

FUKIEN SECONDARY SCHOOL
S4 Final Examination (2020-2021)
Geography
(1 hour 45 minutes)

Date: 17th June 2021

Time: 08:30 a.m. - 10:15 a.m.

Name: _____

Class: _____ No.: _____

Instructions to Candidates:

1. The full mark of this paper is 60.
2. Answer **ALL** questions.
3. Write all answers on the single-lined paper provided.
4. Hand in both the question paper and the single-lined paper at the end of the examination.

I. Multiple Choice Questions (12 marks)

Choose the best options and write the correct answers on the single-lined paper.

1. Which of the following pairs of comparison between primary and secondary forests are correct?

		Primary forest	Secondary forest
(1)	Biomass	Larger	Smaller
(2)	Variety of plants	Larger	Smaller
(3)	Complexity of food web	Higher	Lower

- A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)

2. Which of the following explain(s) high relative humidity in tropical rainforests?

- (1) High evapotranspiration
(2) High diurnal range of temperature
(3) Low wind speed

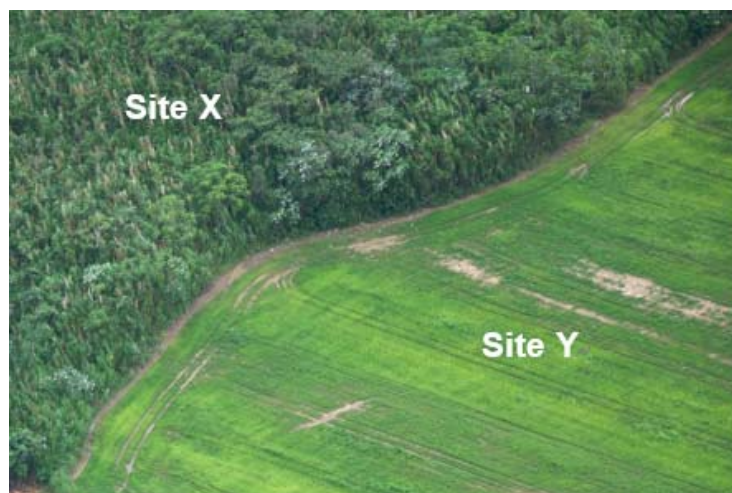
- A. (2) only
B. (1) and (2) only
C. (1) and (3) only
D. (2) and (3) only

3. Which of the following pairs of comparison between saprophytes and epiphytes in tropical rainforests are correct?

	Saprophytes	Epiphytes
(1)	Decomposer	Producer
(2)	Abundant on forest floor	Absent on forest floor
(3)	Absorb nutrients from dead organic matter	Produce nutrients through photosynthesis

- A. (1) and (2) only
 B. (1) and (3) only
 C. (2) and (3) only
 D. (1), (2) and (3)

4. Refer to the photo below. Which of the following pairs of comparison between sites X and Y are correct?



		Site X	Site Y
(1)	Type of land use	Plantation	Primary forest
(2)	Range of temperature	Smaller	Larger
(3)	Links among biotic components	Complicated food web	Simple food web

- A. (1) and (2) only
 B. (1) and (3) only
 C. (2) and (3) only
 D. (1), (2) and (3)

5. How does large-scale afforestation affect the water cycle?

- (1) More interception
- (2) Larger soil moisture storage
- (3) More overland flow

- A. (1) and (2) only
- B. (1) and (3) only
- C. (2) and (3) only
- D. (1), (2) and (3)

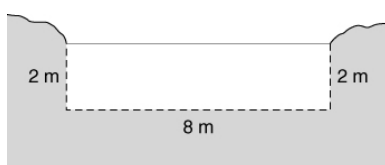
6. Fluvial deposition increases when the river flows through _____.

- (1) a lake
- (2) a gentle course
- (3) a hot and dry area

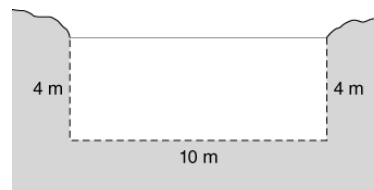
- A. (1) and (2) only
- B. (1) and (3) only
- C. (2) and (3) only
- D. (1), (2) and (3)

7. Which of the following cross-sections shows a river channel with the greatest hydraulic radius?

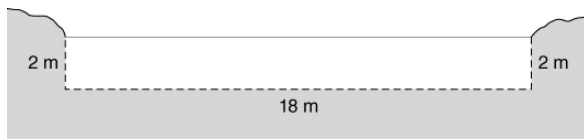
A.



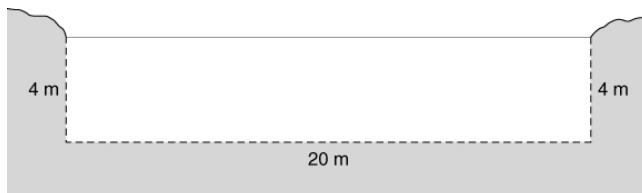
B.



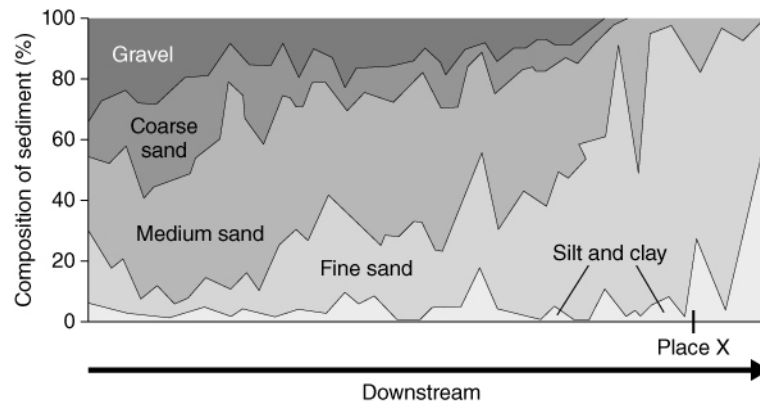
C.



D.



8. The figure below shows the change in sediment composition along a river. Which of the following statements are correct?



- (1) The proportion of gravel increases downstream.
- (2) Place X is located relatively close to the river mouth.
- (3) The change in sediment composition is caused by the increase of attrition downstream.

- A. (1) and (2) only
- B. (1) and (3) only
- C. (2) and (3) only
- D. (1), (2) and (3)

9. Which of the following statements about the greenhouse effect is/are correct?

- (1) Water vapour is a greenhouse gas.
- (2) The earth's surface releases short wave radiation.
- (3) The greenhouse effect increases with increasing latitudes.

- A. (1) only
- B. (2) only
- C. (1) and (3) only
- D. (2) and (3) only

10. Which of the following measures can capture carbon dioxide from the atmosphere?

- (1) Carrying out afforestation
- (2) Improving the efficiency of energy production
- (3) Replacing fossil fuels by renewable energy resources

- A. (1) only
- B. (2) only
- C. (1) and (3) only
- D. (2) and (3) only

11. How does the melting of polar ice intensify global warming?

- A. It releases more heat from the ground.
- B. It increases the amount of water vapour.
- C. It reduces the reflection of solar radiation.
- D. It intensifies the flow of warm ocean current.

12. Which of the following pieces of evidence show(s) the impact(s) of global warming in the Arctic region?

- (1) Crop failure occurs frequently in the Arctic region.
- (2) The ice cover in the Arctic region reduces rapidly.
- (3) The Arctic region receives more solar radiation in summer than that in winter.

- A. (1) only
- B. (2) only
- C. (1) and (2) only
- D. (2) and (3) only

II. Data-based Questions (36 marks)

Attempt all questions.

1. Figure 1a shows a map extract of an area in the northern part of the New Territories. Photo 1b shows the modification of a section along River X.

Figure 1a

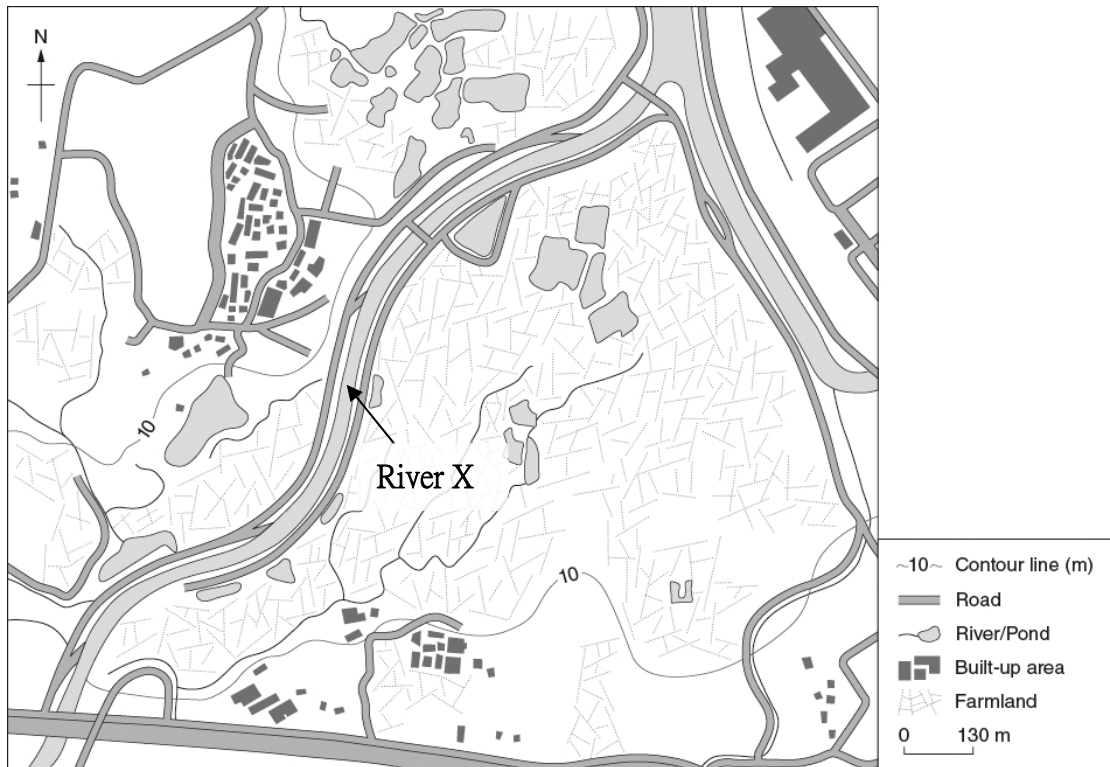


Photo 1b



(a) Refer to Figure 1a.

(i) What is the major human activity along River X? (1 mark)

(ii) Identify the fluvial landform which favours the human activity in question (a)(i). (1 mark)

(iii) Draw a series of annotated diagrams to explain the formation of the fluvial landform in question (a)(ii). (5 marks)

(b) Explain why people carry out the activity mentioned in question (a)(i) along River X. (2 marks)

(c) Refer to Figure 1a. Before the modification of River X, the area frequently suffered from flooding. Account for the frequent flooding. (5 marks)

(d) Refer to Figure 1a and Photo 1b. Discuss the reasons for and against the adoption of the flood control measure shown. (4 marks)

2. Figure 2a shows the locations of some tourist attractions around the world. Figure 2b shows the photos of these tourist attractions.

Figure 2a

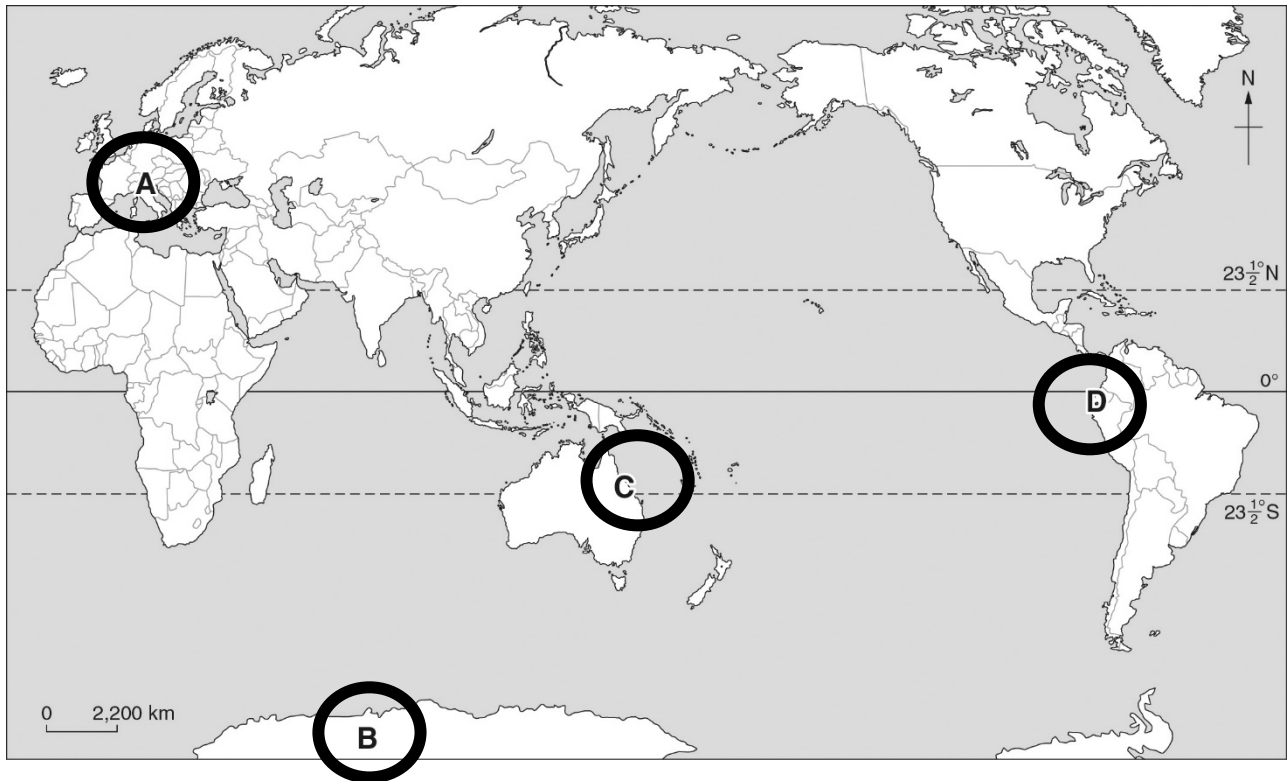


Figure 2b

(a) Refer to Figures 2a and 2b.

- (i) Explain how the rising global air temperature affects the tourism in Location A. (4 marks)
- (ii) Explain how the global warming affects the penguins in Location B. (3 marks)
- (iii) Explain how the rising seawater temperature affects the marine ecosystems in Location C. (3 marks)
- (iv) What will happen to the people living in Location D under climate change? (4 marks)

(b) *Tourism is one of the causes leading to climate change.*

Explain how tourism leads to climate change.

(4 marks)

III. Short Essay (12 marks)

1. Explain how human activities lead to the loss of biodiversity in tropical rainforests. Discuss whether the loss of biodiversity in tropical rainforests is caused by more developed countries.
(12 marks)

-- End of Question Paper --