrigation
- Aviation: Safe flight operations and route planning
- Shipping/Marine: Safe navigation and voyage planning
- Disaster Management: Early warning for cyclones, floods, droughts
- Daily Life: Planning outdoor activities, clothing choices
- Tourism: Planning travel and outdoor events
- Construction: Scheduling construction activities
- Sports Events: Planning and conducting outdoor sports

SECTION E - CASE-BASED QUESTIONS (3×2=6 Marks)

Q17. Case Study 1: **TechStart Innovation Hub**

1. Accept any reasonable answer such as:
 - In-house expertise development
 - Better control over project quality
 - Long-term skill building for company
 - Direct communication and coordination
2. Accept any reasonable answer such as:
 - Lack of required technical expertise
 - Project failure or delays
 - Financial strain if project fails
 - Reputation damage if unable to deliver
3. Accept any reasonable answer such as:
 - Available budget/financial resources
 - Timeline for project completion
 - Current team's learning capacity
 - Cost comparison between hiring vs outsourcing

Q18. Case Study 2: **Green Valley Organic Farm**

1. Accept any reasonable answer such as:
 - Wider customer reach
 - Increased sales potential
 - Reduced dependency on farmers' markets
 - Higher profit margins
2. Accept any reasonable answer such as:
 - High initial investment costs
 - Maintaining product freshness during delivery
 - Managing delivery logistics
 - Competition from established players
3. Accept any reasonable answer such as:
 - Market demand analysis
 - Competitor analysis
 - Financial feasibility studies
 - Technology requirements and costs

SECTION F - MAP WORK (1×4=4 Marks)

Q19. Marking Guidelines:

- Each correct location: 1 mark
- Award marks for approximately correct positioning

A. Region of alpine climate:

- Northern mountain regions (Himalayas, Kashmir, Himachal Pradesh, Uttarakhand)

B. Places having moderate climate:

- Coastal regions, hill stations, or places with temperate climate

C. Kochi:

- Located in Kerala, on the western coast of India

D. Ladakh:

- Located in the northernmost part of India, in Jammu & Kashmir region