## Viva questions related to a Rainwater Harvesting Project

1) What is rainwater harvesting, and why is it important? 2) Can you explain the various components of a rainwater harvesting system? What are the different methods of rainwater harvesting, and which one did you implement in your project? How did you calculate the potential rainwater harvesting yield in your project area? Describe the materials and tools you used in setting up your rainwater harvesting system. 5) What is the role of gutters and downspouts in rainwater harvesting? Explain the importance of a first flush diverter in a rainwater harvesting system. How did you ensure the quality of the harvested rainwater in your project? What are some common uses for harvested rainwater in a residential setting? 10) Can you discuss any challenges you faced during the installation and maintenance of your rainwater harvesting system? 11) Describe the environmental benefits of rainwater harvesting. 12) How does rainwater harvesting contribute to water conservation and sustainability? 13) Can you explain the economic benefits of rainwater harvesting for homeowners and communities? 14) Have you conducted any cost-benefit analysis for your rainwater harvesting project? 15) What are some government policies and incentives that promote rainwater harvesting? 16) How can individuals and communities promote rainwater harvesting on a larger scale? 17) What is the difference between rainwater harvesting and groundwater recharge? Are they interconnected? 18) Describe any future plans or improvements you envision for your rainwater harvesting system. 19) How can rainwater harvesting help address water scarcity issues in urban areas?

\*\*\*\*\*

20) What are the potential limitations and drawbacks of rainwater harvesting systems, and how can they be mitigated?

## Multiple-choice questions (MCQs) related to a Rainwater Harvesting Project

- 1) What is the primary purpose of rainwater harvesting?
  - a) Irrigation b) Drinking water supply c) Reducing soil erosion d) Energy generation
- 2) Which component of a rainwater harvesting system is responsible for diverting the initial runoff to prevent contaminants from entering the storage tank?
  - a) Gutter b) Filter c) First flush diverter d) Storage tank
- 3) Which method of rainwater harvesting involves capturing rainwater in small containers, such as barrels or drums?
  - a) Rooftop rainwater harvesting b) Surface runoff harvesting c) Infiltration pit harvesting d) Container-based harvesting
- 4) What is the primary advantage of using a percolation pit for rainwater harvesting?
  - a) Minimal maintenance required b) High storage capacity c) Quick and easy installation d) Ability to filter contaminants effectively
- 5) Which of the following is NOT a common use for harvested rainwater in residential settings?
  - a) Toilet flushing b) Car washing c) Cooking and drinking d) Landscape irrigation
- 6) What government policy or incentive might encourage homeowners to implement rainwater harvesting systems?
  - a) Income tax reduction b) Higher property taxes c) Water scarcity fines d) Vehicle registration fees
- 7) How does rainwater harvesting contribute to sustainable water management?
  - a) By depleting groundwater reserves b) By increasing water demand c) By reducing dependence on centralized water supplies d) By increasing pollution levels
- 8) Which of the following best describes the "first flush" in a rainwater harvesting system?
  - a) The first rainfall of the year b) The initial portion of rainwater runoff c) The final runoff before the tank is filled d) The sediment settled at the bottom of the tank
- 9) What is the primary environmental benefit of rainwater harvesting?
  - a) Increased soil erosion b) Reduced groundwater recharge c) Reduced storm water runoff d) Increased water pollution
- 10) Which component of a rainwater harvesting system is responsible for storing collected rainwater?
  - a) Filter b) Pump c) Storage tank d) Inlet pipe

## **Answers:**

- b) Drinking water supply
- c) First flush diverter
- d) Container-based harvesting
- a) Minimal maintenance required
- c) Cooking and drinking
- a) Income tax reduction
- c) By reducing dependence on centralized water supplies
- b) The initial portion of rainwater runoff
- c) Reduced storm water runoff
- c) Storage tank