- **1.** Adding salt and sugar to food substances helps In preserving them for a longer duration. It is because excess salt and sugar
- (1) plasmolyse the microbial cells
- (2) cause rupturing of microbial cells
- (3) cause change in the shape of microbial cells
- (4) remove water from food

Ans: (1)

- 2. Hormone Adrenaline
- (1) helps control level of sugar in the blood
- (2) helps the body to adjust stress level when one is very angry or worried
- (3) helps control height
- (4) helps control balance of electrolytes in the body

Ans: (2)

- 3. The green house effect which is causing an increase in the atmospheric temperature is mainly due to
- (1) oxygen
- (2) nitrogen
- (3) carbon dioxide
- (4) sulphur

Ans: (3)

- **4.** Green plants appear to release oxygen instead of carbon dioxide into the atmosphere during the day time because
- (1) green plants do not respire during the night time
- (2) green plants respire only during the night time
- (3) green plants respire during the day time but are involved in photosynthesis during the night time
- (4) the rate of photosynthesis is higher than the rate of respiration during the day time **Ans: (4)**
- **5.** A common characteristic feature of plant sieve-tube cells and mammalian erythrocytes is

- (1) absence of nucleus
- (2) absence of chloroplast
- (3) absence of cell wall
- (4) presence of haemoglobin

Ans: (1)

- 6. Most Boards of Education have banned the dissection of animals because
- (1) animals are no longer available for dissection
- (2) procuring animals has become an expensive proposition
- (3) there is a need to sensitise students to prevention of cruelty to animals
- (4) they may spread new diseases

Ans: (3)

- 7. The main aim of conducting Mathematics and Science Olympiads is to
- (1) promote excellence in the subject by nurturing creativity and experimentation
- (2) grade students according to their capabilities
- (3) help students score high marks in professional examinations
- (4) grade schools based on the performance of their students

Ans: (1)

- **8.** Four applicants for a post of TGT (Science) were asked to plan a lesson on "Consequences of Deforestation", Which one of the following lesson plans reflects the scientific approach?
- (1) Explains in detail the consequences of deforestation
- (2) Provides a variety of examples to explain the concept
- (3) Includes activities that children can perform in groups and draw conclusions through a Power Point presentation
- (4) Mentions about the use of ICT to help students understand the concept **Ans: (3)**
- **9.** Ms. Patel, Principal of a School XYZ, is keen about integrated approach to teaching of Science rather than teaching different disciplines separately. The basis of this is
- (1) non-availability of qualified teachers in her school to teach separate disciplines

- (2) difficulty to adjust the teachers in the time-table
- (3) difficulty of students to adjust to different teachers
- (4) all the disciplines are interlinked and a teacher can draw on cross-curricular linkages **Ans: (4)**
- **10.** A teacher plans to teach "Components of Food" in Class-VI. Which of the following can be used as an essential question?
- (1) List the food items your mother serves you in lunch.
- (2) Why does your mother serve you a meal with a variety of food items?
- (3) Does your mother prepare a definite set of food items for lunch every day?
- (4) Do you eat all the items served in your lunch every day? **Ans: (2)**
- **11.** While teaching the concept, "force can change the shape of an object" to students, a teacher plans the following activities:
- a. Explain concepts using commonly observed examples.
- b. Provide a dough on a plate and ask the students to press it down with the hand.
- c. Show an audio-visual• film explaining the concept with some examples.

The teacher is using different approaches to learning because

- (1) she wants to prove her knowledge
- (2) she knows she must follow her lesson plan
- (3) she wants to prepare students for a test
- (4) there are different kinds of learners in the class and she wants to address multiple intelligences **Ans:**
- **12.** Which of the following can be assessed when Geeta is using only MCQ as a tool to assess "Nutrition in Humans"?
- (1) Analytical ability to classify food items and make a poster
- (2) Misconceptions related to food habits
- (3) Learners' ability to apply knowledge and prepare a role play to present in the morning assembly

- (4) Learners' ability to comprehend the importance of components of food and write a long essay **Ans: (2)**
- **133.** A Science teacher plans group activities to teach "Properties of Air" to her students of Class-VI. Which one set of attributes would she like to have in the students she selects as group leaders?
- (1) Freedom to choose roles, work at their own pace and understanding
- (2) Ordering students to take roles and deliver in consonance with their understanding
- (3) Giving major roles to brighter students to ensure the group finishes first
- (4) Assigning roles as per capability, motivating and coordinating among the group members **Ans: (4)**
- **14.** While selecting a performance task to help students develop research oriented skills in a Science class, a teacher may pick up a topic
- (1) from the content given in the syllabus which must be completed in time
- (2) which majority of the students in a class find interesting
- (3) which she thinks is important for the students
- (4) related to a problem faced by students in their day-to-day functioning and which is a part of the concepts to be covered for this class

Ans: (4)

- **15.** While investigating 'how water affects the germination of seeds', a teacher asked the students to soak bean seeds on a bed of cotton wool for a few days and observe the changes. What is the guideline that she forgot to mention?

 To place
- (1) many seeds on wet cotton
- (2) a few seeds on wet cotton
- (3) many seeds on dry cotton
- (4) a few seeds on dry cotton

Ans: (2)