**Academic Olympics Preliminary Written 2013**

1. Which organisms are in the phylum with the greatest number of species?

A. snails, oysters D. butterflies, beetles

B. amphibians, fish E. lobster, centipedes

C. sponges, jellyfish

2. Which topic is of particular interest to a social anthropologist?

A. kinship and law D. evolution and somatotypes

B. arrowheads and pottery E. races and geographic distribution

C. skeletal systems and diet

3. A speech by one person in a play is a …

A. monopoly B. monocline C. monologue D. monograph E. monosyllable

4. What are the next two numbers in the Fibonacci sequence that begins with 6, 5, 11?

A. 4, 12 B. 7, 18 C. 14, 3 D. 16, 27 E. 22, 44

5. Which song is from a musical set at the lowest latitude?

A. Dulcinea D. They Call the Wind Maria

B. Luck be a Lady E. There is Nothing Like a Dame

C. Hello Young Lovers

6. The theory of biogenesis holds that all living things are produced from …

A. water B. sunlight C. phototropism D. virus evolution E. other living things

7. A person traveling directly north from the Great Salt Lake would soon reach …

A. Idaho B. Oregon C. Wyoming D. Washington E. South Dakota

8. Which language is not paired with the appropriate family of languages?

A. Finnish, Ural-Altaic D. Hebrew, Semito-Hamitic

B. Chinese, Sino-Tibetan E. Swahili, Malayo-Polynesian

C. English, Indo-European

9. Last week, Mustapha could buy an AK-47 for $460, but this week, an identical gun costs $490.

By what percent did the price increase?

A. 5.5 B. 6.5 C. 7.5 D. 8.5 E. 9.5

10. Book of the Middle Ages in which initial letters were highly adorned and borders ornately decorated

were \_\_\_\_\_\_\_\_ manuscripts.

A. esthetic B. monastic C. illuminated D. hieroglyphic E. ecclesiastical

11. The Coriolis effect is caused by …

A. sunspots D. the gravitational pull of the moon

B. Earth’s rotation E. convection currents in the mantle

C. Magnetic anomalies

12. The Hoovervilles of the 1930’s were …

A. cow towns B. boomtowns C. ghost towns D. shantytowns E. company towns

13. Thomas Wolfe wrote …

A. Porgy and Bess D. The web and the Rock

B. Pride and Prejudice E. The Prince and the Pauper

C. Arsenic and Old Lace

14. In an isosceles trapezoid with an area of 84, find the length of each leg if the bases are 24 and 32.

A. 5 B. 6 C. 7 D. 8 E. 9

15. Who was an American singer?

A. Jenny Lind D. Georgia O’Keefe

B. Helen Hayes E. Amelia Earhart Putnam

C. Joyce Kilmer

16. The two opposite points where the moon’s orbit intersects the ecliptic are the …

A. cusps B. nodes C. synods D. faculae E. transits

17. OPEC is a

A. union B. cartel C. monopoly D. corporation E. proprietorship

18. Which words have a Latin stem meaning “close” or “shut”?

A. append, depend D. conclude, preclude

B. confide, infidel E. convene, intervene

C. persist, consist

19. A circle is inscribed in a square has a 15’ radius. What is the area of the square?

A. 15 B. 30 C. 150 D. 600 E. 900

20. Which one is not one of the four standard voices ranges?

A. alto B. solo C. bass D. tenor E. soprano

21. A macrophage is a type of …

A. virus B. neuron C. platelet D. bacterium E. white blood cell

22. Who returned to Italy from South America in 1848 to fight in its war of independence?

A. Enzo Ferrari D. Guglielmo Marconi

B. Giuseppe Verdi E. Giuseppe Garibaldi

C. Amerigo Vespucci

23. In “Othello”, Desdemona is …

A. incarcerated D. stripped of her title

B. banished to Gaul E. smothered by Othello

C. burned at the stake

24. Points W, X, Y, Z lie on a line in that order. If WZ/WY = 2/1 & WZ/WX = 3/1

what is the value of WY/XZ?

A. 1/8 B. 1/4 C. 1/2 D. 3/8 E. 3/4

25. What word completes this bit of punnery? When the sculptors completed Trajan’s Column, it was a(n) …

A. relief B. frieze D. fresco D. mobile E. impasto

26. Specialists in which phenomena use terms such as arêtes, tarns, and horns?

A. glaciers B. volcanoes C. hurricanes D. earthquakes E. meteorite impacts

27. the popularly elected Cuban legislature is the …

A. First Estate B. Casa Grande C. Council of State D. National Assembly E. House of Commons

28. The “Agony and the Ecstasy” is the story of …

A. Michelangelo D. Martin Luther King

B. Isaac Newton E. Sir Winston Churchill

C. Thomas Edison

29. X squared added to 2 times the square root of X equal 8 plus X squared. What is X?

A. 4 B. 9 C. 16 D. 25 E. 36

30. The composer of the music for “Madame Butterfly” also composed the music for …

A. Tosca D. Der Rosenkavalier

B. Carmen E. The Marriage of Figaro

C. Tristan and Isolde

31. Blue-green algae have \_\_\_\_\_ in their outer layers that distinguishes them from other algae.

A. lipase B. myelin C. noradrenalin D. mucopeptide E. deoxyribonucleic acid

32. Other nations quickly joined into World War I because of …

A. détente D. their confidence in new weapons

B. fear of the Nazis E. enthusiasm for the United Nations

C. systems of alliances

33. Hercules’ third labor was to capture a Ceryneian hind, a …

A. lion B. boar C. stag D. hydra E. snake

34. At 8 p.m., clock hands form an angle of \_\_\_\_\_\_ degrees.

A. 60 B. 80 C. 100 D. 120 E. 140

35. Coptic art began around the 3rd century. It developed in the Christian community of …

A. Rome B. Egypt C. China D. Spain E. Britain

36. Which area is the most posterior part of the cerebrum?

A. visual B. motor C. speech D. sensory E. Auditory

37. During Truman’s administration, a presidential committee produced a report entitled

“To Secure These Rights” relating to …

A. copyrights B. civil rights C. voting rights D. states’ rights E. rights of the accused

38. The suffixes “able” and “active” may be added to many verbs and nouns to form …

A. gerunds B. adverbs C. pronouns D. adjectives E. prepositions

39. Simplify 2y – 3 [(2y – 3x) + y – 2]

A. 4x – 9y – 6 B. 6x + 2y + 4 C. 9x – 7y + 6 D. 8x + 4y – 8 E. 5x – 6y + 6

40. The semi-circular recess of the choir of a church is the …

A. nave B. apse C. basilica D. transept E. clerestory

41. Cleavage is entirely lacking in …

A. mica B. beryl C. quartz D. diamonds E. graphite

42. Who never lived in Mesopotamia?

A. Celts B. Hittites C. Akkadians D. Sumerians E. Babylonians

43. To cull apparent obscenity from a literary work is to …

A. etherize B. pulverize C. mesmerize D. bowdlerize E. catheterize

44. 16 to the three-halves power is

A. 8 B. 32 C. 64 D. 128 E. 256

45. What Broadway musical opens with “A Fuge for Tinhorns” also features the songs “Adelaide’s Lament”

and “Luck be a Lady”?

A. Brigadoon B. Oklahoma C. Hello Dolly D. Guys and Dolls E. Paint Your Wagon

46. Which is not true of the stratosphere?

A. Its air is dry D. Its temperature increases with altitude

B. It contains the ozone layer E. Most of the molecules it contains are ions

C. It lies above the troposphere

47. The Cumberland Plateau is a southern extension of the \_\_\_\_\_\_ Plateau.

A. Ozark B. Missouri C. Columbia D. Colorado E. Allegheny

48. The line “He had a sword in each hand and a rifle in the other” is an Irish …

A. tom B. bull C. cock D. buck E. joey

49. Express 80 as a base 5 numeral.

A. 133 B. 234 C. 310 D. 413 E. 421

50. Which is a work of El Greco?

A. Sunflowers D. The Persistence

B . The Night Watch E. Winged Victory of Samothrace

C. Toledo in a Storm

**Answers to this exam:**

**1. D or E 11. B 21. E 31. D 41. C**

**2. A 12. D 22. E 32. C 42. A**

**3. C 13. D 23. E 33. C 43. D**

**4. D 14. A 24. E 34. D 44. C**

**5. E 15. A 25. A 35. B 45. D**

**6. E 16. B 26. A 36. A 46. E**

**7. A 17. B 27. D 37. B 47. E**

**8. E 18. D 28. A 38. D 48. B**

**9. B 19. E 29. C 39. C 49. C**

**10. C 20. B 30. A 40. B 50. C**