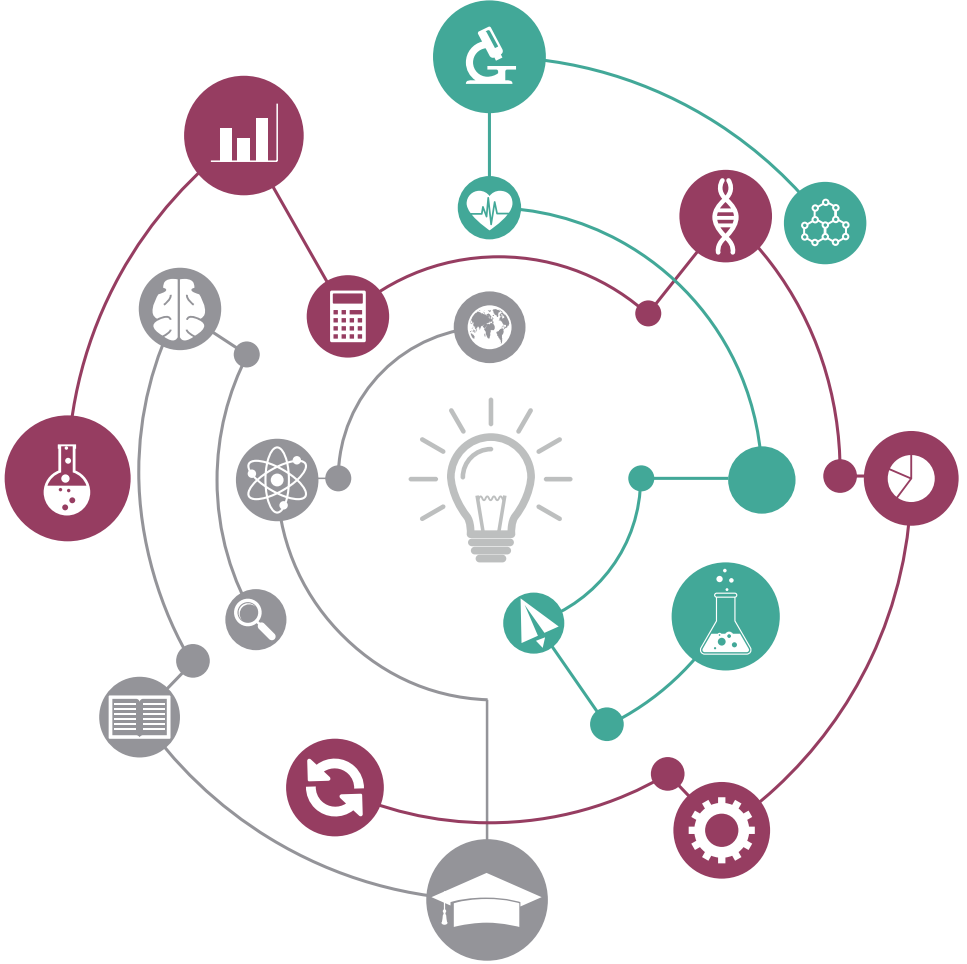


المركز الوطني للقياس

National Center for Assessment



SAAT

Standard Achievement
Admission Test (SAAT)



إحضار إثبات الشخصية شرط أساسي لدخول الاختبار

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Standard Achievement Admission Test (SAAT)

■ General Description:

SAAT is an admission test that covers four basic subject areas: Biology, Chemistry, Physics, and Mathematics. The English version of SAAT focuses on the contents of the official Saudi three-year high school science curriculum. SAAT items have the following distribution:

Year 1 : 20%

Year 2 : 30%

Year 3 : 50%

■ SAAT Components:

The SAAT consists of 120 items spread over five sections. The test includes non-scorable trial items. The time allowed for each section is 25 minutes.

Biology Sample Items

Instruction

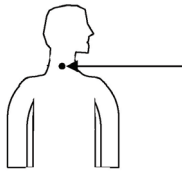
Read the following questions. Choose the right answer and shade the letter corresponding to your answer on your answer sheet.

1. Photosynthesis is a main pathway in all the following groups except:

- | | | | |
|---|---------------|---|-----------|
| A | fungi | B | algae |
| C | cyanobacteria | D | bryophyte |

2. What is the name of the endocrine gland indicated below?

- | | |
|---|-----------|
| A | Pituitary |
| B | Pineal |
| C | Thymus |
| D | Thyroid |



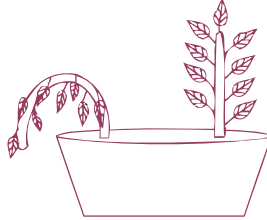
3. RNA molecules differ from DNA molecules in:

- | | |
|---|------------------------------|
| A | having a single strand |
| B | having thiamine |
| C | being present in the nucleus |
| D | having deoxyribose |



4. The two plants below were present in the same house garden. Which of the following could be the cause of the withering of plant A?

- A Plant infection
- B Lack of water
- C Type of soil
- D Lack of light



(A) (B)

5. If a white bull is crossed with a red cow, where both colors are recessive, what will the color of F1 progeny be?

- A White
- B Grey
- C Red
- D White and red

6. The function of the thymus endocrine gland is to regulate:

- A gonad growth
- B body growth
- C body immunity
- D storage of nutrients

7. If a husband has an (AB) blood type, and his wife has a dormant (A) blood type, What is the expected blood type of their child ?

- A B, A
- B O only
- C A, O, AB
- D A, AB

8. Which of the following worms belong to Phylum Annelida?

- A Leech
- B Planaria
- C Liver fluke
- D Ascaris

Chemistry Sample Items

Instruction

Read the following questions. Choose the right answer.

1. Oxidation of primary alcohol produces:

- | | | | |
|---|----------|---|--------------|
| A | ketone | B | organic acid |
| C | aldehyde | D | ester |

2. When 29.25g of sodium chloride (NaCl) dissolves in 1 liter of water, the concentration of the solution is:

- | | | | |
|---|-----------|---|-----------|
| A | 0.5 molal | B | 1.0 molal |
| C | 0.5 Molar | D | 1.0 Molar |

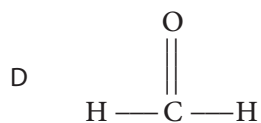
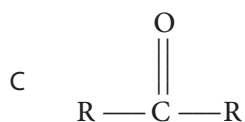
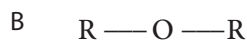
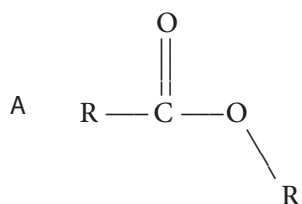
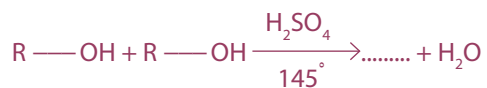
3. Which of the following compounds make hydrogen bonds?

- A Ammonia.
- B Ammonium iodide.
- C Acetic acid.
- D Ethan.

4. According to following electronic periodic distribution $1S^2 2S^2$, to which period and group does the element belong?

	Period	group
A	2	1
B	1	2
C	3	2
D	3	2

5. what is the product of the following reaction?



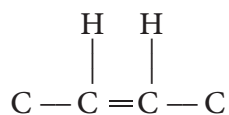
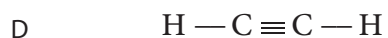
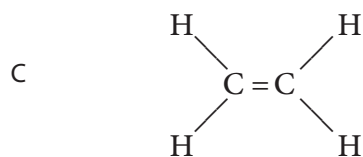
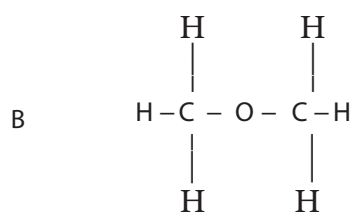
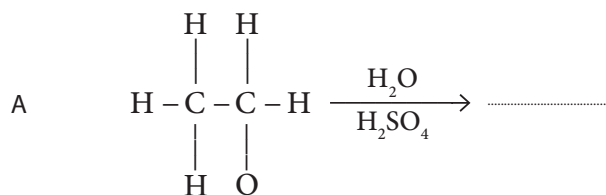
6. The reaction is considered exothermic if the heat content of the reactants is:

- A higher than the heat content of the products.
- B less than the heat content of the products.
- C equal to the heat content of the products.
- D not useful for heat of reaction.

7. Which property applies to aluminium hydroxide, $Al(OH)_3$?

- A Acidic
- B Basic
- C Amphoteric
- D Salty

8. What is the main product of the following chemical reaction equation ?



Physics Sample Items

Instruction

Read the following questions. Choose the right answer and shade the letter corresponding to your answer on your answer sheet.

1. An object accelerates initially from rest at 2.5 m/sec. What is the speed of this object (m/sec) after 3 seconds?

A 2.5

B 4

C 5

D 7.5

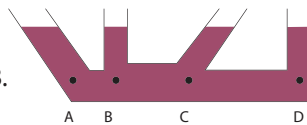
2. If you pour a quantity of water in to four connected pipes, as shown in the figure below, the water pressure will be:

A minimum at point C.

B equal at all points.

C maximum at point D.

D equal at points D, C and B.



3. A hydrogen-filled balloon ascends because its weight is:

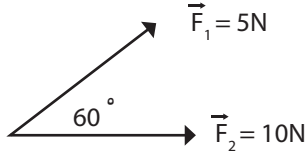
A more than the air buoyant force acting upon it.

B less than the air buoyant force acting upon it.

C equal to the air buoyant force acting upon it.

D at the same direction of the air buoyant force.

4. The net force in Newton for \vec{F}_1 and \vec{F}_2 below is:
($\cos 60 = 0.5$).



- A $\sqrt{175}$
- B $\sqrt{150}$
- C $\sqrt{120}$
- D $\sqrt{70}$

5. In the following diagram, the force formed between the two wires is:

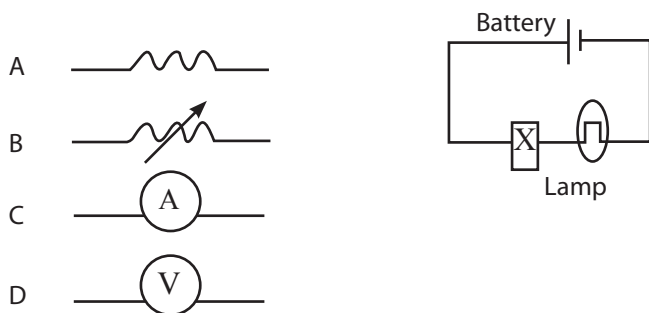


- A repulsive.
- B electrical.
- C attractive
- D related to the mass.

6. An object is placed at 20 cm from a convex lens with a focal length of 15 cm.
How far in cm is the image from the lens?

- A -60
- B -9
- C 9
- D 60

7. The diagram below shows an incomplete lamp circuit. What should be added in the box (x) to measure the electric current?



8. What are the two stages through which the nucleus A_ZX passes when it decays to nucleus ${}^{A-4}_{Z-2}Y$?

- A β emission followed again with β emission.
- B β emission followed by α particles.
- C α emission followed again by α emission.
- D α emission followed by γ rays.

Math Sample Items

Instruction

Read the following questions. Choose the right answer and shade the letter corresponding to your answer on your answer sheet.

1. If the sum of two numbers is 1 and their product is $\frac{1}{8}$, then their difference is:

A $\sqrt{2}$

B $\frac{7}{8}$

C $\sqrt{\frac{1}{2}}$

D $\frac{1}{2}$

2. Let A be a 2×2 matrix such that $A = A^{-1}$. The value of $\det(A)$ can be:

A -2

B -1

C 0

D 2

3. If we have $\log_2 x y = 5$ and $\log_2 \frac{x}{y} = 3$, then $x =$

A 4

B 8

C 12

D 16

4. We have 9 cards numbered 1 to 9. Two cards are drawn at random. What is the probability that the sum of the drawn cards is a prime number less than 9?

A $\frac{1}{6}$

B $\frac{1}{4}$

C $\frac{1}{3}$

D $\frac{1}{2}$



5. Let $0 < x \leq \frac{\pi}{2}$, then the value of x which satisfies $\sin(x) = \sin(2x)$ is:

A $\frac{\pi}{6}$

B $\frac{\pi}{4}$

C $\frac{\pi}{3}$

D $\frac{\pi}{2}$

6. The equation $2x^2 + 3y^2 + 4x - 6y + 11 = 0$ represents:

A an empty set

B a parabola

C a hyperbola

D an ellipse

7. $\lim_{x \rightarrow 2} (\sqrt{x} - 3)$

A 0

B 1

C $\sqrt{6}$

D not existed

8. $\int_0^1 \frac{x^2 - 2x - 15}{x - 5} dx =$

A $\frac{9}{4}$

B 3

C $\frac{7}{2}$

D 4



Answer Key

	Biology	Chemistry	Physics	Math
1	A	B	D	C
2	D	C	B	B
3	A	A	B	D
4	D	A	A	A
5	B	B	C	C
6	C	D	D	A
7	D	C	C	D
8	A	B	B	C

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