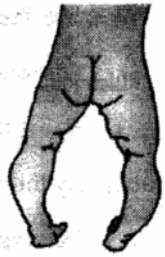


1. The disease shown in the figure is caused due to the deficiency of



- A. Vitamin B
- B. Protein
- C. Vitamin D
- D. Vitamin A

2. Digestion of fat in our body is faster than that of proteins or carbohydrates. The statement is

- A. True
- B. False
- C. Incomplete
- D. Either (B) or (C)

3. Given below are the various steps in animal nutrition. Arrange them as they occur inside the body.

- (i) Assimilation
- (ii) Digestion
- (iii) Ingestion
- (iv) Absorption
- (v) Egestion

- A. (iii), (ii), (i), (iv),(v)
- B. (iii), (i), (iv), (ii), (v)
- C. (iii), (iv), (i), (ii),(v)
- D. (iii), (ii), (iv), (i), (v)

4. Wool industry is an important means of livelihood for many people in our country. But sorter's job is risky as sometimes they get infected by a \_\_\_\_\_ called \_\_\_\_\_ which leads to a fatal lung disease called sorter's disease

- A. Bacterium, Bacillus anthracis
- B. Bacterium, E. coil
- C. Fungus, Salmonella
- D. Virus, Vibrio anthracis

5. Match the two columns and select the correct option from the codes given below.

Column I	Column II
(a) Clothing material	(i) Nylon
(b) Twisted fibre	(ii) Fabric
(c) Synthetic fibre	(iii) Yarn
(d) Animal fibre	(iv) Cotton
(e) Plant fibre	(v) Silk

- A. (a) - (i), (b) - (ii), (c) - (iii), (d) - (iv), (e) - (v)
- B. (a) - (ii), (b) - (iii), (c) - (v), (d) - (i), (e) - (iv)
- C. (a) - (ii), (b) - (iii), (c) - (i), (d) - (v), (e) - (iv)
- D. (a) - (i), (b) - (iv), (c) - (iii), (d) - (ii), (e) - (v)

6. Select the correct option from the following table

A. Name of breed	Quality of wool	State where found
Lohi	Brown fleece	Himachal Pradesh

B. Name of breed	Quality of wool	State where found
Rampur bushair	Coarse wool	Uttar Pradesh

C. Name of breed	Quality of wool	State where found
Nali	For hosiery	Gujarat

D. Name of breed	Quality of wool	State where found
Bakharwal	For woollen shawls	Jammu & Kashmir

7. Mercury is used as a thermometer substance because

- A. It is very costly
- B. It expands less than glass
- C. It does not wet the wall of the glass tube
- D. None of the above

8. Deepak put twenty ice cubes of the same volume into four containers packed with different materials. He recorded the time taken for the ice to melt in each case. The table shows his results. Which of the boxes should he choose to carry ice that he needs to take to a friend's house 120 km away?

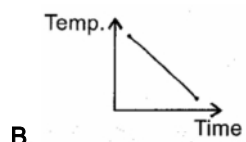
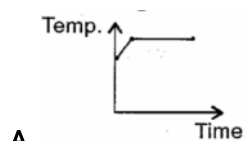
A. Container with thermocole	Melting time 3 h 10 mm
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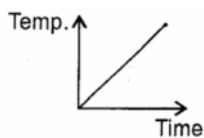
B. Container with ice paper	Melting time 2 h 05 mm
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C. Container with sawdust	Melting time : 1 h 15mm
---------------------------	-------------------------

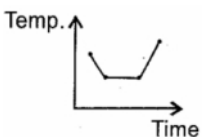
D. Container with sawdust	Melting time : 1 h 15mm
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9. A pot full of water is put to boil on the stove. Which one of the graphs below shows the correct change in temperature over time?





C.



D.

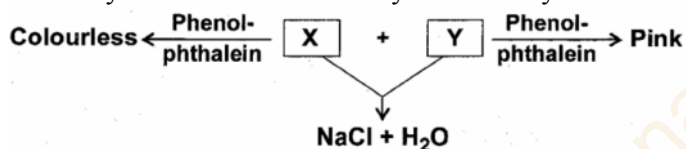
10. Which of the following is incorrect?

- A. Salts are formed as a result of neutralization reaction
- B. All bases are alkalies but all alkalies are not bases
- C. Acids are corrosive in nature
- D. Excess of CO<sub>2</sub> in the atmosphere can cause acid rain

11. X is present in the stomach. However, presence of excess of it causes indigestion, which requires the intake of milk of magnesia to undo the effect of X. What is X?

- A. HCl
- B. H<sub>2</sub>SO<sub>4</sub>
- C. NaOH
- D. KOH

12. Study the flow chart carefully and identify X and Y



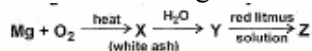
<b>A.</b>	Y
X	
NaOH	NaCl

<b>B.</b>	Y
X	
HCl	NaOH

<b>C.</b>	Y
X	
NaOH	HCl

<b>D.</b>	Y
X	
HCl	NaCl

13. Observe the given flow chart carefully and answer



What is Y ?

- A. MgOH

- B.  $Mg_2OH$   
 C.  $Mg(OH)_2$   
 D. None of these

14. Match both the columns and mark the correct option from the codes given below

Column I	Column II
(a) Limestone	(i) $NaHCO_3$
(b) Blue vitriol	(ii) $CuSO_4$
(c) Vinegar	(iii) $CaCO_3$
(d) Baking soda	(iv) $CH_3COOH$

<b>A.</b>	b	c	d
a			
(iii)	(ii)	(iv)	(i)

<b>B.</b>	b	c	d
a			
(i)	(ii)	(iv)	(iii)

<b>C.</b>	b	c	d
a			
(ii)	(iii)	(i)	(iv)

<b>D.</b>	a	b	c	d
(iv)	(i)	(ii)	(iii)	

15. Which of the following is incorrect? Differences between physical and chemical changes

<b>A.</b> Physical change	Chemical change
It is reversible	It is irreversible

<b>B.</b> Physical change	Chemical change
No-new substance is formed	One or more new substances are formed

<b>C.</b> Physical change	Chemical change
Change may be accompanied with evolution of energy	No energy is given off

<b>D.</b> Physical change	Chemical change
Arrangement of atoms remains the same	The atoms of the substance are rearranged.

16. How does the plant in the figure adapt to reach sunlight?



Wall

- A. By creeping along the ground  
 B. By growing thorns to hook on for support  
 C. By growing tendrils  
 D. By growing clasping roots

17. Match column I with column II and select the correct option from the codes given below

Column I	Column II
(a) Flippers	(i) Duck
b) Webbed feet	(ii) Turtle
(c) Swim bladder	(iii)

<b>A.</b>	a	b	c
(iii)	(i)	(ii)	

<b>B.</b>	a	b	c
(i)	(ii)	(iii)	

<b>C.</b>	a	b	c
(ii)	(i)	(iii)	

<b>D.</b>	a	b	c
(i)	(iii)	(ii)	

18. What is the function of the part labelled as 'X' in the given figure?



- A. To protect the camel from its enemy
- B. To store fat to be used when food becomes scarce in the desert
- C. To provide a place to put the saddle on
- D. To allow the sand to slide off the body of the camel

19. During the formation of rain, when water vapour changes back to liquid in the form of rain drops

- A. Heat is absorbed
- B. Heat is released
- C. Heat is first absorbed and then released
- D. There is no exchange of heat

20. Air exerts pressure in

- A. Downward direction only
- B. Upward direction only
- C. Sideways only
- D. All directions

21. Earthing is provided in buildings to protect it from

- A. Lightning
- B. Leakage of electric current
- C. Cyclone
- D. Thunderstorm

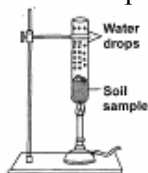
22. Observe the following figures carefully.



If (i) represents all the water present on the earth then what does (iv) represent?

- A. Total freshwater on the earth
- B. Ground-water
- C. Water present in all the lakes and rivers of the world
- D. None of the above

23. The experimental set up in the given figure shows that



- A. Soil reacts with air to form water vapour
- B. Soil reacts with moisture from atmosphere
- C. Soil contains moisture
- D. On heating, soil converts into water

24. What is the function of 'X' in the given figure?



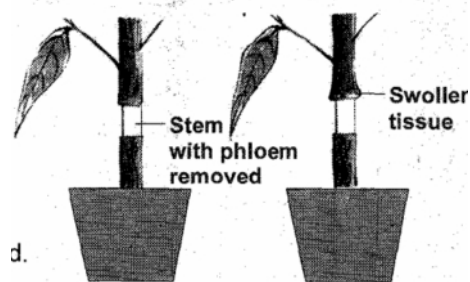
- A. It helps in producing sound
- B. It helps in regulating air flow
- C. It helps in regulating passage of food
- D. It helps in filtering and air conditioning of air

25. Which of the following statements are true/false?

- (i) In insects, circulating body fluids serve to distribute oxygen to tissues.
- (ii) Yeasts respire aerobically, therefore, they are used to make wine and beer.
- (iii) CO<sub>2</sub> concentration is more in alveolar air than in expired air.
- (iv) On an average, an adult human being at rest breathes in and out 15-18 times in a minute.
- (v) Capacity of human lungs for air in a healthy person is 1500 ml.
- (vi) Sneezing expels the foreign particles from the inhaled air

- A. (i), (ii) & (v) are false, (iii), (iv) & (vi) re true
- B. (i), (ii) & (iii) are false, (iv), (v) & (vi) re true
- C. (ii) & (iv) are false, (i), (iii), (v) & (vi) are true
- D. (ii) and (vi) are false, (i), (iii), (iv) and (v) are true

26. Take a plant with thick stem. Remove the phloem tissue as shown in the figure. Observe the stem after a few days. The stem shows swelling in the upper portion. This is due to



- A. Upward movement of food getting blocked
- B. Downward movement of food getting blocked
- C. Upward movement of water getting blocked
- D. Downward movement of water getting blocked

27. Mexico city is at an altitude of 2500 metres. People who live there have more red blood cells than other people who live at lower altitudes. The reason for this is

- A. There is less oxygen at higher altitudes
- B. There is more oxygen at higher altitudes
- C. To absorb enough amount of oxygen
- D. Both (A) & (C)

28. Which of the following correctly defines pollination?

- A. Shedding of pollen from anthers
- B. Similar to fertilization of animals
- C. Transfer of pollen from anthers to stigma
- D. Transfer of pollen from anthers to ovule

29. What is true about pollen of a flowering plant?

- A. It contains the sperm cells
- B. It is brightly coloured to attract insects
- C. It holds the embryo
- D. It is produced by the pistil

30. If a body moves with uniform velocity, then

- A. Its initial velocity is zero
- B. Its final velocity is zero
- C. Its acceleration is non-zero
- D. Its change in velocity is zero

31. A scooterist covers a distance of 3 km in 5 minutes. He travels with a speed of

- A.  $100 \text{ m s}^{-1}$
- B.  $360 \text{ km h}^{-1}$
- C.  $100 \text{ cm s}^{-1}$
- D.  $600 \text{ m min}^{-1}$

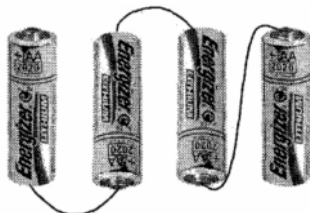
32. Shown below are four cells fixed on a board.



The correct connection of their terminals to make a battery of four cells is



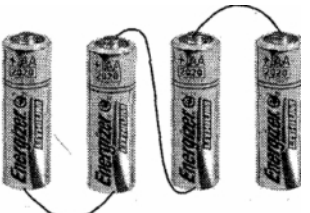
A.



B.



C.



D.

33. The coil of wire contained in a heater is known as

- A. Component
- B. Circuit
- C. Element
- D. Spring

34. On holding a stainless steel spoon near our face, we see

- A. Our inverted image on outer side of the spoon
- B. Our erect image on inner side of the spoon
- C. Our inverted image on inner side of the spoon
- D. Our laterally inverted image on inner side of the spoon

35. In lateral inversion



- A. Right side of the object will be right side of the image
- B. Left side of the object will be left side of the image
- C. Upside of the object will be down side of the object
- D. Right side of the object will be left side of the image

36. What kind of answer results when a rational number is multiplied by zero?

- A. The answer is zero
- B. The answer is the original number
- C. The answer depends on the original number
- D. The answer is the opposite sign of the original number

37. The value of  $\frac{6.98 \times 6.98 - 2.02 \times 2.02}{4.96}$  is

- A. 9
- B. 4.96
- C. 3.72
- D. 6.76

38. Alphabet letter 'Z' has

- A. line symmetry
- B. rotational symmetry
- C. both (A) and (B)
- D. none of these

39. Which expression is the sixth term in this pattern?  $\frac{2a^2}{b}, \frac{4a^4}{b^2}, \frac{8a^6}{b^3}, \frac{16a^8}{b^4}, \dots$

- A.  $\frac{64a^{12}}{b^6}$
- B.  $\frac{64a^{14}}{b^6}$
- C.  $\frac{128a^{12}}{b^6}$
- D. None of these

40. Which number is opposite to 6?



- A. 1
- B. 2
- C. 3
- D. 4

41. If  $\left(\frac{1}{5}\right)^{3y} = 0.008$ , then  $(0.25)y$  will be

- A. 1
- B. 0.25
- C. 0.0625
- D. 0.125

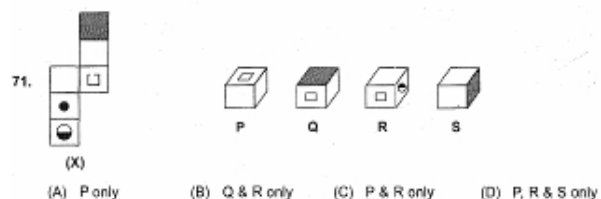
42. Monika answered  $\frac{3}{4}$  of the questions on her quiz correctly. What percent of the questions did she answer correctly?

- A. 25%
- B. 34%
- C. 50%
- D. 75%

43. If 20 men working 7 hours a day can do a piece of work in 10 days, in how many days will 15 men working for 8 hours a day do the same piece of work?

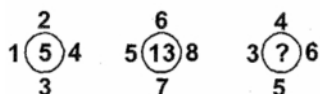
- A.  $11\frac{2}{3}$  days
- B.  $15\frac{5}{21}$  days
- C.  $4\frac{1}{5}$  days
- D.  $6\frac{9}{16}$  days

44. In the following questions, figures below marked (X) at left hand side is folded in such a way that it could form a shape of a box. You have to choose one of the choice given as (A), (B), (C) & (D) that is similar as the box formed.



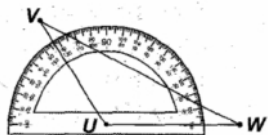
- A. P only
- B. Q & R only
- C. P & R only
- D. P, R & S only

45. In the given questions there are three set of numbers around circles. All the circles are numbered except one. Find the missing number



- A. 11
- B. 8
- C. 9
- D. 19

46. Triangle VUW is shown below. What is the measure of angle VUW to the nearest degree?



- A.  $57^\circ$
- B.  $63^\circ$
- C.  $123^\circ$
- D.  $137^\circ$

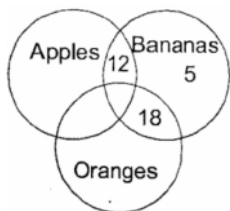
47. In  $\triangle APQR$ ,  $PQ = PR$  and  $PS$  is perpendicular to  $QR$ . State the property by which  $\triangle APSQ \cong \triangle PSR$

- A. SAS property
- B. SSS property
- C. RHS property
- D. ASS property

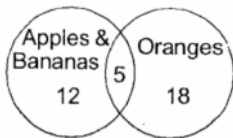
48. A man sold 10 eggs for 5 rupees and gained 20%. How many eggs did he buy for 5 rupees?

- A. 12
- B.  $25/12$
- C. 25
- D. 27

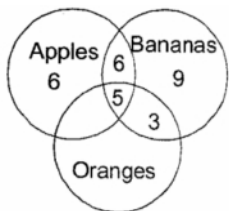
49. A survey showed that 12 students in Mrs. Mona's class liked apples and bananas but not oranges, 18 students liked oranges and bananas but not apples, and five students liked only bananas. Which diagram shows this?



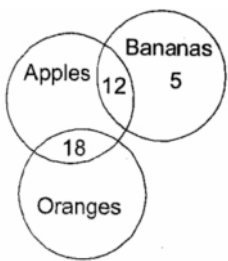
A.



B.

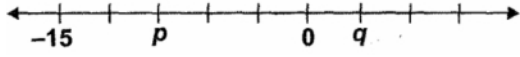


C.



D.

50. What is the value of  $p + q$  in the given number line?



- A. -9
- B. -6
- C. -3
- D. 3

Yagna Innovation