

平成22年度
(前期)

試 験 問 題 (英 語)

解答はすべて解答用紙に記入しなさい。

- 1 次の各組において、見出しの語の下線部と同じ発音を含む語を選び、記号で答えなさい。

- (1) called
 (ア) washed (イ) enjoyed (ウ) started (エ) passed
- (2) break
 (ア) glad (イ) April (ウ) apple (エ) member
- (3) food
 (ア) choose (イ) good (ウ) foot (エ) wood
- (4) weather
 (ア) they (イ) health (ウ) tooth (エ) mouth
- (5) birthday
 (ア) hard (イ) sport (ウ) nurse (エ) ear

- 2 A と B の関係と C と D の関係が同じになるように()に適する語を書きなさい。

	A	B	C	D
1	know	knew	mean	()
2	second	February	twelfth	()
3	I	mine	our	()
4	right	write	their	()
5	book	books	man	()

- 3 次の各文の()に入る適切な語を選び、記号で答えなさい。

- (1) This book was () by a popular writer.
 (ア) write (イ) writes (ウ) written (エ) writing
- (2) Ken speaks English () than I.
 (ア) good (イ) well (ウ) better (エ) best
- (3) Our teacher will come soon. So, we have to stop () now.
 (ア) talk (イ) talks (ウ) talking (エ) talked
- (4) There () some trees in the park when I was a child.
 (ア) is (イ) was (ウ) are (エ) were
- (5) We called () "the king of our team."
 (ア) him (イ) his (ウ) he (エ) he's

4 次の日本語の意味に合う英文を選び、記号で答えなさい。

(1) 僕は君に僕たちと一緒にサッカーをして欲しい。

(ア) I want you to play soccer with us.

(イ) I want you play soccer with us.

(ウ) I want to play soccer with you.

(エ) You will play soccer with us.

(2) ケンは10人の男の子の中で一番年上だ。

(ア) Ken is the oldest in the ten boys.

(イ) Ken is the oldest of the ten boys.

(ウ) Ken is the most old of the ten boys.

(エ) Ken is the older of the ten boys.

(3) このかばんは重すぎて運ぶことができない。

(ア) This bag is too heavy to carry.

(イ) This bag is too heavy not to carry.

(ウ) This bag is to heavy too carry.

(エ) This bag is so heavy not to carry.

(4) 私は彼女に何を言ったらよいのか分からなかった。

(ア) I did not know what I to say to her.

(イ) I knew what I did not have to say to her.

(ウ) I did not know what to say to her.

(エ) I did not know her what to say.

(5) ほとんどの生徒は、マークの言葉を理解できなかった。

(ア) Few students could understand Mark's words.

(イ) A few students could not understand Mark's words.

(ウ) Many students could understand Mark's words.

(エ) A little student could not understand Mark's words.

5 次の各文の内容を表す最も適切な語(句)を選び、記号で答えなさい。

- (1) When we travel, we visit this place to sleep at night.
- (2) In Japan, boys and girls who are from 13 to 15 years old study at this place.
- (3) There are many books that we can read or borrow from this place, but we cannot buy books here.
- (4) We usually go to this place when we are sick or get injured.
- (5) They sell food like meat, vegetables, and fruit at this place.

- | | | |
|-----------------|------------------------|-----------------|
| (ア) hotel | (イ) junior high school | (ウ) high school |
| (エ) library | (オ) restaurant | (カ) hospital |
| (キ) supermarket | (ク) bookstore | |

6 次の日本文に合うように()内の語(句)を並びかえた時、1 つ不要な語(句)がある。その語(句)を書きなさい。ただし、文頭の文字も小文字にしている。

- (1) 私達の先生と話しているあの女性を知っていますか。

(the lady / our teacher / do / talking with / know / you / talk with) ?

- (2) 私は、君が昨日私に送ったEメールを読んでいない。

(read / I / you / me / who / have / the e-mail / sent to / which / yesterday / not).

- (3) 健太は和夫と同じくらい背が高いです。

(Kenta / Kazuo / is / taller / tall / as / as).

- (4) 彼らはなぜその女の子が泣いているのか知らなかった。

(crying / that / they / the girl / not / know / why / was / did).

- (5) 英語を学ぶことは私にとって楽しいです。

(fun / to / it / for / I / study / is / me / English).

- 7 次の会話文はシアトルを旅行中のタクヤとミキオの会話です。文を読んで各問いに答えなさい。

Takuya : We have finally arrived at the airport.

Mikio : Our hotel is in *downtown Seattle. So, how do we get there?

Takuya : Let's see. There are four ways to go to downtown Seattle. They are taxi, Airport bus A, Airport bus B, and a local bus. I think a taxi is the fastest way. It takes the shortest time to go to our hotel. We also can get off in front of the hotel.

Mikio : But it'll *cost about 30 dollars. I think it is too expensive. We should save our money for our trip.

Takuya : You are right. Hmm, what's the cheapest way? Oh, what do you think about a local bus? We need to pay only 4 dollars together.

Mikio : Yes, I've also *checked it, but did you see how long it takes to go downtown? About an hour! It takes the longest time of all. Why don't we take Airport bus B? The *fare is a little higher than that of Airport bus A, but Airport bus B is faster. It also stops in front of the hotel, but (1) Airport bus A does not. If we get off the bus in front of the hotel, we (あ) walk with our heavy bags. Its fare is cheaper than that of a taxi. It will also take less time than a local bus.

Takuya : I agree with you. So, let's take Airport bus B and go to downtown Seattle.

downtown : 繁華街 cost : (費用が)かかる check : 確認する fare : (乗車)料金

	Local Bus	Airport Bus A	Airport Bus B	Taxi
Fare	\$ 2	\$ 15	(2)	\$ 30
Traveling Time	(1)	40 minutes	30 minutes	(3)

問1. 表内の(1)から(3)に入る最も適切なものを選び、記号で答えなさい。

- (1) (ア) 60 minutes (イ) 80 minutes
 (ウ) 100 minutes (エ) 120 minutes
 (2) (ア) \$ 5 (イ) \$ 10 (ウ) \$ 18 (エ) \$ 35
 (3) (ア) 20 minutes (イ) 30 minutes
 (ウ) 35 minutes (エ) 45 minutes

問2. 下線部(1)が表す内容を選び、記号で答えなさい。

- (ア) Airport bus A does not go to downtown Seattle.
 (イ) Airport bus A does not go to the hotel slower than Airport bus B.
 (ウ) Airport bus A does not cost as much as Airport bus B.
 (エ) Airport bus A does not stop in front of the hotel.

問3. 本文の内容に合うように(あ)に入る語句を選び、記号で答えなさい。

- (ア) must not (イ) don't have to (ウ) cannot (エ) should not

8 次の英文を読んで、各問いに答えなさい。

Kanji came from China about 1,400 years ago. The *characters like *kanji* are also used in China and other countries, but they sometimes don't have the same meaning. For example, (1) the character for "yu" means "hot water" in Japan, but it means "soup" in China.

There are (2) two kinds of *kanji*. One came from China and the other was made in Japan. The characters created in Japan are called *kokuji*. *Kokuji* are simpler than Chinese characters. The Japanese *government also *decided on 1,945 *kanji* for daily use in 1981. They are called *joyo-kanji*.

There are only 51 sounds in Japanese, so it is not difficult to *pronounce. There are many *types of Japanese, so it is difficult to know which type to use. If a man uses language used by a woman, it will sound very strange. If an adult uses language used by a child, it will sound *funny.

In Japanese, there are sometimes many ways to say one thing. If you want to say "you", you can use *anata*, *kimi*, or *omae*. If you don't use the (あ) word, you will sound too strong or too weak. It is okay to say *omae* to your friends, but if you call your *boss *omae* in your office, (い) .

In America and many other countries, the most important thing is to be friendly, but in Japan, it is more important to show *respect than to be friendly. So, sometimes you may think that Japanese are not (う) and *cold, but they are just trying to show respect to you.

character : 文字

government : 政府

decide on : ～に決定する

pronounce : 発音する

type : 種類

funny : おかしい

boss : 上司

respect : 尊敬

cold : (態度が)冷たい

問1. 下線部(1)を参考にして次の英文の()に入る適切な英単語1語を書き、英文を完成させなさい。

The character for “*tegami*” means “()” in Japan, but it means “toilet paper” in China.

問2. 下線部(2)が表す内容を選び、記号で答えなさい。

- (ア) 音読み漢字と訓読み漢字
- (イ) 国字と常用漢字
- (ウ) 中国からきた文字と国字
- (エ) 中国からきた文字と常用漢字

問3. (あ)に入る語を選び、記号で答えなさい。

- (ア) light (イ) right (ウ) long (エ) wrong

問4. (い)に入る英文を選び、記号で答えなさい。

- (ア) it is very nice for you
- (イ) it isn't good at all
- (ウ) you will be good friends
- (エ) he will be happy

問5. (う)に入る語を、同じ段落から英単語1語抜き出して書きなさい。

問6. 次の各日本文が、本文の内容と一致する場合にはTで、一致しない場合にはFで答えなさい。

- (1) 漢字はもともと中国から伝わった。
- (2) 漢字のような文字は日本と中国のみで使われている。
- (3) 日本政府は1945年に常用漢字を定めた。
- (4) 日本語は、使うのは難しいが発音するのは簡単である。
- (5) 時に日本人は冷たく思われることがある。

9 次の会話文を読み、(1)～(5)の物がどこに置かれるかを記号で答えなさい。

Father : Are you ready to move these things ?

Ken : Yes, dad. So, what should we move first ?

Father : I think we should move the piano first. I think we should put it in the corner.

Ken : Which corner ? In front of the window ?

Father : No, not that one. Do you see the plant ? Let's put it by the plant.

Ken : Oh, ok. What is next ? The dining table ?

Father : Yes.

Ken : We will put it in the middle of the living room. Right ?

Father : No, Ken. The table is for our *meals. So, let's put it by the kitchen.

Ken : Do you mean we put it in front of the big window ?

Father : Yes, you are right.

Ken : How about the TV ? Do we put it by the stereo set ?

Father : Yes. Let's put it there.

Ken : And the sofa. Where should we put it ?

Father : I think I will buy a new living table and put it in the middle of the living room.

So, why don't we put the sofa between the new table and the kitchen ?

Ken : OK. How about the last one ?

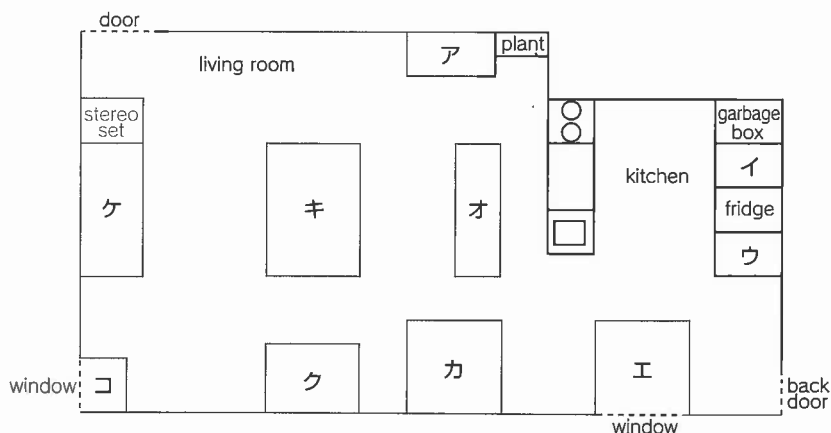
Father : The *microwave should be in the kitchen by the *fridge.

Ken : Which side ?

Father : Oh, I mean we should put it between the *garbage box and the fridge.

Ken : OK.

meal : 食事 microwave : 電子レンジ fridge : 冷蔵庫 garbage box : ゴミ箱



(1) piano (2) sofa (3) TV (4) microwave (5) dining table

受験番号		氏名	
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得点	
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1	(1)		(2)		(3)		(4)		(5)		小計			
2	(1)		(2)		(3)								小計	
	(4)		(5)											
3	(1)		(2)		(3)		(4)		(5)		小計			
4	(1)		(2)		(3)		(4)		(5)		小計			
5	(1)		(2)		(3)		(4)		(5)		小計			
6	(1)		(2)		(3)								小計	
	(4)		(5)											
7	問1	(1)		(2)		(3)		問2		問3		小計		
8	問1		問2		問3		問4		問5		小計			
	問6	(1)		(2)		(3)		(4)		(5)				
9	(1)		(2)		(3)		(4)		(5)		小計			

平成22年度
(前期) **試 験 問 題** (数 学)

解答はすべて解答用紙に記入しなさい。

〔1〕 次の各問いに答えなさい。

(1) $3 + (-2) \times (-3)^2$ を計算しなさい。

(2) $\sqrt{50} + \sqrt{18} - 2\sqrt{8}$ を計算しなさい。

(3) $7x + 2y - 3(y - x)$ を計算しなさい。

(4) 2次方程式 $x^2 - 3x - 40 = 0$ を解きなさい。

(5) 2つのさいころを同時に投げるとき、目の積が18である確率を求めなさい。

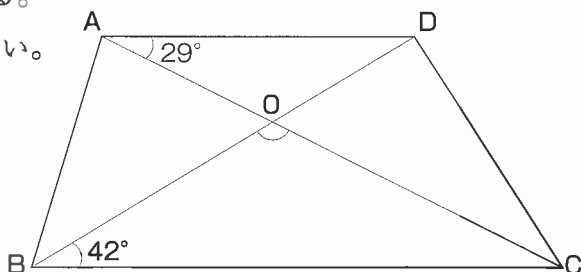
(6) $\frac{5}{\sqrt{10}}$ の分母を根号のない形にしなさい。

(7) $x = \sqrt{5} + 1$ のとき、 $x^2 + 2x - 3$ の値を求めなさい。

(8) $4 \square 2 \square 8 + 9 = -3$ を満たすように、 \square 内に $+$ 、 $-$ 、 \times 、 \div の記号を選んで入れなさい。

(9) ある商品が15%引きであったので4930円で買った。もとの値段を求めなさい。ただし、消費税は考えないものとする。

(10) 図において、 $AD \parallel BC$ である。
 $\angle BOC$ の大きさを求めなさい。



〔2〕 2つの数 a, b に対して

$$a \bullet b = \frac{a \cdot b}{2}, \quad a \triangle b = \frac{b}{a}$$

ときめるとき、次の各問いに答えなさい。

(1) $23 \bullet 46$ を求めなさい。

(2) $3 \bullet 8 = x$, $x \triangle y = 15$, $5 \triangle z = x \bullet y$ を満たすとき、 x と y と z の値を求めなさい。

〔3〕 次の連立方程式(A), (B)の解が同じになるとき、各問いに答えなさい。

$$(A) \begin{cases} 3ax - by = 4 \\ 2x + 3y = 2 \end{cases}$$

$$(B) \begin{cases} 2ay = -bx - 6 \\ x = -5y - 6 \end{cases}$$

(1) x と y の値を求めなさい。

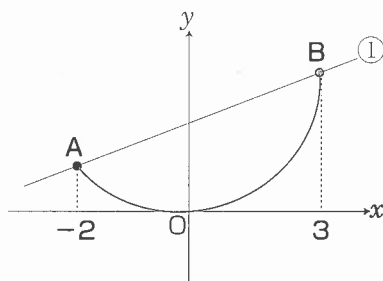
(2) a と b の値を求めなさい。

〔4〕 図のように、関数 $y = ax^2$ について、 x の変域が $-2 \leq x \leq 3$ のとき、 y の変域が $0 \leq y \leq 3$ である。直線 $y = mx + n$ …①は変域の両端の2点 A, B を通っている。次の各問いに答えなさい。

(1) 直線①の式を求めなさい。

(2) x 軸について、直線①と対称となる直線②の式を求めなさい。

(3) 直線②について、 x の変域が $-3 \leq x \leq 5$ のときの y の変域を求めなさい。



〔5〕図のように、底面の半径が 3cm 、母線の長さが 5cm の円錐がある。

この円錐について、次の各問いに答えなさい。

ただし、円周率は π とすること。

(1) 底面の周の長さを求めなさい。

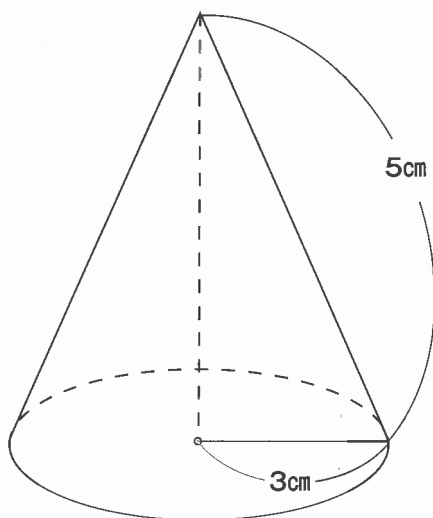
(2) 展開図を考えたとき、側面のおうぎ形の中心角を求めなさい。

(3) 側面積を求めなさい。

(4) 表面積を求めなさい。

(5) 高さが 2 分の 1 のところで底面と平行な平面で切断し、上部を取り除くと

円錐台ができた。この円錐台の表面積を求めなさい。



受験番号		氏名	

得点	

〔1〕

(1)	
(2)	
(3)	
(4)	
(5)	
(6)	
(7)	
(8)	4 <input type="text"/> 2 <input type="text"/> $8 + 9 = -3$
(9)	
(10)	

〔2〕

(1)	
(2)	$x =$
	$y =$
	$z =$

〔3〕

(1)	$x =$, $y =$
(2)	$a =$, $b =$

〔4〕

(1)	$y =$
(2)	$y =$
(3)	$\leq y \leq$

〔5〕

(1)	
(2)	
(3)	
(4)	
(5)	

受験番号		氏名	
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得点	
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1	(1)	イ	(2)	イ	(3)	了	(4)	了	(5)	ウ	小計	
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2	(1)	meant		(2)	↓ December	(3)	ours		小計	
	(4)	there		(5)	men					

3	(1)	ウ	(2)	ウ	(3)	ウ	(4)	エ	(5)	了	小計	
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4	(1)	了	(2)	イ	(3)	了	(4)	ウ	(5)	了	小計	
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5	(1)	了	(2)	イ	(3)	エ	(4)	カ	(5)	キ	小計	
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6	(1)	talk with		(2)	who		(3)	taller		小計	
	(4)	that		(5)	I						

7	問1	(1)	了	(2)	ウ	(3)	了	問2	エ	問3	イ	小計	
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8	問1	letter(s)		問2	ウ	問3	イ	問4	イ	問5	friendly		小計	
	問6	(1)	了	(2)	エ	(3)	エ	(4)	了	(5)	了			

9	(1)	了	(2)	オ	(3)	リ	(4)	イ	(5)	エ	小計	
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受験番号		氏名	
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得点	
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[1]

(1)	-15
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(2)	$4\sqrt{2}$
-----	-------------

(3)	$10x - y$
-----	-----------

(4)	$8, -5$
-----	---------

(5)	$\frac{1}{18}$
-----	----------------

(6)	$\frac{\sqrt{10}}{2}$
-----	-----------------------

(7)	$5 + 4\sqrt{5}$
-----	-----------------

(8)	$4 \boxed{-} 2 \boxed{\times} 8 + 9 = -3$
-----	---

(9)	5800
-----	--------

(10)	109°
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[2]

(1)	529
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(2)	$x = 12$
	$y = 180$
	$z = 5400$

[3]

(1)	$x = 4, y = -2$
-----	-----------------

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

[4]

(1)	$y = \frac{1}{3}x + 2$
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(2)	$y = -\frac{1}{3}x - 2$
-----	-------------------------

(3)	$-\frac{11}{3} \leq y \leq -1$
-----	--------------------------------

[5]

(1)	6π
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(2)	216°
-----	-------------

(3)	15π
-----	---------

(4)	24π
-----	---------

(5)	$\frac{45}{2}\pi \quad (22.5\pi)$
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