英　語

昭和医科大学（旧・昭和大学）医学部 対策 ／ 試験時間目安：60分（2教科140分内） ／ 配点：100点

【注意事項】 1. 本冊子は昭和医科大学医学部（2024年度・一般I期）の出題形式・分量・難易度を忠実に再現したオリジナル予想問題です。 2. 解答・採点基準・詳細解説は、TMPS英語道場のWeb解説ページ内の「そっくり類題セットの解答・解説を開く」にて確認してください。

1 次の各文の (　　) の中に入れるのに最も適切な表現を1つずつ選び、記号で答えなさい。（配点：30点）

1. (　　) do you suppose the medical care system in rural Japan will be in 20 years?
   A. What　B. How　C. Which　D. Why
2. Next April, our freshmen will move to the dormitory in Fujiyoshida, (　　) commands a breathtaking view of Mount Fuji.
   A. where　B. that　C. which　D. what
3. After staying up all night to care for emergency patients, Dr. Sato has certainly (　　) a good night's sleep.
   A. earned　B. taken　C. made　D. done
4. Regular aerobic exercise and balanced nutrition are essential for keeping your cardiovascular (　　) in optimal condition.
   A. network　B. organization　C. system　D. structure
5. As a seasoned hiker, my father (　　) than to enter the mountain trail when a typhoon is approaching.
   A. thinks better　B. had better　C. knows better　D. learns better
6. Stricter infection control measures must be implemented immediately if a hospital-acquired outbreak (　　).
   A. prevents　B. is prevented　C. will prevent　D. is to be prevented
7. The patient sat quietly in the waiting room, with her injured wrist (　　) in a clean bandage.
   A. wrapping　B. wrapped　C. wrap　D. being wrapping
8. The chief nurse is always attentive to anxious patients. She is really (　　) considerate.
   A. very too　B. much too　C. too much　D. very much
9. The senior surgeon (　　) there to be no serious complications after the minimally invasive procedure.
   A. advised　B. expected　C. instructed　D. reminded
10. Because the rural clinic lacked an MRI scanner, the doctors had to (　　) a portable ultrasound device for the initial diagnosis.
    A. do without　B. dispense with　C. make do with　D. go without
11. Preventive lifestyle modification is always (　　) invasive surgical intervention whenever possible.
    A. preferable to　B. more preferable than　C. more preferable to　D. preferably to
12. The annual medical conference (　　) on the third Saturday of November this year.
    A. turns　B. falls　C. gets　D. takes
13. Now that you have passed the national medical licensing exam, the world is your (　　).
    A. minister　B. monster　C. boaster　D. oyster
14. I examined two twin sisters, Emi and Mei, this morning. Emi is (　　) of the two.
    A. a taller　B. tallest　C. the taller　D. more tall
15. Word soon reached the research team (　　) their clinical trial protocol had been approved by the ethics committee.
    A. which　B. what　C. that　D. how

2 下記の英文を読み、質問に答えなさい。但し、[A]と[B]を除く他の段落は本来の順番が入れ替わっています。（配点：30点）

[A] While the master circadian clock in the human brain keeps time internally, it relies on a chemical messenger to announce the arrival of darkness to the rest of the body. That messenger is melatonin, a hormone synthesized by the pineal gland* deep within the brain. Every evening after dusk, melatonin is released into the bloodstream, signaling to organs and tissues that night has begun.

[B] Melatonin regulates the timing of sleep onset, acting like an official race starter who calls runners to the starting line. Its nightly release (I) a cascade of physiological adjustments, including a drop in core body temperature, a slowing of cardiovascular activity, and changes in immune function. It is no (II) that night-shift workers exposed to bright artificial light at night often suffer from disrupted sleep cycles and metabolic disorders (III) the chronic suppression of this vital hormonal signal.

[C] Prior to Lewy's landmark study, endocrinologists widely assumed that the human pineal gland was completely insensitive to ordinary room or artificial light, unlike the pineal glands of rodents. It seemed a reasonable belief: early laboratory tests using dim indoor lamps had failed to alter human hormone levels. That long-held dogma was overturned$_{(a)}$ by Lewy's team. First, they measured the nocturnal melatonin levels of healthy volunteers sleeping in complete darkness and confirmed the normal midnight surge of the hormone.

[D] Decades before smartphones and LED screens invaded our bedrooms, a pioneering experiment revealed just how vulnerable human melatonin production is to artificial illumination. It was in 1980 when psychiatrist Alfred Lewy and his colleagues at the National Institute of Mental Health demonstrated for the very first time that bright artificial light could halt human melatonin secretion.

[E] It was a watershed moment in chronobiology*: Lewy had proven that human biology was not, in fact, immune$_{(b)}$ to the glow of modern electric lighting. Even brief exposure to sufficiently bright light at night could trick the brain's master clock into believing day had broken, resetting our internal timing and opening the door to modern light-therapy treatments for seasonal depression and circadian sleep disorders.

[F] Lewy was investigating how seasonal and daily light cycles affect human mood and hormone rhythms. He was particularly captivated$_{(c)}$ by the sharp nocturnal rise of melatonin in human blood plasma, which normally begins shortly after dusk, peaks in the middle of the night, and plummets by sunrise, earning melatonin the nickname "the hormone of darkness."

[G] Then came the crucial test. On a subsequent night, Lewy awakened the volunteers at 2:00 a.m. and exposed their eyes to bright fluorescent light for two hours, flooding$_{(d)}$ their retinas with intense illumination. Within thirty minutes, their blood melatonin concentrations plunged to daytime levels, only resuming their nocturnal rise after the lights were switched off and darkness was restored.

NOTES: pineal gland 松果体 ／ chronobiology 時間生物学

1. **[C] から [G] の5つの段落を正しい順番に並べ替えなさい。**
   解答欄：[1番目：　　] → [2番目：　　] → [3番目：　　] → [4番目：　　] → [5番目：　　]

2. **空欄 (I) から (III) に入る表現として最も適切なものを各々の選択肢から1つ選び、記号で答えなさい。**
   - 空欄 (I)：　A. triggers　　B. prevents　　C. ignores　　D. conceals
   - 空欄 (II)：　A. excuse　　B. coincidence　　C. evidence　　D. reason
   - 空欄 (III)：　A. in spite of　　B. due to　　C. instead of　　D. prior to

3. **下線部 (a) から (d) の単語の本文中の意味に最も近いものを各々の選択肢から1つ選び、記号で答えなさい。**
   - (a) overturned：　A. confirmed　　B. refuted　　C. preserved　　D. expanded
   - (b) immune：　A. sensitive　　B. obedient　　C. resistant　　D. vulnerable
   - (c) captivated：　A. fascinated　　B. intimidated　　C. offended　　D. exhausted
   - (d) flooding：　A. adjusting　　B. depriving　　C. immersing　　D. concealing

3 下記の英文を読み、質問に答えなさい。（配点：40点）

[1] When Marcus Vance underwent knee replacement surgery last autumn, he was deeply anxious about postoperative side effects. Having seen his brother suffer from severe nausea* and dependency after taking strong analgesic* drugs following two hospital stays, Vance was reluctant (ア) rely on heavy pain medication.

[2] In recent decades, clinical researchers have extensively studied the "nocebo effect"—often called the evil twin of the placebo effect—in which patients experience real adverse symptoms simply because they are warned (イ) advance about potential side effects. Based on traditional pharmacological principles regarding how chemical compounds act on specific receptors, an inert sugar pill or a mere verbal warning should not trigger physical nausea, dizziness, or heightened pain. Yet in a remarkable proportion of clinical cases, they do.

[3] In a clinical trial conducted at Vance's hospital, 60 postoperative patients were divided into two groups, both receiving the exact same basal dose of intravenous pain relief. The goal was to examine whether framing the medical explanation positively could dissociate the treatment (ウ) negative anxiety. For the first group, doctors emphasized the risk of nausea and headache; for Vance's group, doctors honestly explained the safety profile and emphasized how the medication would support natural recovery. Both groups could press a button to request additional analgesics whenever needed. Vance's group reported minimal nausea and requested 40 percent fewer additional analgesic doses than the negatively framed group. "I knew it was a (I) adjustment in how the doctor spoke to me, not a different drug," Vance says.

[4] Systematic reviews of dozens of clinical studies confirm that negative expectations can dramatically worsen clinical outcomes. Still, (clinicians / surprised / powerful / phenomenon / has / many / medical / the).

[5] In standard informed consent, physicians are legally and ethically required to disclose possible risks so that clinical decisions do not introduce (II) or paternalism. However, some researchers attribute the surge in nocebo-induced side effects to overwhelm patients with terrifying lists of rare complications, heightened patient anxiety, or sensitized neural pathways in the brain.

[6] Either way, leaving patients at the mercy of raw fear troubled Dr. Elena Rostova, who led the communication trial Vance participated (エ). Unlike their pharmacological (III), verbal framing interventions cost nothing and carry no chemical toxicity. Experts now hold a clearer conviction (オ) empathetic, balanced communication can calm pain-amplifying circuits in the human brain.

NOTES: nausea 吐き気 ／ analgesic 鎮痛薬・鎮痛の ／ inert 不活性の（薬効のない）

1. **(I) から (III) の空欄に入る表現として最も適切なものを各々の選択肢から1つ選び、記号で答えなさい。**
   ・空欄 (I)： A. subtle　B. fake　C. toxic　D. random
   ・空欄 (II)： A. clarity　B. bias　C. harmony　D. relief
   ・空欄 (III)： A. customs　B. cousins　C. habits　D. duties
2. **(ア) - (オ) の空欄に適切な英単語を1つずつ補いなさい。**
   (ア) [　　] (イ) [　　] (ウ) [　　] (エ) [　　] (オ) [　　]
3. **[2] の下線部を日本語に訳しなさい。**
4. **[4] の下線部の ( ) 内の単語を並べ替えて正しい英文を完成させなさい。但し、6番目と7番目にはそれぞれ medical と clinicians が入るものとし、解答欄には2番目、4番目、8番目に入る単語を書きなさい。**
   Still, [1] [2] [3] [4] [5] [6 medical] [7 clinicians] [8].
   ・2番目：[　　]　・4番目：[　　]　・8番目：[　　]
5. **[5] には文法上誤りのある単語が1語含まれている。その語をそのまま書き抜きなさい。 ➔ [　　]**
6. **[6] の下線部はどういうことか。簡潔かつ具体的に日本語で説明しなさい。**
7. **Vance 氏が参加した臨床試験の方法と結果について 160 字以内の日本語で説明しなさい。但し、句読点も一文字と数えるものとする。**