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NAVED ASHRAFI

1. Born in 780 AD, he compiled a set of astronomical tables based largely on Brahma-Siddhant. He was the founder of the Arabic School of Algebra.
   a. Al-Battani  b. Al-Khwarazmi
   c. Banu Musa  d. Al-Beruni

2. In Kitab-al-Jabr wal-Muqabalah (the book of integration and equations), the term al-Jabr when Latinized gave rise to the term algebra. The book was written by:
   a. Al-Tabarah  b. Al-Maghribi
   c. Al-Khazini  d. Al-Khwarazmi

3. The most talked about astronomer of the Arabic world who wrote Kitab-al-Zij mentioning his observation of two kinds of eclipses on January 901 and August 901 was:
   a. Al-Beruni  b. Al-Battani
   c. Al-Idrisi  d. Al-Zehrawi

4. Kitab-al-Kamil is an astronomical work of:
   a. Abul Wafa al-Buzjani  b. Ibn-e-Sina
   c. Al-Battani  d. Ibn-al-Nafees

5. Who explained the reason behind the salinity of seawater and occurrence of spark while striking stones?
   a. Abu Mashar Al-Balkhi  b. Thabit Ibn Qurrah
   c. Ibn Ridwan  d. Al-Majusi

6. Who described the so-called Conic Compass - a compass with one leg of variable length for drawing conic sections?
   a. Al-Quhi  b. Al-Sabi
   c. Al-Khudjandi  d. Abul Masar

7. An important work in the field of optics by Ibn Halitham (al-Hazen) is:
   a. Al-Majest  b. Tadhkira
   c. Kitab-Al-Manazir  d. None of these

8. Tadhkira, written by Al-Tusi, is a landmark collection in the field of:
   a. Astronomy  b. Geography
   c. Geology  d. Geometry

9. Omar Khayyam, a well known mathematician, astronomer and poet of great repute who wrote Mushkilat-al-Hisaab (Problems of Arithmetic) belonged to:
   a. Persia  b. Iran
   c. Iraq  d. Both (a) and (b)

10. ... is/are important work/s of Kamal-al-Din-al-Farisi in which he explained various optical phenomena like refraction, reflection, rainbow formation and the camera obscura:
    a. Kitab al-Manazir  b. Quwas Qazab
    c. Tangan  d. All of these

11. Who defined arithmetic as 'the science of rules for finding numerical unknowns with the aid of corresponding known quantities'?
    a. Al-Khazim  b. Al-Majusi
    c. Al-Hazen  d. Al-Kashi

12. Averros is the Latinised name of:
    a. Ibn Rushd  b. Ibn Batuta
    c. Ibn Sina  d. Al-Tabari

13. Qanun-al-Tibb (Canon of Medical Sciences) is an acclaimed work of:
    a. Al-Rushd  b. Avicenna
    c. Ibn Khaldun  d. Ibn Ridwan

14. ... was a great clinician who diagnosed the carcinoma of the stomach:
    a. Avenzoar  b. Avicenna
    c. Averros  d. Rhazes

15. Who said that, “my religion and my mercy towards animals prevented me from practising anatomy”?
    a. Al-Maqdisi  b. Al-Idrisi
    c. Al-Beruni  d. Ibn Khaldun

16. ... was the first Arab geographer who defined geography as 'the science in which kings and nobles take a keen interest while judges and jurists seek it and the common people and the leaders love it':
    a. Al-Maqdisi  b. Al-Idrisi
    c. Al-Beruni  d. Ibn Khaldun

17. Arabic word mausim that gave rise to the term monsoon was first used by:
    a. Al-Idrisi  b. Ibn Batuta
    c. Al-Battani  d. Al-Beruni

18. Qanun-al-Masudi is a great work of Al-Beruni that deals with:
    a. Astronomy and Astrology  b. Mathematics
    c. Geography  d. All

19. The work of Al-Kashi that deals with the determination of the distances between planets and their size:
    c. Sulam-al-Sama  d. Kitab-al-Zij

20. Who used gold and silver wires to bridge the gap between teeth?
    a. Averos  b. Rhazes
    c. Albucasis  d. Avicenna

ANSWERS
1. b  2. d  3. b  4. a  5. b  6. a  7. c  8. d
17. d  18. d  19. c  20. c

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ENVIRONMENTAL SCIENCE

1. What is the harm from the depletion of Earth's ozone layer?
   a) The average temperature of earth's surface will increase gradually
   b) The oxygen content of the atmosphere will decrease
   c) Increased amount of ultra violet radiation will reach earth's surface
   d) Sea level will rise as the polar ice caps will gradually melt

2. Which of the following is a prime health risk associated with greater UV radiation through the atmosphere due to depletion of stratospheric ozone?
   a) Damage to digestive system
   b) Increased liver cancer
   c) Neurological disorder
   d) Increased skin cancer

3. The most serious environmental effect posed by hazardous wastes is
   a) Air pollution
   b) Contamination of groundwater
   c) Increased use of land for landfills
   d) Destruction of habitat

4. The concentration of which gas is highest in our environment?
   a) Oxygen
   b) Carbon dioxide
   c) Nitrogen
   d) Carbon monoxide

5. Which of the following is a consequence of global warming?
   a) Rising sea level
   b) Worsening health effects
   c) Increased storm frequency and intensity
   d) All of the above

6. Which of the following is not a primary contributor to the greenhouse effect?
   a) Carbon dioxide
   b) Carbon monoxide
   c) Chlorofluorocarbons
   d) Methane gas

7. The increase in the concentration of CO2 in environment since 1960 is about
   a) 20%
   b) 10%
   c) 14%
   d) 6%

8. The depletion in the Ozone layer is caused by
   a) Nitrous oxide
   b) Carbon dioxide
   c) Chlorofluorocarbons
   d) Methane

9. A major in-stream use of water is for
   a) Producing hydroelectric power
   b) Dissolving industrial wastes
   c) Agricultural irrigation
   d) None of the above

10. The presence of high coliform counts in water indicates
    a) Contamination by human wastes
    b) Phosphorous contamination
    c) Decreased biological oxygen demand
    d) Hydrocarbon contamination

11. How does the biological oxygen demand get affected with increased presence of organic matter in water?
    a) The oxygen demand increases
    b) The oxygen demand decreases
    c) The oxygen demand remains unchanged
    d) None of the above

12. Which of the following is a major source of groundwater contamination?
    a) Agricultural products
    b) Landfills
    c) Septic tanks
    d) All of the above

13. The stage at which the biological process is used to purify water in a wastewater treatment plant, is called-
    a) Secondary sewage treatment
    b) Primary sewage treatment
    c) Wastewater reduction
    d) Biochemical reduction

14. Groundwater mining in coastal areas can result in
    a) Increase in the salinity of groundwater
    b) Decrease in the toxicity of groundwater
    c) Decrease in the salinity of groundwater
    d) Increase in the water table

15. The three primary soil macronutrients are
    a) Carbon, oxygen and water
    b) Copper, cadmium and carbon
    c) Potassium, phosphorus and nitrogen
    d) Boron, zinc and manganese

16. Which of the following is a major pollutant causing acid rain?
    a) Carbon dioxide
    b) Sulphur dioxide
    c) Hydrogen peroxide
    d) Carbon monoxide

17. The phenomenon of corrosion of marble due to acid rain:
    a) Marble Fever
    b) Marble Cancer
    c) Marble Rain
    d) Marble Pain

18. An alternative source of energy to fuel energy:
    a) Tidal Energy
    b) Petroleum
    c) Nuclear Energy
    d) Compressed Natural Gas

19. The best way to dispose plant waste is
    a) Burning
    b) Composting
    c) Dumping in a water body
    d) Incineration

20. An eco-friendly slogan:
    a) ‘Do or die’
    b) ‘Birds of same feather fly together’
    c) ‘Say no to crackers’
    d) ‘Time and tide wait for none’

ANSWERS
1. c 2. d 3. b 4. c 5. d 6. c 7. c 8. c
9. a 10. a 11. a 12. d 13. a 14. a 15. c 16. b
17. b 18. a 19. b 20. c

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