|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Q1. An \_\_\_\_\_\_\_\_\_is an underground layer of water-bearing permeable rock, rock fractures or unconsolidated materials (gravel, sand, or silt) from which groundwater can be extracted using a water well. | | | | |
| a water well. | | | b) Aqifuge | |
| c) Aquiclude | | | d) Aquifer | |
| Correct answer: D | | |  | |
| Q 2.  If the impermeable area overlies the aquifer, pressure could cause it to become a confined aquifer. | | | | |
| a) True | | | b) False | |
| Correct answer: A | | |  | |
| Q 3.   Shallow or unconfined wells are completed in the uppermost saturated aquifer at that location (the upper unconfined aquifer). | | | | |
| a) True | | | b) False | |
| Correct answer: A | | |  | |
| Q 4.  Drilled wells can be excavated by simple hand drilling methods. | | | | |
| a) True | | b) False | | |
| Correct answer: A | |  | | |
| Q 5. \_\_\_\_\_\_\_\_\_\_wells are constructed when low yielding groundwater sources are found relatively close to the surface, usually under 30 m (100 ft.). These are constructed using a rotary bucket auger. | | | | |
| a) Cap | | b) Drilling | | |
| c) Bored | | d) Surface | | |
| Correct answer: C | |  | | |
| |  | | --- | | Q 6. A commercially manufactured, vermin-proof \_\_\_\_\_\_\_\_\_ is the only type of cap designed to keep animals, insects and contaminants from entering your well. | |  | | | | | |
| a) animal cap | | b) security cap | | |
| c) danger cap | | d) well cap | | |
| Correct answer: D | |  | | |
| |  | | --- | | Q 7. \_\_\_\_\_\_\_\_\_\_\_is the application of controlled amounts of water to plants at needed intervals. | | | | | |
| a) Cultivation | | |  | | --- | | b) Plantation | |  | | | |
| |  | | --- | | c) Watering | |  | | | d) Irrigation | | |
| Correct answer: D | |  | | |
| Q 8. \_\_\_\_\_\_\_\_\_\_\_\_ sometimes also called as localized irrigation, low volume irrigation, or trickle irrigation. | | | | |
| a) Macro-irrigation | | b) Surface irrigation | | |
| c) Micro-irrigation | | d) Farrow irrigation | | |
| Correct answer: C | |  | | |
| Q 9.  Subirrigation has been used for many years in field crops in areas with high water tables. | | | | |
| a) True | | b) False | | |
| Correct answer: A | |  | | |
| Q 10. Water use efficiency in the field can be determined as follows: Field Water Efficiency (%) = (Water Transpired by Crop x Water Applied to Field) % 100 | | | | |
| [A.](javascript:%20void%200;) | False | [B.](javascript:%20void%200;) | | True |
| Correct answer: A | |  | | |
| Q 11. When the speed of a centrifugal pump is changed, the head varies as | | | | |
| [A.](javascript:%20void%200;) | the speed | [B.](javascript:%20void%200;) | | square of the speed |
| [C.](javascript:%20void%200;) | square root of the speed | [D.](javascript:%20void%200;) | | cube root of the speed |
| Correct answer: B | |  | | |
| |  | | --- | | Q 12. Check valves are used to | |  | | | | | |
| A | stop flow in both directions | C | | permit air to escape from the pipe |
| B | permit flow only in one direction | D | | regulate velocity |
| Correct answer: B | |  | | |
| Q 13. One kilowatt is equal to | | | | |
| [A.](javascript:%20void%200;) | 0.746 HP | [B.](javascript:%20void%200;) | | 1 HP |
| [C.](javascript:%20void%200;) | 1.34 HP | [D.](javascript:%20void%200;) | | 1.50 HP |
| Correct answer: C | |  | | |
| Q 14. To prevent the pumped liquid from leaking along the shaft, pumps include | | | | |
| [A.](javascript:%20void%200;) | Bearings | [B.](javascript:%20void%200;) | | Packing |
| [C.](javascript:%20void%200;) | Shaft sleeves | [D.](javascript:%20void%200;) | | volutes |
| Correct answer: B | |  | | |
| Q 15. Foot valve is fitted at | | | | |
| A | junction of delivery pipe and pump body | [B.](javascript:%20void%200;) | | junction of suction pipe and pump body |
| [C.](javascript:%20void%200;) | end of suction pipe | [D.](javascript:%20void%200;) | | end of delivery pipe |
| Correct answer: C | |  | | |

SHORT AND LONG QUESTIONS

1. What do you mean by cavitation?
2. What is well log? How is it used in the construction of tube wells?
3. What is well and how wells are classified?
4. With a diagrammatic sketch, describe a dug cum bore well.
5. Distinguish between artesian and sub artesian wells
6. What is aquifers and explain the different types of aquifers with diagram..
7. Explain the constructional detail of centrifugal Pump.
8. Distinguish between wate table and piezometric surface.
9. What is priming of a pump?
10. With the help of neat sketch explain reciprocating pumps
11. What is meant by well development?
12. Describe the procedure for designing of open well.
13. What are the different methods of well development and explain well development by surging method?