

科目	基礎科技英文	適用系所	資訊電機工程碩士在職專班(中科產業組)	時間	100分鐘
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※請務必在答案卷作答區內作答。

共二頁 第一頁

1. Read the below sentences and translate them into Chinese. [5 % each]

- (1) The research was conducted in a laboratory.
- (2) The applicants need to submit their research proposal by December 31.
- (3) Dr. Chen is the principal investigator of this research project .
- (4) Similar results have been reported in the open literature.

2. Read the below paragraph and translate them into Chinese. [15 % each]

(Personal Handy-phone System) is a wireless mobile network system employing micro-cellular communication technique and operates in the 1880 - 1930 MHz frequency band. PHS base station covered region is limited, the distant from the communication base station to the end terminal is shorter. Therefore, the communication power is smaller, and more base station is needed to cover a larger surface area. This makes PHS suitable for urban areas, but impractical for rural areas .

3. Read the below sentences and translate them into English. [7.5 % each]

- (A) 這項研究的目的是計算數據流動/流程的速率。
- (B) 這意味着溫度在實驗室不是一個重要的因子。

4. Read the following paragraphs and choose a true ansew for each question. [3 % each]

Mary, John, Kelvin, Max, and Lydia have an average height of 1.72 meters. Max is taller than Mary. Lydia is shorter than Kelvin. John is shorter than Max. Lydia is taller than John. Max is shorter than Kelvin. John is the shortest of the five.

- (1) The tallest boy is (a) Mary. (b) Lydia. (c) Max. (d) Kelvin. (e) Cannot be determined.
- (2) Mary is not necessarily : I. taller than John, II. taller than Lydia. (a) I only, (b) II only, (c) either I or II, (d) both I and II, (e) neither I nor II.
- (3) Which of the following must be true? I. Kelvin is taller than Mary. II. Max is taller than Lydia. III. Lydia is taller than Mary. (a) I, (b) II, (c) III, (d) I and II, (e) II and III.
- (4) If Sam joins the group and is taller than Lydia, but shorter than Mary, which of the following must be true? I. Max is taller than Sam. II. Mary is taller than Lydia. (a) I only, (b) II only, (c) either I or II, (d) both I and II, (e) neither I nor II.

Five technicians from different countries wish to communicate. Technician A can speak Chinese and Japanese. Technician B can speak English and Chinese. Technician C can speak Korean and Chinese. Technician D can speak Japanese and Korean. Technician E can speak Korean and English.

- (5) Which technician pairs can converse with each other only with an interpreter? (a) Technicians A and D. (b) Technicians E and B. (c) Technicians B and D. (d) Technicians C and A. (e) Technicians D and C.
- (6) Which technician can act as an interpreter when technicians A and E wish to confer? (a) Technicians D only. (b) Technicians B only. (c) Technicians B and D. (d) Technicians C and D. (e) Any of the other three technicians.
- (7) Of the languages spoken by the technicians, which are the two most common languages? (a) Chinese and Japanese. (b) Korean and Chinese. (c) Korean and Japanese. (d) Japanese and English. (e) Korean and English.

5. Correct the mistake in the following sentences. [3 % each]

- (1) When each person arrives the conference, they must check in.
- (2) Experimental results is present in section 3 of the paper.
- (3) Table 4 summarization the results.

6. Translate the following terminologies into Chinese. [2 % each]

- (1) transistor,
- (2) capacitance,
- (3) reliability,
- (4) radiation damage,
- (5) semiconductor industry,
- (6) conservation of momentum,
- (7) impedance matching,
- (8) break-down voltage,
- (9) cutoff frequency,
- (10) integrated circuit.