

Structure

before his demise in 2013,

..... as a politician of great rapport.

- (A) the recognition of Nelson Mandela
- (B) Nelson Mandela being recognized
- (C) many people recognized Nelson Mandela
- (D) Nelson Mandela was recognized by many

2. In 1397 a memorial plaque maestro Isa Alipur, the Iranian folklore musician, was placed at the entrance of an old house in Bojnourd.

- (A) commemorating
- (B) for commemorate
- (C) in commemoration of
- (D) was commemorating

1. While not working in any official capacity

3. The industry of husbandry, the main goal is supreme quality and optimum prices, exploits data obtained from other sciences.

- (A) in which
- (B) and which
- (C) which is
- (D) which

4. Hewlett studies the immersive experience of visitors in art galleries in England.

- (A) in which the exploration of (B) an exploration of
(C) were they explored (D) which were exploration

5. Several species of animal are able to detect their surrounding environment using sonar, echolocation.

- (A) which process called (B) process is being called
(C) is calling that process (D) a process called

6. As the moon progresses in its orbit, its axis, a hypothetical line that is right through the center.

- (A) revolves it on (B) it revolves on
(C) on revolves it (D) revolves on it

7. the equatorial regions get a lot of sunlight, the land there is too hot to hold for any glacier to survive.

- (A) Because (B) The reason for
(C) Subsequently (D) In consequence of

8. Charles Kettering's invention of electric ignition in 1910, in the early 1870's, machinery had to be stopped to be lubricated.

- (A) While (B) By the time
(C) Before (D) When

9. Astrology originated in the belief humans at the time of birth.

(A) stars and planets that influence (B) that stars and planets influence (C) influencing to stars and planets (D) stars and planets influence

10. Not only can ACVs travel over water,..... they can also cover short distances over land.

(A) and (B) neither
(C) but (D) if

11. On Titan, Saturn's largest moon, temperatures above -161.5 degrees Celsius would cause its lakes of methane

(A) boil (B) to boil
(C) are boiling (D) boiled

12. In addition to sustenance..... enjoyment and gratification.

(A) foodstuffs provide (B) the providing of foodstuffs
(C) foodstuffs if providing (D) the foodstuffs which provide

13. The down duckling's skin is intended to stop the little bird from submerging parent duck happens not to be around to save it.

(A) that which the (B) were its
(C) if its (D) might the

14. The milk from a Yak differs produced by other cattle, such as oxen and domestic cow.

(A) the milk can be (B) from the milk
(C) and the milk (D) the milk That is

15. The Japanese sword, the katana, wielded by the samurai warriors, was sharp that it would cut through any material used as a shield.

- (A) much (B) so
(C) very (D) quite

16. end of the adventures that we can have if only we seek them with our eyes open.

- (A) Not any (B) Has no
(C) It not (D) There is no

17. Silicon is the most plentiful solid material in the crust of the Earth, but the gas oxygen though found mostly in compounds, is more still profuse.

18. Heavy-duty vehicles carry heavy loads, elevation large blocks, excavate soil and rock and help with several types of operations.

19. Some of the funniest comedy movies while the history of enema were performed by Charles Chaplin.

20. Animal behaviorism explore the behavior of different groups of animals, particularly that in inaccessible regions.

21. The basis tenets of fuzzy logic have been examined for decades.


22. Paleontologists are not quite sure why did the mammoths became extinct, but some hypotheses assume that excessive hunting by man was a crucial factor.
23. White-eared bulbuls sing exquisitely and pleasing, and they make brilliant pets
24. In 1394, author Mohammad Keshävarz is receiving Iran's Book of the Year Award for excellence in storytelling.
25. Belonging to the same family of birds as starlings, medium-sized Mynas on yellow are part of the everyday scene in the south-eastern regions of Iran.
26. Fossil evidence indicates that bug-like animals called Trilobites lived in the seas who covered the earth 300 million years ago.
27. Although widely seen as a female profession, and mainly portrayed as such in the media, nursing is gradually becoming a more inclusive profession with more man being employed every year than the year before.
28. Kerman is the larger and the ninth most populated province of Iran.
29. The town of Kalameh in Bushehr province is laid out on its 5 square kilometers so no point is more than a 20 minute walks from another.
30. The Sign Language has its own distinctive syntactic structure, which must be learned in the same way as that of another languages.

Reading 1

During the Renaissance, renewed interest in the physical and medical worlds emerged, **overshadowing** supernatural and religious viewpoints. Interest in the mind and soul were considered unscientific and thus **relegated** to the philosophers and clergy. New discoveries in chemistry, physics, biology, and mathematics unfolded rapidly and were met with great enthusiasm. Giovanni Battista Morgagni (1682- 1771) for example, discovered through autopsy that a diseased organ in the body could cause illness and death. Andreas Vesalius (1514-1564), a Dutch physician, published an anatomy textbook in 1543 delineating dissection of the human body.

The emphasis on scientific observation and experimentation rather than reason, mythology, religious beliefs, and dogma provided a model for future research and teaching. When William Harvey, an English physician, used the scientific method in 1628 to determine that blood circulated through the body because of the function of the heart, the Greek notion of imbalance of bodily fluids vanished from medical thinking. New medical discoveries during the Renaissance resulted in biomedical reductionism in that disease, including mental illness, could be understood by scientific observation and experimentation rather than beliefs about mind and soul. The biological side of the integrative biopsychosocial perspective was emphasized.

Rene Descartes (1596-1650), a French philosopher, argued that the mind and body were separate. The dualism of mind and body became the basis for Western medicine until recently. The mind and body were viewed historically as split, in that diseases of the body were studied by the medical sciences while problems with the mind or emotional life were delegated to the philosophers and clergy. However, mental illness was often considered a disease of the brain, and thus the insane were treated using the medical orientation of the time. Treatment of mental illness, however, **lagged** behind these medical developments. During this period, physicians treated people who were considered deviant or abnormal by **confining** them to hospitals and asylums. Little treatment, other than custodial care, was provided to these patients and thus these asylums were **renowned** for their prisonlike environments. The term bedlam (a variant of Bethlehem), connoting chaos and hellish circumstances, originated when St. Mary of Bethlehem was opened in London during 1547. Active treatments, besides custodial care, included restrictive cribs, hunger cures, bloodletting, cold water dunking or hydrotherapy, and other painful treatments.



01. What does the passage mainly discuss?

- (A) The Renaissance art and sciences
- (B) Philosophers of the Renaissance period
- (C) Medicine in the Renaissance Europe
- (D) Psychology during the Renaissance

02. During the Renaissance, philosophers and clergy... (A) showed interest in the physical and medical worlds.

- (B) kept interest in the mind and soul.
- (C) let go of their supernatural and religious viewpoints.
- (D) made new discoveries.

03. The Greek notion of imbalance of bodily fluids was forsaken in medical sciences due to the work done by:

- (A) Giovanni Battista Morgagni
- (B) Andreas Vesalius
- (C) William Harvey
- (D) René Descartes

04. All of the following are true about the mental illness during the Renaissance era EXCEPT:

- A) It was treated by philosophers and clergy.
- B) It was studied by the medical science.
- C) It was considered a disease of the brain.
- D) It was viewed as a diseases of the body.

05. The term "bedlam" has negative connotations because...

- (A) the city of Bethlehem was historically associated will chaos and hell. (B) the people were restricted to their "beds" in those days, as a form of punishment.
- (C) prisoners who were diagnosed with mental illness were not sent to hospitals.
- (D) patients were treated poorly at St Mary of Bethlehem asylum.

06. The word "overshadowing" in paragraph 1 is closest in meaning to:

- A) eclipsing
- B) illuminating
- C) inflating

D) collaborating

07. The word "relegated" in paragraph 1 is closest in meaning to:

- (A) adjusted (B) falsified
(C) consigned (D) proven

08. The word "lagged" in paragraph could best be replaced by:

- (A) stood (B) trailed
(C) concealed (D) proven

09. The word "confining" in paragraph 3 is closest in meaning to:

- (A) restraining (B) disclosing
(C) pledging (D) alluring

10. The word "renowned" in paragraph 3 could best be replaced by:

- (A) opportune (B) disagreeable
(C) costly (D) notorious

Reading 2

It has long been a subject of debate, whether the Industrial Revolution made possible the steam engine or vice versa. Surely the practical steam engine could not have been developed without the efficient mining of coal and the smelting and working of metals, mainly the ferrous, and the development of effective prime movers, principally in the form of water powered machinery. Conversely, it can be equally well argued that none of these developments would have been possible without the steam engine. While the early history of the steam engine is **inextricably** bound up with the raising of water almost solely for the dewatering of mines and in itself a vital chapter of the Industrial Revolution it was not until the steam engine became capable of producing continuous rotary power, and thus was able to drive the machinery of factories and mills, that manufacturing developed on a truly industrial scale.

This ability of a prime mover to turn a shaft independent of the vagaries of flowing water or blowing wind and, most significantly, free of the geographical

restraint of a source of falling water had implications that ultimately reached far beyond the propulsion of factory machinery. As metal-working techniques were refined and, consequently, it became possible to increase the rotational speed of the steam engine, its size could be proportionally reduced resulting in portability. This **in due course**, led logically to the steamboat, the steam locomotive, and ultimately a vast array of other mobile steam-powered machinery and vehicles. But until about 1910, the **preponderance** of steam power was directed to the driving of stationary machinery in mines, mills, factories, and processing plants in a wide variety of industries. The basic configuration of Watt's relative beam engine exemplified by the landmark engine in Sydney remained essentially unchanged and commercially **viable** for well over a century. Even with improvements in metallurgy, thermal efficiency, lubrication, and machine design, and even as the direct-connected horizontal steam engine gained in popularity for the mechanical driving of machinery and later generators, the beam engine as **conceived** by Watt continued to be built by manufacturers principally in Europe throughout the nineteenth century

11. What does the passage mainly discuss?

- (A) Early days of mining metal
- (B) Early days of the steam engine
- (C) History of the Industrial Revolution
- (D) history of the prime movers

12. The efficient working of ferrous metals helped with the development of...

- (A) practical steam engines
- (B) water-powered machinery
- (C) effective prime movers
- (D) coal mining

13. According to paragraph 1, one of the early vital chapter of Industrial Revolution was...

- (A) The production of equipment that led to the invention of the steam engine.
- (B) How the steam engine drove the machinery of factories and mills.
- (C) The manufacturing of equipment that led to the invention of the steam engine.
- (D) The use of the steam engine for the dewatering of mines.

14. Steam-powered vehicles became possible after ...

- (A) Smaller seam engines could be manufactured.
- (B) Metal-working techniques were suited to the geography.

- (C) Water and wind were used for propulsion.
- (D) Engines designed to run on coal and gas failed.

15. All the following are true about Watt's beam engine EXCEPT:

- (A) It became less popular than the direct-connected horizontal steam engine.
- (B) One of them can be found in Sydney.
- (C) None of them broke down over a century.
- (D) Their design went through little change through the nineteenth century.

16. The word "inextricably" in paragraph 1 is closest meaning to:

- (A) extraordinary
- (B) skillfully
- (C) indivisibly
- (D) unintentionally

17. The phrase "in due course" in paragraph 2 is closest in meaning to:

- (A) eventually
- (B) actually
- (C) occasionally
- (D) previously

18. The word "preponderance" in paragraph 2 is closest in meaning to:

- (A) delay
- (B) bulk
- (C) distinction
- (D) tendency

19. The word "viable" in paragraph 2 is closest in meaning to:

- (A) wasteful
- (B) precise
- (C) expansive
- (D) feasible

20. The word "conceived" in paragraph 3 is closest in meaning to:

- (A) devised
- (B) counseled
- (C) endorsed
- (D) deserted

Reading 3

The study of the internal structure and dynamics of the Sun through the analysis of solar oscillations is called helioseismology. The Sun vibrates like a gong with periods ranging from minutes to hours, but principally in the range 3 to 20 min. These oscillations can be detected as small periodic Doppler shifts in the wavelengths of spectral lines emitted by localized regions of the solar surface as **they** rise toward, and fall away from, the observer.

The oscillations are produced by sound waves (pressure waves) that **propagate** through the solar globe. The speed of sound depends on various factors, including temperature and density, both of which increase with increasing depth below the solar surface. Consequently, a wave moving downward from a point on the surface is refracted and eventually curves back to meet the surface at another point. The sharp change in density at the surface then reflects the wave back down into the solar interior, enabling it to **bounce** repeatedly around the Sun and thereby produce **standing** waves that cause different parts of the solar surface to vibrate up and down in a systematic fashion. The deeper the wave penetrates, the fewer the points at which it meets the surface.

By analyzing the millions of different modes of oscillation, and separating out those that penetrate to diligent depths, solar physicists can study the structure of the solar interior in the same sort of way as geophysicists use seismic waves to study the interior of the Earth. Furthermore, by comparing the speeds at which waves travel in the same direction as, and in the opposite direction to, the rotation of the Sun itself, it is possible to determine how the relation rate of the solar interior varies with depth and latitude. Helioseismology provides information on the variation with depth of temperature, density, pressure, chemical Composition and rotational velocity. Observations have shown, for example, that the **boundary** between the radiative and convective zones occurs 71.3% of the way from the center to the surface.

21. The Sun mostly oscillates every

- (A) minute
- (B) 24 hours
- (C) 3 to 20 minutes
- (D) 3 to 20 hours

22. The Doppler shifts in the spectral lines are produced by

- (A) the observer's vibrations
- (B) the rotation of the Sun around its axis
- (C) the rise and fall of the solar surface

(D) the internal structure of the Sun

23. The deeper we get below the solar, ...

- (A) the slower the pressure waves get.
- (B) the louder the sound waves get.
- (C) the more transparent it gets.
- (D) the hotter and denser it gets.

24. The sound waves reflect back down into the solar interior because...

- (A) they lose their energy.
- (B) there is a sharp change in density at the surface.
- (C) there is a reflective material on the surface of the Sun.
- (D) the gravity of the Sun curves them back to the center.

25. By analyzing solar oscillations, solar physicists obtain all of the following information about the Sun EXCEPT:

- (A) its chemical composition
- (B) its cosmological age
- (C) its interior rate of rotation
- (D) its anterior structure

26. The word 'they' in paragraph 1 refers to:

- A) lines
- B) wavelength
- C) regions
- D) shifts

27. The word "propagate" in paragraph 2 is closest in meaning to:

- A) transmit
- B) decelerate
- C) stall
- D) wrinkle

28. The word "bounce" in paragraph 2 is closest in meaning to:

- A) attach
- B) flee
- C) evade
- D) leap

29. The word "standing" in paragraph 2 is closest in meaning to:

- A) rising
- B) flexible
- C) curving
- D) durable

30. the word "boundary" in paragraph 3 is closest in meaning to:

A) opening line

B) dividing line

C) finish line


D) punch line

Reading 4

The two major centers from which Islamic classical civilization radiated were Damascus under the Umayyad caliphate and Baghdad under the Abbasid caliphate. With the foundation of the Dome of the Rock in Jerusalem in 691, the Umayyad caliph Abd al-Malik **inaugurated** Islamic monumental architecture. With its location on the temple mount, its glass mosaics with Byzantine and Persian motifs in a novel combination, its extensive Koranic inscription inviting non-Muslims to join Islam, this monument emphasizes the religious appropriation of the past by the new Muslim rulers.

The Great Mosque of Damascus, founded slightly later in 715 by the caliph al-Walid, rather emphasized political appropriation. Its interior, entirely covered with glass mosaics representing landscape with architecture, displayed the largest surface ever to be decorated in this Byzantine medium. The lavishness of its decoration expressed imperial continuity under a new Islamite identity. When al-Walid rebuilt the Prophet's mosque in Medina, he again used glass mosaics for its decoration, doing away with its initial simplicity documented in Islamic tradition and **cherished** by Muslims to the present day. Historical accounts mention Byzantine craftsmen and materials used in this reconstruction, emphasizing the Umayyad appropriation of Byzantine paraphernalia.

With the foundation of Baghdad along the Tigris as the capital of the new Abbasid caliphate following the overthrow of the Umayyads of Damascus in the mideighth century the center of gravity of the Muslim Empire was transferred from the Byzantine East Mediterranean to Iraq. Mesopotamian and Iranian culture **superseded** Byzantine influences in the design of the round city of Baghdad founded by the caliph al-Mansur and in the abstract decoration developed in the following century, which **henceforth** became a characteristic feature of Islamic art. As Byzantium and Iran were the two great imperial powers defeated in the course of the Arab conquest, the appropriation of their arts, besides being a matter of convenience, proclaimed their submission to the Muslims. Their arts and



regalia, symbols of their power, became the **trophy** with which the conquerors glorified themselves.

31. What does the passage mainly discuss?

- (A) The history of first Islamic caliphates
- (B) The Byzantine architecture in Iran
- (C) History of architecture in Syria
- (D) Early Islamic art and architecture

32. The first Islamic architectural monument was built in...

- (A) Baghdad
- (B) Damascus
- (C) Jerusalem
- (D) Medina

33. It is implied in paragraph 1 that the Dome of the Rock can be interpreted as a symbol of...

- (A) religious supremacy of the new Muslim rulers.
- (B) artistic supremacy of the new Caliphate.
- (C) imperial continuity of a new Islamic rule.
- (D) political sovereignty of the Persians and Byzantines.

34. According to historical accounts, the material used in the reconstruction of the Prophet's mosque in Medina was...

- (A) of Persian origin.
- (B) Byzantine glass mosaic.
- (C) intended to keep its initial simplicity.
- (D) brought in from Baghdad.

35. It can be inferred from paragraph 4 that the abstract decoration developed in the 9th century was influenced

- (A) more by the Byzantine than Mesopotamian culture
- (B) by the Umayyads of Damascus
- (C) more by politics than by art
- (D) by the Iranian culture



36. The word "inaugurated" in paragraph 1 is closest in meaning to:

- A) inhabited
- B) advocated
- C) initiated
- D) abridged

37. The word "cherished" in paragraph 3 is closest in meaning to:

- A) treasured
- B) discovered
- C) neglected
- D) denounced

38. The word "superseded" in paragraph 4 is closest in meaning to:

- A) abandoned
- B) succeeded
- C) Supported
- D) astonished

39. The word "henceforth" in paragraph 4 is closest in meaning to:

- A) in the end
- B) from this time on
- C) until then
- D) by far

40. The word "trophy" in paragraph 4 is closest in meaning to

- A) delight
- B) substance
- C) plunder
- D) slogan