



QUESTIONS **50**



TOTAL MARKS **100**



DURATION **60 mins**

GRADE

**9**

**Instruction for Students:**

- Read the question carefully before answering.
- Each question has 4 options (A, B, C & D).
- **Grand Finale Marking System:-**  
Each correct answer carries 2 marks.  
For each unattempted question, 2 marks will be deducted.  
For each wrong answer, 2.5 marks will be deducted.
- Grand Finale Result will be declared Online after 45 days from the exam date. To know your Result, login to [www.neltas.com](http://www.neltas.com) and use given Seat Number.

1. An ripe green chilli turns red when ripens. The reason is \_\_\_\_\_.  
 (A) Leucoplast masks chromoplast (B) Chromoplast masks chloroplast  
 (C) Chloroplast masks chromoplast (D) None of the above

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2. Which of the following is the accessory organ of the flower?  
 (A) Corolla  
 (B) Calyx  
 (C) Perianth  
 (D) All of the above

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3. The germination in which cotyledons are brought above the soil is called \_\_\_\_\_.  
 (A) hypogeal (B) vivipary  
 (C) ovipary (D) epigeal

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4. Cell respiration occurs in \_\_\_\_\_.  
 (A) chloroplast (B) mitochondria  
 (C) nucleus (D) ribosome

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5. Flowering plants belong to \_\_\_\_\_.  
 (A) angiosperms (B) thallophyta  
 (C) pteridophyta (D) bryophyta

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6. An adult male athlete must check blood haemoglobin regularly to detect deficiency of \_\_\_\_\_.  
 (A) iron (B) potassium  
 (C) calcium (D) iodine

7. Which kind of joint is present between the bones of the elbow?

- (A) pivot
- (B) ball and socket
- (C) immovable
- (D) hinge

8. Name the scientist who gave the law of conservation of mass.

- (A) Dalton
- (B) Lavoisier
- (C) Avogadro
- (D) None of the above

9. Which of the given sets contains only elements?

- (A) air, water, fire
- (B) hydrogen, oxygen, water
- (C) carbon dioxide, hydrochloric acid, sodium bicarbonate
- (D) phosphorus, magnesium, mercury

10. Exothermic reaction is \_\_\_\_\_.

- (A) reversible
- (B) irreversible
- (C) Both A and B
- (D) Neither A nor B

11. The percentage of hydrogen in water \_\_\_\_\_.

- (A) 88.81
- (B) 11.11
- (C) 80
- (D) 20

12. Solubility of calcium sulphate in water \_\_\_\_\_.

- (A) increases with increases in temperature
- (B) first increases and then decreases
- (C) decreases with increase in temperature
- (D) remains unaltered with rise of temperature

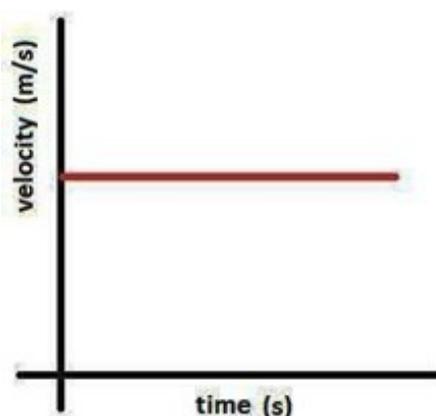
13. From which period the transition elements start?

- (A) 1st
- (B) 2nd
- (C) 3rd
- (D) 4th

14. Which of the following is correct?

- (A) Speed = Time/Distance
- (B) Speed = Distance/Time
- (C) Speed = Distance × Time
- (D) None of the above

15. The given velocity-time graph shows that the object is \_\_\_\_\_.



- (A) at rest
- (B) in uniform motion
- (C) in non-uniform motion
- (D) None of the above

16. Which of the following is an example of a good conductor of heat?

- (A) plastic (B) aluminium  
(C) saw dust (D) thermocol

17. How can sound travel in the air?

- (A) With the help of particles of the medium  
(B) With the help of disturbance  
(C) With the help of both particles as well as disturbance  
(D) None of the above

18. The mass of the moon is about 0.012 times that of the earth and its diameter is about 0.25 times that of the earth. What is the value of G on the moon?

- (A) About one-fifth of that on the earth  
(B) Same as that on the earth  
(C) About one-fourth of that on the earth  
(D) About one-sixth of that on the earth

19. Identify the false statement.

- (A) Mitochondria is said to be the powerhouse of the cell as it generates ATP.  
(B) Cytoplasm is called protoplasm.  
(C) Nucleus, mitochondria and plastid have DNA.  
(D) None of the above.

20. If both male and female flowers are present on the same plant, \_\_\_\_\_.

- (A) autogamy will be prevented but not geitonogamy  
(B) both autogamy and geitonogamy are possible  
(C) both autogamy and geitonogamy are prevented  
(D) allogamy is promoted

21. Seed is \_\_\_\_\_.

- (A) fertilized ovary (B) embryo  
(C) ripened ovule (D) unfertilized ovary

22. The process of exchange of gases between blood and cells called \_\_\_\_\_.

- (A) internal respiration (B) pulmonary respiration  
(C) external respiration (D) None of the above

23. A common feature in bacteria and plant cells is the presence of \_\_\_\_\_.

- (A) cell wall  
(B) nucleus  
(C) prokaryotic nature of the cell  
(D) All of the above

24. The first part of the small intestine is called \_\_\_\_\_.

- (A) ileum (B) jejunum  
(C) duodenum (D) pancreas

25. Which of the following is not a part of the axial skeleton?

- (A) Pectoral girdle (B) Skull  
(C) Sternum (D) Vertebral column

26. Dry ice is \_\_\_\_\_.
- (A) ice with no water of crystallisation  
(B) ice that has been dried  
(C) solid carbon dioxide  
(D) None of the above
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27. Diamond is lustrous because \_\_\_\_\_.
- (A) it is colourless  
(B) it is the hardest substance  
(C) its refractive index is high  
(D) it is purest substance
- 
28.  $\text{SO}_2 + \text{H}_2\text{O} \rightarrow$  \_\_\_\_\_ Complete the reaction.
- (A)  $\text{H}_2\text{SO}_4$   
(B)  $\text{SO}_3$   
(C)  $\text{H}_2\text{SO}_3$   
(D) None of the above
- 
29. The property of water that enables it to modify the climate is \_\_\_\_\_.
- (A) latent heat  
(B) solubility  
(C) high specific heat capacity  
(D) None of the above
- 
30. Name the first transition element.
- (A) Manganese  
(B) Vanadium  
(C) Cobalt  
(D) Scandium
- 
31. Which of the following is the correct chemical symbol for oxygen gas?
- (A) O  
(B)  $\text{O}_3$   
(C)  $\text{O}_2$   
(D) None of the above
- 
32. A body is said to be in motion if there is a change in its position with \_\_\_\_\_.
- (A) time  
(B) distance  
(C) speed  
(D) All of the above
- 
33. Which of the following statement is correct concerning the relationship between velocity and speed of a moving body?
- (A) Speed of a moving body is always higher than its velocity  
(B) Speed of a moving body is its velocity in a given direction  
(C) Velocity of a moving body is always higher than its speed  
(D) Velocity of a moving body is its speed in a given direction
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34. Heating of water is due to \_\_\_\_\_.
- (A) conduction  
(B) convection  
(C) transmission of heat  
(D) radiation
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35. Some animals are able to hear a kind of sound waves produced by the earthquake; before the mainshock waves are produced. What kind of sound waves produced are?
- (A) Ultrasonic sounds  
(B) Audible sounds  
(C) Inaudible sounds  
(D) Infrasonic sounds
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36. A ball weighing 4 kg of density  $4000 \text{ kg m}^{-3}$  is completely immersed in water of density  $1000 \text{ kg m}^{-3}$ . What will be the buoyant force acting on it?
- (A) 100 N  
(B) 10 N  
(C) 1600 N  
(D) 16 N
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37. Which of the following structures is not found in xylem tissues?  
(A) Sieve tubes (B) Vessels  
(C) Tracheids (D) Xylem parenchyma
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38. Fertilization is the process in which \_\_\_\_\_.  
(A) embryo grows into a plant  
(B) animal carries pollen from one flower to another  
(C) an egg and sperm fuse  
(D) none of the above
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39. In germination experiments, alkaline pyrogallic acid is used to absorb \_\_\_\_\_.  
(A) carbon dioxide (B) nitrogen  
(C) carbon monoxide (D) oxygen
- 
40. In anaerobic respiration, glucose is broken down to release \_\_\_\_\_.  
(A) carbon dioxide (B) water  
(C) lactic acid (D) ethyl alcohol
- 
41. Another name for cyanobacteria is \_\_\_\_\_.  
(A) red algae (B) euglena  
(C) blue-green algae (D) slime mould
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42. The enzyme that breaks down lactose \_\_\_\_\_.  
(A) lactase (B) lipase  
(C) pepsin (D) amylase
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43. The human vertebrae are comprised of which type of bones?  
(A) Long bones (B) Flat bones  
(C) Irregular bones (D) small bones
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44. Which of the following explains why sugar solution is considered a mixture?  
(A) It is composed of two or more substances and retains its own chemical properties.  
(B) It is composed of only one element.  
(C) It is composed of only one compound.  
(D) It is composed of two or more substances and has new chemical properties.
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45. The people of Minamata in Japan were affected by neurological syndrome pollution. Which industrial effluent was responsible for it?  
(A) Phosphorous (B) Lead  
(C) Methylmercury (D) Chromium
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46. In which shell do the elements of 1st period contain valence electrons?  
(A) J shell (B) K shell  
(C) L shell (D) M shell
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47. What is the value of Avogadro's constant?  
(A)  $6 \times 10$  to the power of 23  
(B)  $6 \times 10$  to the power of -23  
(C)  $6.022 \times 10$  to the power of 23  
(D)  $6.022 \times 10$  to the power of -23
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48. A car is travelling at a speed of 90 km/h. Brakes are applied to produce a uniform acceleration of  $-0.5 \text{ m/s}^2$ . How far the car will go before it is brought to rest?
- (A) 90 m (B) 180 m  
(C) 625 m (D) None of the above
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49. In which of the following cases; transfer of heat takes place from the object to the surroundings?
- (A) Teddy bear on the bed.  
(B) A cup of hot coffee is placed on the table.  
(C) A magazine is placed on the shelf.  
(D) Ice cream kept in the cup.
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50. Two objects of different masses falling freely near the surface of the moon would \_\_\_\_\_.
- (A) have different accelerations  
(B) have the same velocities at any moment  
(C) undergo a change in their inertia  
(D) None of the above
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**ANSWERS**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
B	D	D	B	A	A	D	B	D	C
<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
B	C	D	B	B	B	B	B	B	A
<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
C	A	A	C	A	C	C	C	C	D
<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>
C	A	D	B	D	B	A	C	D	D
<b>41</b>	<b>42</b>	<b>43</b>	<b>44</b>	<b>45</b>	<b>46</b>	<b>47</b>	<b>48</b>	<b>49</b>	<b>50</b>
C	A	C	A	C	B	C	C	B	B