

ಕರ್ನಾಟಕ ಶಾಲಾ ಪರೀಕ್ಷೆ ಮತ್ತು ಮೌಲ್ಯನಿರ್ಣಯ ಮಂಡಲ

ಕೆಎಸ್‌ಕ್ಯುವಿಸಿ, ಮಲ್ಲೇಶ್ವರಂ, ಬೆಂಗಳೂರು-560003.

KARNATAKA SCHOOL EXAMINATION AND ASSESSMENT BOARD

KSQAAC, Malleshwaram, Bengaluru-560003.

ಮೌಲ್ಯಾಂಕನ - ಮಾರ್ಚ್ 2024 - ಮಾದರಿ ಪ್ರಶೋತ್ತರ ಪತ್ರಿಕೆ

Assessment - March 2024 Model Paper

Class : 9

Subject : Electronics & Hardware

Marks : 60

Time : 2 Hours 15 min.

Information to be filled by the Student

Name of the Student : _____

Student SATS No :

Signature
of the Student : _____

Information to be filled by the Room Invigilator

School DISE Code :

School Name : _____

Cluster : _____ Block : _____ District : _____

School Type : Govt. Aided Un-aided

(Put "✓" mark for applicable information)

Signature of the Room Invigilator : _____

Information to be filled by the Evaluator at the time of evaluation

Question Number	Obtained marks	Question Number	Obtained marks	Question Number	Obtained marks
1		13		25	
2		14		26	
3		15		27	
4		16		28	
5		17		29	
6		18		30	
7		19		31	
8		20		32	
9		21		33	
10		22		34	
11		23		-	
12		24		-	
				Grand Total	

Total marks obtained (in words) : _____

Signature of the Evaluator : _____

I. Four alternatives are given for each of the following questions / incomplete statements. Choose the correct alternative and write the complete answer along with its question number and alphabet :

10 x 1 = 10

1. The SI unit of Electric current is

- (A) Ampere (B) Volt
(C) Watt (D) Ohm

Answer : _____

2. An insulator in the following is

- (A) Silicon (B) Copper
(C) Glass (D) Germanium

Answer : _____

3. Identify the symbol of diode

- (A)  (B) 
(C)  (D) 

Answer : _____

4. The component that stores energy in the form of electric field is

- (A) Inductor (B) Capacitor
(C) Resistor (D) Transistor

Answer : _____

5. The following is necessary to place in order to avoid the water leakage in filter ?

- (A) P - Ring (B) O - Ring
(C) L - Ring (D) F - Ring

Answer : _____

6. Pipe wrench is available in the following size ?

- (A) 10 to 40 inches (B) 3 to 48 inches
(C) 5 to 50 inches (D) 30 to 60 inches

Answer : _____

7. The range of temperature required to purify water in a water purifier is

- (A) 30° F to 40° F (B) 60° F to 90° F
(C) 20° F to 85° F (D) 35° F to 95° F

Answer : _____

8. The commonly used chemical for water treatment method is

- (A) Chlorine (B) Carbon di-oxide
(C) Sodium (D) Magnesium sulphate

Answer : _____

9. TDS level of water is above 400PPM, the type of water purifier used is

- (A) Ultra Filter (UF)
(B) Ultra Violet Filter (UV)
(C) Reverse Osmosis (RO) and Ultra Violet Filter (UV)
(D) Gravity based

Answer : _____

10. Purified water in a water purifier has a bad smell. The type of filter that us to be changed to over come this problem is

- (A) Post carbon filter (B) Sediment filter
(C) Carbon filter (D) Reverse Osmosis (RO) filter

Answer : _____

II Fill in the blanks with suitable answer : 4 x 1 = 4

11. One coulomb is equal to _____ electrons.
12. IC stands for _____
13. PH value of water is _____
14. The contact number to call ambulance is _____

III 15 The type of vehicles are given in Column-A and their examples are given in Column-B. Match them and write the answers along with its letter of alphabet : 4 x 1 = 4

Column-A

- i) No water from the inlet tap
- ii) Low pressure from water outlet tap
- iii) Leakaging membrane
- iv) System is continuously running

Column-B

- a) Replace auto shut off valve
- b) Replace O-Ring
- c) Open blocked valve
- d) Replace RO filter
- e) Pressurise the tank to 8 PSI
- f) Replace storage tank
- g) Replace sediment filter

IV Answer the following questions :

6 x 1 = 6

16. We should not wear loose dress while drilling the wall ?

17. What is the recommended duration to change the carbon filter ?

18. Which form is filled by the customers at their premises ?

19. What is Coagulation in water purification process ?

20. Write the use of screw driver.

21. What is a semi conductor ?

V Answer the following questions :

6 x 2 = 12

22. Draw the diagram of open and closed circuit.

23. Write the differences between active and passive components.

OR

Write the differences between alternating current and direct current.

24. Calculate the resistor values for the following colour codes.

a) Red, yellow, brown, gold

b) Green, blue, orange, gold

25. Write the guidelines to be followed before installing water purifier unit.

OR

Write the differences between water filter and water purifier.

26. Write the function of carbon filter and check valve.

27. Write the hazards and their precautions while using spanner.

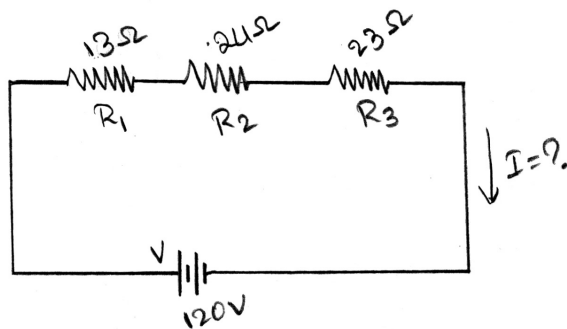
VI Answer the following questions :

4 x 3 = 12

28. Write the steps to measure the Total Dissolved Solids (TDS) of water.

30. Draw the diagram of line tester and label the parts.

31. Calculate the current flowing through the following circuit.



VII Answer the following questions :

3 x 4 = 12

32. Draw the diagram showing the flow of electric current in Reverse Osmosis (RO) water purifier.

33. How do you clean the Reverse Osmosis (RO) system ? Explain with the help of flow chart.

OR

Mention the steps that you follow while interacting with customer over phone.

