作答完畢考生請將試題與答案卷一併交回
4. The cycle most responsible for linking the other biogeochemical cycles is the
   a. carbon cycle.
   b. nitrogen cycle.
   c. phosphorous cycle.
   d. hydrologic cycle.

5. An assistant is a person who:
   a. takes care of finances
   b. cleans bathrooms and cooks meals
   c. does simple tasks to help another person do their job
   d. helps someone cross the street

6. Patterns of speciation and extinction are least likely to be affected by
   a. climatic changes.
   b. continental drift.
   c. meteorites crashing into the earth.
   d. changes in the weather.

7. The introduction of gasoline-powered pumps to tap underground water supplies in the desert has served as a positive feedback loop to all of the following except
   a. the cattle population.
   b. the human population.
   c. the kangaroo rat population.
   d. groundwater depletion.

8. Taiwan is an island with only a few:
   a. taxis
   b. airports
   c. mountains
   d. McDonalds

9. A popular American sport is called Football.
   a. You don’t need a lot of protection to play.
   b. A racquet is needed in the game.
   c. It is a different game with the same name in other countries.
   d. It is important to get the ball past the goalie.
10. Oceans cover about _____ of the earth's surface.
   a. 50%
   b. 60%
   c. 70%
   d. 80%

11. Flying foxes are now listed as endangered because
   a. they congregate and are easy targets.
   b. they are hunted.
   c. of deforestation.
   d. of all of these answers.

12. A new kitten is added to a home with an established older cat. The older cat is observed to gobble up its food as well as that of the younger cat. This behavior is best described as
   a. interference competition.
   b. exploitation competition.
   c. mutualism.
   d. predation.

13. Prey are **least** likely to defend themselves against predators by
   a. camouflage.
   b. acute senses of sight and smell.
   c. protective shells.
   d. pursuit and ambush.

14. Not one student **showed up** for the scheduled meeting.
   a. 遺失
   b. 表演
   c. 顯示
   d. 出現

15. Which of the following does **not** apply to sea otters?
   a. They have blubber to keep them warm.
   b. They can eat 25% of their weight per day in sea urchins and other benthic organisms.
   c. They use tools.
   d. They have the thickest fur of any mammal.
16. A population crash occurs when
   a. a population approaches its carrying capacity.
   b. environmental resistance comes into play gradually.
   c. resources are essentially unlimited.
   d. a population overshoots carrying capacity and environmental pressures cause effects.

17. It's very large indeed; in fact it's the largest I've ever seen.
   a. may be
   b. actually
   c. often
   d. usually

18. Which of the following rocks is most likely to be formed from compacted shells and skeletons?
   a. coal
   b. limestone
   c. rock salt
   d. marble

19. Which of the following types of soils holds the most water?
   a. silt
   b. loam
   c. clay
   d. sand

20. An agricultural style that prevents erosion on steep slopes is
   a. conventional-tillage farming.
   b. conservation-tillage farming.
   c. alley cropping.
   d. terracing.

21. Today we have beef and chicken, which do you prefer?
   a. I prefer beef.
   b. chicken, please.
   c. I like beef.
   d. all of above.
22. The telephone marketer called to see if Sandy wanted to renew her ________ to the fashion magazine.
   a. interest
   b. subscription
   c. encryption
   d. request

23. Which of the following statements about human migration is false?
   a. People tend to move from areas of low opportunity to areas of higher opportunity.
   b. Most countries restrict immigration rates.
   c. Migration from urban areas to rural areas is increasing worldwide.
   d. The number of environmental refugees is increasing.

24. The newest model of mobile phone has many new ________.
   a. machines
   b. apparatus
   c. operators
   d. features

25. Agriculture can harm the land through
   a. soil erosion.
   b. salinization.
   c. reduction in microorganism diversity.
   d. all of these answers.

26. Jeff enjoyed snacking on junk food, __________ it was necessary to exercise more to stay fit.
   a. though
   b. when
   c. if
   d. for

27. Which of the following statements about liquefied natural gas (LNG) is false?
   a. Natural gas has to be liquefied before it can be transported by ship.
   b. Shipment of LNG is safe and inexpensive.
   c. Explosions in urban areas near LNG loading facilities could kill people and cause much damage.
   d. Conversion of natural gas to LNG reduces net energy yield by one-fourth.
28. The cheapest and **most** energy-efficient way to heat a house is super insulation coupled with
   a. active solar heating and a natural gas furnace.
   b. active solar heating and electric resistance heating produced by a nuclear power plant.
   c. passive solar heating and a high-efficiency natural gas furnace.
   d. passive solar and electric resistance heating produced by a nuclear power plant.

29. Amy liked all three dresses she received as gifts, but the blue dress was _______ her favorite.
   a. mostly
   b. the best
   c. by far
   d. easy

30. Cells that convert solar energy directly into electricity are called
   a. electrosolar chips.
   b. photovoltaic cells.
   c. helioelectric units.
   d. photoelectric cells.

31. Keeping energy prices artificially high does all of the following except
   a. encourage improvements in energy efficiency.
   b. reduce dependence on imported energy.
   c. dampen economic growth.
   d. cause high unemployment.

32. Today the entrance exam is held at:
   a. National Yunlin University of Science and Technology
   b. National Formosa University
   c. Transworld Institute of Technology
   d. Douliu Senior High School

33. Lichens are particularly useful for indicating
   a. water pollution.
   b. air pollution.
   c. toxic-waste sites.
   d. pesticides.
34. Carbon monoxide
   a. causes the blood to carry too much oxygen.
   b. speeds up reflexes.
   c. causes headaches and dizziness.
   d. sharpens thinking and perceptions.

35. Pollutants that can penetrate the lungs' natural defenses include
   a. large suspended particles.
   b. fine and ultra-fine suspended particles.
   c. ozone.
   d. acid rain.

Reading and comprehension (4%)  
"The new AIDS drugs are paying off, at least in the U.S. The number of Americans who died last year (1997) from AIDS dropped by nearly half, to 16,865 --- the lowest level since 1987. Once the leading cause of death in young adults, AIDS is now No. 5. But the epidemic is far from over. The number of new HIV infections is holding steady at 40,000 a year, and researchers report a surge in unsafe sex practices." (Time, Nov. 9, 1998)

36. Where is this report placed most possibly?
   a. Classified Advertisement
   b. Cinema Introduction
   c. Health Report
   d. New Trend in Computer Products

37. Why does the report say, "The epidemic is far from over"?
   a. Because of a surge in safe sex practices.
   b. Because the number of infected people each year is still steady.
   c. Because the number of the infected was the lowest in 1997.
   d. Because AIDS is the fifth cause of death in adults.

Cloze (10%)
The __38__ of the MRT in Taipei greatly improved public transportation, __39__ traffic and pollution were a serious problem. Now everyone can feel at ease in a clean __40__ with efficient service to most parts of the city. Future plans promise service to less accessible areas and __41__ the international airport. The addition of this __42__ system will help Taipei take its place as an international city.
38. a) impression b) assistance c) operation d) introduction
39. a) congestion b) previously c) when d) aforementioned
40. a) enclosure b) environment c) situation d) staff
41. a) eventually b) primarily c) actually d) at least
42. a) station b) electrical c) line d) rail

Translation (16%)
43. Mary is a girl.
44. The golden sun set behind the tall mountain peaks.
45. Jeffrey asked his chemistry teacher, "Do we have to hand in the assignment tomorrow?"
46. 你今年20歲嗎？