

**A**

**1 Which one is a genetic disease in which a person's blood does not clot properly?**

- A) sickle cell anaemia
- B) anaemia
- C) thalassaemia
- D) haemophilia
- E) colour blindness

**2 Which structures are strong tissues that hold bones together at joints?**

- A) villi
- B) ligaments
- C) bone marrow
- D) cartilage
- E) fatty tissue

**3 Which one does not conduct electricity?**

- A) NaCl (s)
- B) KCl (l)
- C) NaOH (aq)
- D) HCl (aq)
- E) HNO<sub>3</sub> (aq)

**4 Compounds of which element are used to disinfect drinking water and swimming pools?**

- A) Francium
- B) Hydrogen
- C) Chlorine
- D) Magnesium
- E) Sodium

**A**

**5 Which one is related with red blood cells?**

- A) destroy disease causing organisms
- B) carry oxygen to the tissues
- C) can move like amoebas
- D) liquid part of the blood
- E) help to clot blood

**6 Which element is found as a diatomic gas in nature?**

- A) Argon
- B) Oxygen
- C) Neon
- D) Helium
- E) Iron

**7 What do <sup>12</sup>Mg and <sup>20</sup>Ca have in common?**

- A) Mass numbers
- B) Same period
- C) Atomic numbers
- D) Same group
- E) Number of electrons

**8 Which group of elements in the periodic table never form compounds in chemical reactions?**

- A) VIIA
- B) VIA
- C) IA
- D) IIA
- E) VIIIA

**A**

**9 Which of the following glands release both hormone and digestive juices?**

- A ) pancreas
- B ) testes
- C ) thyroid gland
- D ) pituitary gland
- E ) adrenal gland

**10 Which part of your eyes controls the amount of light entering the eye?**

- A ) pupil
- B ) cornea
- C ) iris
- D ) lens
- E ) retina

**11 Which structure in the umbilical cord carries carbondioxide and other wastes away from the fetus?**

- A ) placenta
- B ) vein
- C ) villi
- D ) gland
- E ) artery

**A**

**12 Where is ball and socket joint found?**

- A ) skull
- B ) fingers
- C ) knees
- D ) shoulders
- E ) elbows

**13 What are the products of respiration?**

- A ) nitrogen and oxygen
- B ) carbondioxide and water
- C ) oxygen and carbondioxide
- D ) water and oxygen
- E ) glucose and oxygen

**14 Which element in the periodic table is known as the 'most reactive metal'?**

- A ) Magnesium
- B ) Francium
- C ) Iron
- D ) Lithium
- E ) Flourine

**15 Which one is not found in a DNA molecule?**

- A ) a deoxyribose sugar
- B ) a phosphate group
- C ) a ribose sugar
- D ) a cytosine nucleotide
- E ) an adenine nucleotide

**A**

**16 Which one is a kind of solid solution?**

- A) sugar solution
- B) steel
- C) alcohol solution
- D) air
- E) coffee

**17 8500 mm<sup>2</sup> is equal to**

- A) 8.5 m<sup>2</sup>
- B) 0.0085 m<sup>2</sup>
- C) 0.85 m<sup>2</sup>
- D) 85000 m<sup>2</sup>
- E) 0.085 m<sup>2</sup>

**18 Which one is related with arteries?**

- A) they are the places where exchange of gases take place
- B) they carry blood to the heart
- C) they are used to find the pulse rate
- D) they are the thinnest blood vessels
- E) they are only one-cell thick

**19 What is the function of the bone marrow?**

- A) to produce blood cells
- B) to give body its shape
- C) to help digestion of food
- D) to store calcium and phosphorus
- E) to supply food and oxygen

**A**

**20 What will the weight of a man be on the moon if he has a mass of 60 kg?**

- A) 100 N
- B) 60 N
- C) 10 kg
- D) 600 N
- E) 60 kg

**21 In garden peas, yellow seed colour is dominant and green seed colour is recessive. Suppose purebred green-seeded pea plants are crossed with hybrid yellow-seeded pea plants. What is the phenotype of the F<sub>1</sub> generation?**

- A) 50 % yellow-seeded , 50 % green-seeded
- B) 100 % yellow-seeded
- C) 25 % yellow-seeded , 75 % green-seeded
- D) 75 % yellow-seeded , 25 % green-seeded
- E) 100 % green-seeded

**22 A water pump uses 0.5 kw of power to raise 100kg of water by 10m. How long does it take to pump water?**

- A) 500 000 s
- B) 2 s
- C) 20 s
- D) 5 000 000 s
- E) 50 s

**A**

**23 Which one is related with metals?**

- A) They have low densities and low melting points than non-metals
- B) They gain electrons in chemical reactions
- C) They have 1, 2 or 3 valence electrons
- D) They form anions
- E) They are brittle

**24 Which statement is true for chemical changes?**

- A) State changes are examples of chemical changes
- B) Chemical changes cannot be reversed easily
- C) In a chemical change only the size and shape of the substance changes
- D) No new substances are made
- E) Heat is not produced in chemical changes

**25 Which of the following factors cannot reduce friction?**

- A) lubricating surfaces
- B) rolling the objects
- C) pushing on a smooth surface
- D) separating the surfaces in contact with air
- E) pulling on a rough surface

**A**

**26 Two healthy parents had three children. The third was found to have a certain disease although the other two were normal. What can you say about the genotypes of the parents?**

- A) Bb and BB
- B) BB and BB
- C) Bb and Bb
- D) Bb and bb
- E) bb and bb

**27 What is blood clotting?**

- A) Solidification of blood
- B) Giving out oxygen from the blood
- C) Increasing the amount of blood
- D) Loss of blood through a broken blood vessel
- E) Contraction of the blood vessels

**28 I. Atmospheric pressure is highest at sea level.  
II. Amount of oxygen increases as you climb up a mountain.  
III. In space, pressure inside our body is greater than the outside pressure.  
Which sentences are correct?**

- A) I and III
- B) I and II
- C) I, II and III
- D) II and III
- E) only I

**A**

**29** The area of the large piston in a hydraulic lift is 100 times the area of the small one. How much force is needed to lift a weight of 6000N?

- A) 60N
- B) 6N
- C) 600N
- D) 6000N
- E) 600 000N

**30** Which one is responsible for the exchange of materials in and out of the cell?

- A) mitochondria
- B) cell membrane
- C) nucleus
- D) nuclear membrane
- E) ribosome

**31**  $C_xH_8(OH)_y + 4O_2 \rightarrow 3CO_2 + 4H_2O$

- A)  $x = 3$  ,  $y = 4$
- B)  $x = 6$  ,  $y = 8$
- C)  $x = 3$  ,  $y = 2$
- D)  $x = 2$  ,  $y = 3$
- E)  $x = 4$  ,  $y = 3$

**A**

**32** Why do you sense the taste of foods less when you get cold?

- A) because you cannot eat too much
- B) because your body temperature increases
- C) because your nose is clogged
- D) because your mouth is clogged
- E) because your body loses energy

**33** Which of the organelles below are found both in plant and animal cells?

- A) golgi body and endoplasmic reticulum
- B) mitochondria and chloroplasts
- C) centrioles and vacuoles
- D) cell membrane and cell wall
- E) cell wall and ribosomes

**34** If a car travels 100 km with a constant speed of 20 m/s, how long does the journey take?

- A) 5000 s
- B) 5 s
- C) 120 s
- D) 0.2 s
- E) 20000 s

**A**

**35 Which of the following sentences is not true?**

- A) Humans, insects and wind help pollination
- B) Pollination is the joining of an egg and a sperm
- C) Self pollination requires only one parent
- D) After pollination pollen grains produce a pollen tube
- E) Fruit is produced from the ovary

**36 Which one is not true for RNA molecule?**

- A) It is made by DNA
- B) It contains the base uracil
- C) It forms a shape called a double helix
- D) It is found both in the nucleus and cytoplasm
- E) It has lower molecular weight than DNA

**37 Which one is false for cations?**

- A) They are formed by losing electrons
- B) They join with anions to form ionic compounds
- C) They lose electrons to become a neutral atom
- D) They are positively charged atoms
- E) They gain electrons to become a neutral atom

**38 Which is incorrect for identical twins?**

- A) They are always same sex
- B) They look exactly alike
- C) They are developed from two eggs and two sperms
- D) They are formed from one zygote
- E) None of them

**A**

**39 Which one is not true for compounds?**

- A) They can only be separated by chemical methods
- B) They are composed of elements only
- C) They are always homogenous
- D) Each substance which forms it keeps its own properties
- E) None of them

**40 Which one is true for gravitatal force?**

- A) It is different in different places
- B) It is directly proportional to the distance between bodies
- C) It is inversely proportional to the mass of the bodies
- D) It is a scalar quantity
- E) It can be measured by using a barometer

**41 Which one is not correct for Noble gases?**

- A) They do not undergo chemical reactions
- B) They are used in lighting
- C) They are diatomic gases
- D) They have full outer shells
- E) They never form compounds

**42 Which one is not related with acids?**

- A) They have slippery feeling
- B) They have a sour taste
- C) They turn blue litmus paper to red
- D) They produce salt by neutralization reaction
- E) They produce hydrogen gas when react with metals

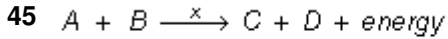
A

- 43 I. Liquid in the cochlea vibrates  
II. Brain interprets nerve impulses  
III. Three tiny bones vibrate  
IV. Pinna collects sound waves  
V. Ear drum vibrates  
Which is the appropriate order for hearing?

A) II, IV, V, III, I  
B) IV, V, II, III, I  
C) IV, V, III, I, II  
D) V, III, IV, II, I  
E) III, II, V, I, IV

- 44 Which one is not a property of covalent compounds?

A) They do not form ions in solutions  
B) They are hard solids  
C) They are formed between non-metal atoms  
D) They have low melting points  
E) They are formed by sharing of valence electrons



Which one is not true for the above reaction?

A) It is an endothermic reaction  
B) C and D are the products of the reaction  
C) A and B are the reactants of the reaction  
D) x is the catalyst of the reaction  
E) Heat is produced at the end of the reaction

- 46 Which pair is incorrect?

A) golgi body → DNA synthesis  
B) mitochondria → energy production  
C) chloroplast → photosynthesis  
D) ribosome → protein production  
E) endoplasmic reticulum → transport of materials

A

- 47 Solubility of NaCl at 80°C is 32g / 100ml water.  
Which one is the unsaturated solution of NaCl at 80°C?

A) 16 g NaCl in 50 ml water  
B) 40 g NaCl in 100 ml water  
C) 64 g NaCl in 200 ml water  
D) 108 g NaCl in 400 ml water  
E) 90 g NaCl in 300 ml water

- 48 Which one is not correct for chromosomes?

A) They consist of proteins and DNA molecules  
B) They are found in pairs in the nucleus  
C) They have different shapes and lengths  
D) Each chromosome has one pair of genes on it  
E) They are found in the nucleus

- 49 Which one is not true for solutions?

A) Particles in them cannot be separated by filtering  
B) They are heterogenous mixtures  
C) Particles in them do not settle down after some time  
D) They are transparent  
E) Particles are evenly distributed in the solution

**A**

50 The initial velocity of a train is 5 m/s and it reaches a velocity of 45 m/s in 20 seconds. The acceleration of the train is

- A)  $3 \text{ m/s}^2$
- B)  $2 \text{ m/s}^2$
- C)  $-2 \text{ m/s}^2$
- D)  $2.5 \text{ m/s}^2$
- E)  $-2.5 \text{ m/s}^2$

**TEST BİTTİ**  
**CEVAPLARINIZI KONTROL EDİNİZ**