英 語［問題その1］

解答はすべて解答用紙に記入せよ。

1 次の文（1～9）の 1 ～ 9 に入れるのに最も適当なものを，それぞれ下の①～④のうちから1つずつ選べ。

1 Please tell me the reason 1 you didn't call me last night.
① how ② when ③ where ④ why

2 You 2 give up smoking.
① need ② ought ③ ought to ④ used to

3 I wouldn't have gone out 3 you would come.
① did I know ② do I know ③ had I known ④ have I known

4 Some day your dream of becoming a teacher will 4 true.
① come ② get ③ go ④ make

5 My father 5 smokes nor drinks.
① also ② both ③ either ④ neither

6 The students were looking forward 6 the new exchange student.
① meet ② meeting ③ to meet ④ to meeting

7 Harry is old 7 understand such things.
① as to ② enough to ③ ready to ④ up to

8 I tried to 8 some ink spots on my shirt, but I couldn't.
① catch up with ② come up with ③ get rid of ④ make up for

9 To the best of my 9 , the temple dates back to the 15th century.
① know ② knowingness ③ knowledge ④ knows

2 次の文（1～9）の 10 ～ 18 に入れるのに最も適当なものを，それぞれ下の①～⑫のうちから1つずつ選べ。

1 Ann is junior 10 John, but she is more mature than him.

2 My aunt made this beautiful dress 11 hand.

3 To read 12 the lines means to understand what is implied in the text.

4 All the neighbors went 13 search of the missing dog.

5 My son has been studying hard 14 the English test.

6 Congratulations 15 the birth of your daughter!

7 I have nothing to do 16 the matter.

8 Hurry up! The class begins 17 nine o'clock.

9 Eric was separated 18 his family while working abroad.

① along	② as	③ at	④ behind	⑤ between	⑥ by
⑦ for	⑧ from	⑨ in	⑩ on	⑪ to	⑫ with

英 語［問題その２］

解答はすべて解答用紙に記入せよ。

3 次の文（１～６）において，それぞれ下の選択肢の語句を並べかえて空所を補い，日本文の意味を表す英文を完成せよ。
解答は 19 ～ 30 に入れるものの番号のみを答えよ。

1　ジョージは自分の過去について一切語らなかった。

＿＿＿ 19 ＿＿＿ ＿＿＿ 20 ＿＿＿ .

① about　② his　③ George　④ past
⑤ remained　⑥ silent

2　準備ができたら教えてください。

＿＿＿ 21 ＿＿＿ ＿＿＿ 22 ＿＿＿ ＿＿＿ .

① are　② know　③ let　④ ready
⑤ us　⑥ when　⑦ you

3　なんとおいしい食事なんでしょう。

＿＿＿ 23 ＿＿＿ ＿＿＿ 24 ＿＿＿ !

① a　② delicious　③ is　④ meal
⑤ this　⑥ what

4　主治医が私にぜん息の新しい薬を試してほしいと思っている。

＿＿＿ 25 ＿＿＿ ＿＿＿ 26 ＿＿＿ ＿＿＿ ＿＿＿ ＿＿＿ .

① a new drug　② asthma　③ doctor　④ for
⑤ me　⑥ my　⑦ to　⑧ try
⑨ wants

5　店の前にたくさんの車が停まっている。

＿＿＿ 27 ＿＿＿ ＿＿＿ 28 ＿＿＿ ＿＿＿ ＿＿＿ ＿＿＿ ＿＿＿ .

① are　② cars　③ front　④ in
⑤ many　⑥ of　⑦ parked　⑧ shop
⑨ the　⑩ there

6　ポールは看護師であることを誇りに思っている。

＿＿＿ 29 ＿＿＿ ＿＿＿ 30 ＿＿＿ ＿＿＿ .

① a　② being　③ is　④ nurse
⑤ of　⑥ Paul　⑦ proud

英 語［問題その３］

解答はすべて解答用紙に記入せよ。

4 次の英文を読んで，下の問いに答えよ。

Though time management seems a problem as old as time (1) itself, the science of scheduling began in the machine shops of the industrial revolution. In 1874, Frederick Taylor, the son of a wealthy lawyer, turned down his acceptance at Harvard to become an apprentice machinist at Enterprise Hydraulic Works in Philadelphia. Four years later, he completed his apprenticeship and began working at the Midvale Steel Works, where he rose through the ranks from lathe operator to machine shop foreman and ultimately to chief engineer. A In the process, he came to believe that the time of the machines (and people) he oversaw was not being used very well, leading him to develop a discipline he called "Scientific Management."

Taylor created a planning office, at the heart of which was a bulletin board displaying the shop's schedule for all to see. The board depicted every machine in the shop, showing the task currently being carried out by that machine and all the tasks waiting for it. This practice would be built upon by Taylor's colleague Henry Gantt, who in the 1910s developed the Gantt charts that would help organize many of the twentieth century's most ambitious construction projects, from the Hoover Dam to the Interstate Highway System. A century later, Gantt charts still adorn the walls and screens of project managers at firms like Amazon, IKEA, and SpaceX.

Taylor and Gantt made scheduling an object of study, and they gave (2) it visual and conceptual form. But they didn't solve the fundamental problem of determining which schedules were best. The first hint that this problem even *could* be solved wouldn't appear until several decades later, in a 1954 paper published by RAND Corporation mathematician Selmer Johnson.

The scenario Johnson examined was bookbinding, where each book needs to be printed on one machine and then bound on another. But the most common instance of this two-machine setup is much closer to home: the laundry. When you wash your clothes, they have to pass through the washer and the dryer in sequence, and different loads will take different amounts of time in each. A heavily soiled load might take longer to wash but the usual time to dry; a large load might take longer to dry but the usual time to wash. So, Johnson asked, if you have several loads of laundry to do on the same day, what's the best way to do them?

His answer was that you should begin by finding the single step that takes the least amount of time—the load that will wash *or* dry the quickest. If that shortest step involved the washer, plan to do that load *first*. If (3) it involves the dryer, plan to do it *last*. Repeat this process for the remaining loads, working from the two ends of the schedule toward the middle.

Intuitively, Johnson's algorithm works because regardless of how you sequence the loads, there's going to be some time at the start when the washer running but not the dryer, and some time at the end when the dryer is running, but not the washer. By having the shortest washing times at the start, and the shortest drying times at the end, you maximize the amount of overlap—when the washer and dryer are running simultaneously. B Thus you can keep the total amount of time spent doing laundry to the absolute minimum. Johnson's analysis had yielded scheduling's first optimal algorithm: start with the lightest wash, end with the smallest hamper.

Beyond (4) its immediate applications, Johnson's paper revealed two deeper points: first, that scheduling could be expressed algorithmically, and second, that optimal scheduling solutions existed. This kicked off what has become a sprawling literature, exploring strategies for a vast menagerie of hypothetical factories with every conceivable number and kind of machines.

注
- machine shop： 機械組立工場
- Harvard： Harvard University
- apprentice： 見習い，徒弟
- machinist： 機械工
- lathe operator： 旋盤工
- foreman： 職工長
- adorn： decorate
- hint： something that suggests what will happen in the future (sign, indication)
- soiled： dirty
- algorithm： アルゴリズム（問題解決のための段階的処理手順）
- simultaneously： at the same time
- hamper： laundry basket

英 語［問題その４］

解答はすべて解答用紙に記入せよ。

１　下線部 (1) ～ (4) の表現が指すものを，それぞれ①～⑪のうちから１つずつ選べ。

(1): 31　　(2): 32　　(3): 33　　(4): 34

① a problem	② an object of study	③ bookbinding	④ Johnson's paper
⑤ scheduling	⑥ the laundry	⑦ the lightest wash	⑧ the shortest step
⑨ the washer	⑩ time	⑪ time management	

２　次のア～ケの記述について，本文の内容と合致するものに①を，合致しないものに②をマークせよ。

ア 35　A less dirty load of laundry should take less than the usual time to dry.

イ 36　In the 1910s, Henry Gantt helped organize many construction projects.

ウ 37　In 1874, Frederick Taylor decided to choose work over education.

エ 38　Selmer Johnson found a solution to the problem of time management.

オ 39　The laundry business greatly benefited from Johnson's algorithm.

カ 40　What Taylor and Gantt did turned scheduling into an object of study.

キ 41　Johnson's work on scheduling was followed by many other studies.

ク 42　Gantt charts are completely out of fashion in the 21st century.

ケ 43　Taylor started working as a chief engineer at the Midvale Steel Works.

以下の問いの解答はすべて［解答用紙（記述）］に記入せよ。

３　下線部 A を和訳せよ。

４　下線部 B を和訳せよ。

5　次の各組の二文がほぼ同じ意味を表すように，(　　) 内に適当な語を入れよ。

１　Amy learned how to swim at the age of four.

Amy learned how to swim when she was four (　　) (　　).

２　They made him have a haircut.

He (　　) made (　　) have a haircut.

３　The baby dropped the spoon purposefully.

The baby dropped the spoon (　　) (　　).

’21
ＩＡ

受　験 番　号	

英 語［解答用紙（記述）］

4 第２問 までの解答はすべて［解答用紙（マーク）］に記入せよ。

4

3	

4	

5

1		2		3	

解答例

英 語[解答用紙(マーク)]

21-I-A

受験番号		受験番号	
	⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨		

注意
1. HB または B の鉛筆で濃くマークすること。
2. 消すときは消しゴムで完全に消すこと。
3. 所定欄以外に記入しないこと。
4. 用紙を汚したり，折り曲げたりしないこと。

解答番号	解答欄	解答番号	解答欄
1	① ② ③ ● ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	23	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
2	① ② ● ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	24	① ② ③ ④ ● ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
3	① ② ● ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	25	① ② ● ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
4	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	26	① ② ③ ④ ⑤ ⑥ ● ⑧ ⑨ ⑩ ⑪ ⑫
5	① ② ③ ● ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	27	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
6	① ② ③ ● ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	28	① ② ③ ④ ⑤ ⑥ ● ⑧ ⑨ ⑩ ⑪ ⑫
7	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	29	① ② ● ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
8	① ② ● ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	30	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
9	① ② ● ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	31	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ● ⑪ ⑫
10	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ● ⑫	32	① ② ③ ④ ● ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
11	① ② ③ ④ ⑤ ● ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	33	① ② ③ ④ ⑤ ⑥ ⑦ ● ⑨ ⑩ ⑪ ⑫
12	① ② ③ ④ ● ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	34	① ② ③ ● ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
13	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ● ⑩ ⑪ ⑫	35	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
14	① ② ③ ④ ⑤ ⑥ ● ⑧ ⑨ ⑩ ⑪ ⑫	36	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
15	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ● ⑪ ⑫	37	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
16	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ●	38	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
17	① ② ● ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	39	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
18	① ② ③ ④ ⑤ ⑥ ⑦ ● ⑨ ⑩ ⑪ ⑫	40	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
19	① ② ③ ④ ● ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	41	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
20	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	42	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
21	① ② ③ ④ ● ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	43	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
22	① ② ③ ④ ⑤ ⑥ ● ⑧ ⑨ ⑩ ⑪ ⑫		

4 第３問以降の解答は［解答用紙（記述)］に記入せよ。

’21
ＩＡ

受　験 番　号	

英 語［解答用紙（記述）］

解答例

4 第２問 までの解答はすべて［解答用紙（マーク）］に記入せよ。

4

3	その過程において，彼は自分が監督した機械（と人）の時間があまりうまく使われていないと思うようになった。

4	このようにして，洗濯に費やされる全時間数を最小限に保つことができるのだ。

5

1		2		3	
years	old	was	to	on	purpose