

1. (B)
2. (yourself)
3. (c) scattered  
The scattering of beam of light on passing through colloidal solution is known as Tyndall effect.
4. (yourself)
5. (c) complex tissues  
The given tissues are complex tissues.
6.  
(a) physical change  
Iodine is converted into iodine vapours which can be condensed back to get iodine (solid).
7. (yourself)
8. (d) Epidermis  
A xerophyte is an organism, which is able to survive in an ecosystem with little or no water (or moisture). To reduce transpiration the epidermal cells of xerophytes (plants) secrete a waxy (fatty) water resistant layer of cutin.
9. (d) Only 4  
It is the chemical property of oil that makes it different from water.
10. (a)
11. (C)
12. (D)
13. (b) copper and zinc  
Brass is an alloy of copper and zinc.
14. (A)
15. (A)
16. (c) Lignin  
Sclerenchyma consists of thick, hard secondary walls due to deposition of lignin. It provides mechanical strength to the cells.
17. (c) inertia of rest keeps the upper part of body at rest while lower part of the body moves forward with the horse
18. (b)
19. (B)
20. (A)
21. (b) Action and reaction forces act on different objects.  
Action and reaction forces act on different objects.
22. (C)
23. (yourself)
24. (b) compound  
A compound can be separated into its components by chemical means while an element cannot be further separated. A mixture can be separated by physical means.
25. (c) 1 and 4  
Animals consume more energy as compared to plants. They move around in search of food, mates and shelter and hence require more energy for their activities. Most of the plant tissues are dead. Since plants are stationary or fixed, their tissues require to be supportive which provide them structural strength. Dead cells provide mechanical strength as easily as live ones, and need less maintenance.
26.  
(a) law of conservation of linear momentum
27. (C)
28. (d)
29. (d)
30.  
(a) physical change
31. (D)
32. (C)

33. (b) backward

34. (b) voluntary

The muscle fibre in hand are voluntary muscles.

35. (d) may be more than one of the above

36. (a)

37. (d)

38. (b)

39. (D)

40. (a)

41. (A)

42. (d)

43. (c)

44. (D)

45. (D)

46. (d) Both **Assertion** and **Reason** are false.

As impulse is equal to change in momentum. Therefore, impulse and momentum have same SI units.

47. (c) **Assertion** is true but reason is false.

According to Newton's second law,

$$\text{acceleration} = \frac{\text{force}}{\text{mass}} \text{ i.e.,}$$

if net external force on the body is zero ( $F = 0$ ), then, the acceleration of a body is also zero

48. (b) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).

Both are definitions of sublimation and distillation respectively

49.

(c) Assertion is true but reason is false.

Surface of skin is impervious to water because it is covered by stratified keratinized squamous epithelium. This epithelium has many superficial layers of horny, scale-like remains of dead squamous cells and several deeper layers of living polygonal cells. Heavy deposits of the insoluble protein keratin are present in the dead superficial layers which makes this epithelium impervious to water. Stratified

cuboidal epithelium, on the other hand, lines the inner surface of sweat gland, large salivary and pancreatic ducts.

50. (c) Assertion (A) is true but reason (R) is false. Both camphor and ammonium chloride sublime on heating.