Ⅰ 次の英文を読み、以下の問いに答えなさい。*のついた語句には注があります。[35 点]

著作権の都合上、掲載不可です。

著作権の都合上、掲載不可です。

Ⅱ　次の英文を読み、以下の問いに答えなさい。*のついた語句には注があります。　[35点]

Growing up in the US during the oil embargo* of the early 1970s, I was bombarded by public service announcements encouraging people to conserve energy. But at a very young age, I also read that "energy is always conserved", according to physics. This baffled* me. If nature automatically conserves energy, why would human efforts to do so be needed?

I soon realised that physicists don't exactly speak English. They employ a dialect full of familiar-sounding terms with unfamiliar meanings (including "conserve" and "energy"). Worse still, many words, including simple ones like "force" and "mass", don't even signify what physicists (　A　) intended. Consequently, the language we use to talk about physics obscures some of our most beautiful and fascinating discoveries about how the universe works.

Some scientists might shrug and say it is neither surprising nor problematic that the words aren't completely clear. After all, the foundations of physics are experiment and mathematics. Those are what matter; words are inevitably mere shadows.

Though I agree that data and equations are paramount, physicists convey their ideas, both to each other and to non-scientists, using language. When their wording is ambiguous or opaque*, essential lessons about the cosmos may be (　B　).

So let's look closer at the language of physics, and how three seemingly simple words* have morphed over time, becoming snares for the unwary. Such deceptive terms and metaphors are widespread in physicists' dialect. In pausing to contemplate them, we can gain a clearer, deeper and more satisfying vision of reality.

To set the stage, let me begin with another short story from my youth. When I was 20, I paused my physics studies for a year to pursue music at the Paris Conservatory, taking classes in piano and composition. During my first days in the city of lights, I felt constant stress as I struggled to communicate in French. Attending a classical concert, I found it a challenge to buy a ticket, speak with the usher and decipher the programme. But when the musicians began to play, I felt a sudden rush of unanticipated relief. I had somehow forgotten that the music itself would require no translation — it would soothe my brain and heart just as it did at home.

(　C　) music, mathematics can sometimes transcend language: the set of symbols 2+2=4 can be wordlessly interpreted across many cultures. Since theoretical physics is the most firmly maths-based science, perhaps it inherits this linguistic independence. Must $E = mc^2$ really be translated into words?

The answer is certainly yes. E and m stand for "energy" and "mass", but what do these words really mean? No understanding of Albert Einstein's famous formula* can be attained, even by physics students, without a discussion of the precise connotations* of these terms. This is no small thing, because in modern physics there are multiple types of energy and mass, each with an unfamiliar definition. Unless one chooses the correct types, $E = mc^2$ isn't even true. In short, "energy" and "mass" aren't shadows, they are load-bearing* supports.

With this in (　D　), let's dive in to the first of the three words* that I want to explore in more detail. I find the history of the word "atom" particularly illustrative. Its origin is traced to the ancient Greek philosopher Leucippus and his student Democritus, who suggested that material objects are made of tiny, elementary, indestructible particles. The particles of each type were imagined to be identical and indivisible, hence the name

"atom", from the ancient Greek *atomos*, meaning "uncuttable".

Much later, as the 19th century dawned, chemistry experiments provided evidence that all materials are indeed made from elementary substances — hydrogen, oxygen, carbon and other elements — and that each such substance consists of identical, minuscule* objects. European scientists of the time were familiar with ancient Greek philosophers, so it was natural for chemists such as John Dalton to call these objects "atoms". After some initial definitional chaos, the meaning of atom was settled by the middle of that century, (E) as it does today to the fundamental unit of a chemical element.

Yet the word is a misnomer*. Soon after electrons were discovered at the turn of the 20th century, it was understood that they inhabit the outskirts of atoms and can be stripped off and reassigned to other atoms in chemical reactions. Their negative electric charge is cancelled, within each atom, by a positively charged nucleus, itself also divisible. So much for atoms being uncuttable.

But, by then, the word "atom" had already been established. Decades of research papers and conversation had relied on the term; replacing it would be no easy matter, practically or psychologically. That is why, despite knowing atoms were divisible, scientists retained "atom" and shifted its definition. Language has staying power.

Fortunately, the fact that atoms contradict their own name is harmless, albeit amusing, because the word "atom" no longer carries the resonance it had — unless you happen to have studied ancient Greek.

【注】

the oil embargo　石油の通商禁止（石油危機、オイル・ショックなどとも呼ばれた）
baffle　当惑させる　　opaque　わかりにくい
three seemingly simple words　原文で筆者は "atom" など 3 語を論じているが、この問題文では他の 2 語についての箇所は省略した
Albert Einstein's famous formula　"$E = mc^2$" のこと
connotations　含意　　load-bearing　荷重に耐える
the first of the three words　"atom" のこと、前掲の "three seemingly simple words" の注を参照
minuscule　非常に小さい　　misnomer　誤称

1. 下線部を和訳し、解答用紙に記入しなさい。

2. 本文の空欄(A)～(E)に入るもっとも適切な語句を選び、その番号を解答用紙に記入しなさい。

(A)	① sometimes	② accidentally	③ originally	④ forcefully
(B)	① misunderstood	② recorded	③ surveyed	④ comprehended
(C)	① Like	② As for	③ Despite	④ Compared with
(D)	① general	② essence	③ mind	④ case
(E)	① considering	② referring	③ choosing	④ studying

3. 以下の(1)～(5)に関して、本文の内容に合致するものにはTを、合致しないものにはFを、それぞれ解答用紙に記入しなさい。

(1) 70 年代初頭の石油禁輸が起きていた頃のアメリカで、まだ少年だった筆者は、エネルギーは常に保存されるという物理学の基本的な原理を、公共広告が繰り返し宣伝していたことに当惑した。
(2) 筆者は 20 歳の時、物理学の勉強を一時中断して、パリの学校へ行ってピアノや作曲を学んだ。
(3) パリでの留学時代、筆者はいつもフランス語での応答に苦労していたが、コンサートの入場券を買う時は、故国での場合と同じく簡単にできたので安堵していた。
(4) 有名なアインシュタインの "$E = mc^2$" という公式は、"E" が "energy" を、"m" が "mass" を表すことだけ知っていれば、物理学を研究する者なら十分に理解可能だ。
(5) John Dalton らが "atom" という言葉を使うようになった背景には、19 世紀の初めの科学者は、古代ギリシアの哲学者について詳しかったという事情がある。

Ⅲ　以下の各日本文と英文がほぼ同じ意味になるように、空所に入るもっとも適切なものをそれぞれ一つ選び、その番号を解答用紙に記入しなさい。[10 点]

1．魚類の個体数の大半は、適切に漁業を管理することで回復できるだろう。
Most fish populations could be (　　) with appropriate fisheries management.
① excused　② succeeded　③ prospered　④ restored

2．鷲の飛ぶ様子から着想を得て、私たちはこの大型の輸送用ドローンを開発しました。
(　　) by the way an eagle flies, we developed this large transport drone.
① Contributed　② Inspired　③ Engaged　④ Trained

3．年賀状を交換する習慣は、日本では最近、廃れつつある。
The custom of exchanging New Year's cards is falling out of (　　) in Japan.
① fashion　② clothes　③ delivery　④ taste

4．首相が発表した景気刺激策の詳細について、私たちはほとんど何も知らない。
We know (　　) to nothing about details of the economic stimulus plan announced by the Prime Minister.
① almost　② top　③ next　④ last

5．強風を伴う大雨についての緊急警報が発表された。
An emergency warning was issued for heavy rain (　　) by strong winds.
① gathered　② inhabited　③ stated　④ accompanied

Ⅳ　以下の日本文とほぼ同じ意味になるように、かっこ内の語句を並べ替えて英文を完成させるとき、かっこの中で３番目と５番目にくるものを選び、その番号を解答用紙に記入しなさい。[10 点]

1．メディアは、外国文化の広範な受容において重要な役割を果たしてきた。
The media has played a (① in　② widespread　③ the　④ adoption　⑤ role　⑥ significant) of foreign cultures.

2．交渉の結果は、彼らが予想していたものと異なっていた。
The outcome of the negotiations (① what　② from　③ was　④ they　⑤ different　⑥ had) expected.

3．旅先で知り合いに偶然出くわすことについても、同じことが言えます。
The (① can　② said　③ same　④ running　⑤ be　⑥ of) into an acquaintance while traveling.

4. その契約についてのあなたの質問に関して書いています。
I am (① your　② writing　③ regard　④ inquiry　⑤ to　⑥ with) about the contract.

5. 世界経済がどうなっていくのか、私には全く分からない。
I have (① what　② no　③ will　④ of　⑤ become　⑥ idea) of the world economy.

Ⅴ　次の日本文を英訳し、解答用紙に記入しなさい。[10 点]

民主主義は、互いの意見を尊重し合うという原則に基礎を置いています。

2026年度

経済学部編入学試験

受験番号		フリガナ	
		氏名	

小　論　文（経済の基礎知識）

（50 点）

問題

近年のわが国における物価の変動に関して、以下の２つの問いに答えなさい。

(1)最終消費財及び中間財の物価の変動に関する統計指標が何かを述べた上で、これらの統計指標の最近の変動について、名目値と実質値の両面から具体的に論じなさい。

(2)わが国における最近の物価の動向は、家計の収入や支出にどのような影響を及ぼしているかを述べた上で、わが国の社会経済で今後行うべき政策について論じなさい。

採点欄

（裏面へ）

2026年度

経済学部編入学試験

受験番号		フリガナ	
		氏名	

小 論 文(経済学の基礎知識)

(50 点)

問題	
	消費者と生産者からなる経済を考える。消費者は「多数」であるとする。また、生産者は「多数」「1 社」「2 社」のいずれかであるとする。以下の 3 つの問いに答えなさい。 (1)「生産者が多数のときは、生産者はプライスメーカーではなくプライステーカーとして行動する」。この文章の意味をわかりやすく説明しなさい。 (2)「生産者が 1 社のときの社会的余剰（消費者余剰と生産者余剰の総和）は、生産者が多数のときより小さくなる」。このことを、図を用いて説明しなさい。 (3)「生産者が 2 社のときは、戦略的状況が起きるため、生産者行動の分析は複雑になる」。この文章の意味をわかりやすく説明しなさい。

採点欄

(裏面へ)