Section I: Test your environment quotient

1. The Earth’s outer solid layer, the lithosphere, is made of rock. Rocks are mainly of three types: igneous, sedimentary, and metamorphic. What is the study of rock known as?
   a) Petrology  
   b) Lithology  
   c) Geology  
   d) Petrography

2. Agenda 21 is a programme run by the United Nations (UN) related to sustainable development. The Agenda 21 was announced during the United Nations Conference on Environment and Development (Earth Summit), held in Rio de Janeiro on June 14, 1992. What does the number 21 of ‘Agenda 21’ refer to?
   a) Agenda for 21 years  
   b) Agenda for 21 months  
   c) 21 point agenda of the Earth Summit  
   d) Agenda for the 21st century

3. Rachel Louise Carson is primarily known for her book ‘Silent Spring’ published in 1962. This ground breaking book on pesticide highlighted environmental concerns and eventually led to the creation of a very important environmental organization in the United States. Mention the name of this organization.
   a) US Fish & Wildlife Service  
   b) DEFRA  
   c) US Environmental Protection Agency  
   d) U.S. Department of the Interior

4. A rapid flow of snow down a slope, from either natural triggers or human activity is known as?
   a) Avalanche  
   b) Snow slides  
   c) Mud slides  
   d) Slush flows

5. If a ‘Richter scale’ measures the magnitude of an earthquake; what does a ‘Saffir-Simpson scale’ measure?
   a) Hurricanes  
   b) Floods  
   c) Atmospheric pressure  
   d) Water Table
NOIDA: The Noida authority Monday imposed penalties totalling ₹3.2 lakh against five housing complexes for flouting waste management rules. The authority said penalties will be recovered from the agency managing the waste.

“We have imposed a ₹1 lakh penalty against a housing complex in Sector 70. Two societies, located in sectors 75 and 78, have been fined ₹50,000 each. Two housing complexes in sectors 75 and 79 have been fined ₹60,000 each for not treating their waste in their respective complexes,” said the officer on special duty, Noida authority.

1. According to Waste Management Rules, 2016, if a society produces over 100kg waste daily or is built on 5,000 square metres or above area, then it needs to segregate and treat its waste at source. They are to segregate dry, wet and plastic waste and then treat them. These societies are considered as bulk waste producers. “We conducted inspections and found that these five housing complexes were not treating their waste,” officer said.

2. “It means if the developer takes care of waste management, they will face the penalty, and if the apartment owners association (AOA) is assigned the job, the respective AOA will pay the penalty,” officer added.

Questions

1. Which authority in India exercises waste management rules in a district?
   a) State Pollution Control Board
   b) High Court
   c) Municipal Authority
   d) District court

2. Which of the following category of waste is exempted from Solid Waste Management Rules, 2016?
a) Industrial waste
b) Radio-active waste
c) E-waste
d) All the above

3. Name the nodal Ministry in India that coordinates implementation of *Swachh Bharat Mission (Rural)*?
   a) Ministry of Housing and Urban Affairs
   b) Ministry of Jal Shakti
   c) Ministry of Environment, Forest and Climate Change
   d) Ministry of Earth Sciences

4. How does waste directly contribute to Climate Change?
   a) Waste accumulation releases methane
   b) Waste accumulation produces leachate
   c) Waste generation leads to foul smell
   d) None of the above

5. Name the term given to social and economic order that encourages an acquisition of goods and services in ever-increasing amounts. This type of lifestyle also impacts the environment.
   a) Consumerization
   b) Consumerism
   c) Globalization
   d) Consumption

**Situation 1: How much is enough?**
You have 200 litres of water on a given day. Below are all the necessary jobs that you are required to do in a day. Water usage in each category of work is also mentioned.

   A. Loo break (per visit): 25 litres*
   B. Brushing your teeth (once): 10 litres
   C. Bathing by shower: 70 litres
   D. Bathing by bucket: 20 litres
   E. Cooking food (once): 15 litres*
   F. Washing hands (once): 5 litres*
   G. Drinking water: 2 litres*
   H. Washing clothes: 150 litres
   I. Watering the plants: 40 litres
   J. Sweeping the house: 20 litres
   K. Cleaning the house with a hose pipe: 100 litres
   L. Cleaning the vehicle with a hose pipe: 80 litres
   M. Wiping the car: 10 litres
6. Based on water consumption patterns listed above and options given below, work out a combination of 10 daily chores that you may do and save maximum water?

Please note the following:
- You will be scored on how best you plan your routine by including important activities you may like to do and simultaneously save water.
- Activities that may be repeated are loo break, cooking food, drinking water, washing hands and brushing your teeth
- Activities marked with asterisk (*) are compulsory to include in your daily routine

b) A-A-E-E-F-F-G-D-J-M
c) A-E-F-G-A-B-D-F-J-M
d) A-E-F-G-B-C-F-A-I-M

7. Based on your answer to Q. 41, how much water did you manage to save?
   a) +63 litres
   b) +94 litres
   c) +33 litres
   d) +58 litres

8. List out options that promote personal hygiene.
   a) G-E-I
   b) I-M-J
   c) J-I-G
   d) F-D-B

9. Which method is used to quantify water flow and quality in simple or complex systems, with a view to reducing water usage and often saving money on otherwise unnecessary water use?
   a) Runoff coefficient
   b) Water audit
   c) Water economics
   d) None of the above

10. Despite progress, billions of people still lack safe water, sanitation and hand washing facilities. As part of Sustainable Development Goals (SDGs), which SDG is dedicated for clean water and sanitation?
    a) SDG 11
    b) SDG 14
    c) SDG 6
    d) SDG 13

Answer Key
Section I: 1-a, 2-d, 3-c, 4-a, 5-a
Section II: 1-c, 2-d, 3-b, 4-a, 5-b, 6-c, 7-a, 8-d, 9-b, 10-c