

## **Kuwait University**

Office of Assistant Vice President for Evaluation and Measurement

## **Academic Aptitude Tests**

Student Name	Version A
Civil ID No.	1
	]
Instructions:	
1. The aptitude tests consist of three tests.	

Diigiibii	32	1 110 011	
Mathematics	20 (No Calculator)	1 Hour	
Chemistry	25	1 Hour	

2. Mark all your answers on the **Answer Sheet** and in the proper section. On your answer sheet as shown below, using a pencil, darkenthe proper circle.

Time

1 Hour

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**Test** 

English

- 3. Verify all personal and test data on answer sheet and don't make any changes unless approved by the proctor.
- 4. Write down your name and Civil ID# on the test booklet.

**Number of Questions** 

- 5. Copy the test's version on your answer sheet.
- 6. Follow the proctor's instruction during the test.
- 7. During testing, be quite and avoid any cheating situation.
- 8. Observe the allocated and the announced time for each test.

English Test Page 1

The solution set of  $6x^2 - 11x - 10 = 0$  is: 1.

(a) 
$$\left\{\frac{-5}{3}, 1\right\}$$

$$(c) \qquad \left\{ \frac{-5}{2}, \frac{2}{3} \right\}$$

(b) 
$$\left\{\frac{5}{3}, -1\right\}$$

$$(d) \qquad \left\{ \frac{5}{2}, \frac{-2}{3} \right\}$$

The solution set of  $x^2 - 2 = |x|$  is: 2.

(a) 
$$\{2\}$$

(c) 
$$\{-2, 1\}$$

(a) 
$$\{2\}$$
  
(b)  $\{2, -1\}$ 

The solution set of the inequality |7 - x| > 5 is: 3.

(a) 
$$(-12,-2) \cup (0, \infty)$$
  
(b)  $(-\infty, 0) \cup (12, \infty)$ 

(c) 
$$(-\infty, -12) \cup (-2, \infty)$$
  
(d)  $(-\infty, 2) \cup (12, \infty)$ 

(b) 
$$(-\infty, 0) \cup (12, \infty)$$

(d) 
$$(-\infty, 2) \cup (12, \infty)$$

The solution set of the inequality  $\frac{(x+5)(x-2)}{x+3} > 0$  is: 4.

(a) 
$$(-\infty, -3) \cup (2, \infty)$$

(c) 
$$(-\infty, -5) \cup (-3, 2)$$
  
(d)  $(-5, -3) \cup (2, \infty)$ 

(a) 
$$(-\infty, -3) \cup (2, \infty)$$
  
(b)  $(-\infty, -5) \cup (-3, \infty)$ 

(d) 
$$(-5, -3) \cup (2, \infty)$$

If z = 2xw + 2yw + 2yx, then y =5.

(a) 
$$\frac{z - 2xw}{2w + 2x}$$

(c) 
$$\frac{z - 2xw}{2w - 2x}$$
(d) 
$$\frac{z - xw}{w - x}$$

(b) 
$$\frac{z - xw}{2xw}$$

(d) 
$$\frac{z - xw}{w - x}$$

6. 
$$\frac{-1}{x-1} + \frac{2}{x-2} =$$

(a) 
$$\frac{3x-4}{(x-1)(x-2)}$$
(b) 
$$\frac{x-4}{(x-1)(x-2)}$$

(c) 
$$\frac{x}{(x-1)(x-2)}$$

(b) 
$$\frac{x-4}{(x-1)(x-2)}$$

(d) None of the previous

- $2x^3 5x^2 28x + 15 =$ 7.
  - (2x-1)(x-3)(x-5)
- (2x-1)(x-5)(x+3)(c)

(b)  $(2x^2-3)(x-5)$ 

x(2x-1)(x-5)(x+3)(d)

- 8.
  - (a)

 $5^{4x-2}$ (c)

(b)

- (d) 25
- The solution set of  $7^{x^2+20} = 7^{9x}$  is: 9.
  - (a)  $\{4, 5\}$

 $\{0, 20\}$ (c)

(b)  $\{-4, -5\}$ 

None of the previous (d)

- 10.  $\frac{2}{3} \left(\frac{3}{4} \frac{1}{2}\right) =$ 
  - (a)  $\frac{5}{24}$

(c)  $\frac{5}{12}$ 

(b)  $\frac{-7}{12}$ 

- None of the previous (d)
- The domain of  $f(x) = \frac{1}{\sqrt{x-1}}$  is: 11.
  - $(-\infty, 1)$ (a)

 $[1, \infty)$ (c)

(b)  $\mathfrak{R}\setminus\{1\}$ 

- None of the previous (d)
- If  $f(x) = x^2 1$ , then f(x-1) =12.
  - $x^2 + 2x 1$ (a)

(c)  $x^2 - 2x - 1$ (d)  $x^2 - 2$ 

 $x^{2} - 2x$ (b)

- Prices in a sale were reduced by 20%. If the price of a washing machine was 120 13. KD before the sale, then its sale price is:
  - 94 KD (a)

96 KD (c)

(b) 144 KD

100 KD (d)

14.	a med	g an operation, the heart beat of a patication that decreased the heart beat beart beat before the operation was:		•
	(a) (b)	58 b/Min. 72 b/Min.	(c) (d)	64 b/Min. None of the previous
15.		bbits consume 70 Kg of food per wee its in 3 days?	k, then	how much food is consumed by
	(a) (b)	72 Kg 48 Kg	(c) (d)	24 Kg None of the previous
16.		orkers can finish a job in 8 days, then ne job in 4 days?	how ma	any workers are needed to finish
	(a) (b)	12 9	(c) (d)	3 None of the previous
17.		d can finish a job in 3 hours, while M ow long it takes to finish this job, if A		
	(a) (b)	2 hours 12 hours	(c) (d)	6 hours None of the previous
18.	charge	el charges $x$ KD per night plus 8% tax es an untaxed 5 KD per stay in the hot for $m$ nights?		
	(a)	1.08(mx+5)	(c)	1.08(mx) + 5
	(b)	(x+0.08m)+5	(d)	None of the previous
19.	cows	In had 50 cows at the beginning of 201 will double every 6 years, then which or $C$ of cows $m$ years after 2018.		
	(a)	$C = 50(2)^{6m}$	(c)	C = 50 + 6m
	(b)	$C = 50(2)^{\frac{m}{6}}$	(d)	C = 6 + 50m
20.	sells e	ost (in KD) of producing <i>m</i> items in a ach item for 12 KD. What is the minite factory to make profit?		
	(a)	84	(c)	71
	(b)	70	(d)	None of the previous

Q's#	Answers	Q's#	Answers	Q's#	Answers	Q's#	Answers	Q's#	Answers
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Answers - Math	ematics Exam	إجابات اختبار الرياضيات			
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1 - A 8 0 0 0 3 - A 8 0 0 0 4 - A 8 0 0 0 5 5 - 0 8 0 0	6 - 0 0 0 0 7 - 0 0 0 0 8 - 0 0 0 9 - 0 0 0 0	11 - (A (B (C (C (D	16 - 8 0 0 0 17 - A 0 0 0 19 - A 0 0 0 0 20 - A 0 0 0		

)'s# Answers	Q's# Answers	Q's# Answers	Q's# Answers	Q's# Answers
1 - A B C D 2 - A B C D 3 - A B C D 4 - A B C D	7 - 0000 8 - 0000	11 - (A (B) (C) (D) (12 - (A (B) (C) (D) (13 - (A (B) (C) (D) (15 - (A (B) (C) (D) (D) (15 - (A (B) (C) (D) (D) (D) (15 - (A (B) (C) (D) (D) (D) (15 - (A (B) (C) (D) (D) (D) (D) (15 - (A (B) (C) (D) (D) (D) (D) (15 - (A (B) (C) (D) (D) (D) (D) (D) (D) (15 - (A (B) (C) (D) (D) (D) (D) (D) (D) (D) (D) (D) (D	16 - (A (B) (C) (D) (D) (D) (D) (D) (D) (D) (D) (D) (D	21 - (A (B (C (O))) 22 - (A (B (C (O))) 23 - (A (B (C (O))) 24 - (A (B (C (O)))) 25 - (A (B (C (O)))

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	@@@@	12 -	A @ @ @	22 -	(A (B (C) (C) (A (C) (C) (A (C) (C) (A (C) (C) (C) (A (C)	32 -	A B C O	42 -	A B C C	52 -	A @ @ @
3 -	A B C O	13 -	A 8 C D		A B C D	33 -	A 8 C O	43 -	000B	53 -	A B C
4 -	0000	14 -	@@@	24 -	ABCO	34 -	A 8 0 0	44 -	A 8 C O	54 -	(A) (B) (C)
5 -	A @ O O	15 -	0000	25 -	A @ @ @	35 -	@@@@	45 -	A 8 6 0	55 -	A 0 0
3 -	@@@		A @ @ @		A B C O	36 -	@@@@	46 -	A B C C	56 -	A B C
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