Structure

1. Films should have a beginning, a middle, and an end, but …….. in that order.
A) not necessarily being B) do not necessarily
C) not necessarily D) necessarily is not

2. Legend has it that ……. enlightenment while sitting under the Bodhi tree by the river Neranjara.
A) attained the Buddha B) the Buddha attained
C) attaining the Buddha D) the Buddha that attained

3. Rainforest vines serve as a food source for the hungry caterpillar as it …….. into a butterfly.
A) metamorphoses B) metamorphose that
C) has metamorphosed D) does metamorphosed

4. With Alzheimer's disease, by the time …….. , too many neurons have died.
A) the manifestation of all the symptoms B) all the symptoms manifest
C) manifested all the symptoms D) are all the symptoms manifest

5. Born in Tabriz, ……. received his elementary education under his father's supervision.
A) that the poet Shahriyar B) Shahriyar was the poet
C) as the poet Shahriyar D) the poet Shahriyar

6. One element of outside the box thinking is …… previous assumptions.
A) to falsify B) falsified C) for falsification D) that falsified

7. Shahr-e-Sukhte was deemed …….. in June 2014.
A) a world heritage site and B) of a world heritage site
C) a world heritage site D) heritage a world site

8. In some people lactose remains in the digestive tract and …….. the small intestine.
A) it is poorly absorbed by B) by poorly it is absorbed
C) is poorly absorbed by it D) it is absorbed by poorly

9. The tentacles of Porpita are in fact individual zooids, …… is specialized for a particular function.
A) each of them B) each of which C) each of whom D) which each of

10. Shinkansen and TGV …….. for which devoted high-speed lines were built from scratch.
A) how were the first systems B) were there the first systems
C) the first systems were D) were the first systems

11. Hydropower may provide the foundation for more comprehensive frameworks …….. .

A) of which issues encompass
B) have multiple issues encompass
C) that multiple issues encompass
D) encompassing multiple issues

12. France is the first State …… to shut down its fissile material production facilities for nuclear weapons.

A) it decided
B) which it decided
C) which decided
D) in which decided

13. The British government has conceded ……. has been a disaster.

A) of the new tax policy
B) that the new tax policy
C) the new tax policy that
D) which the new tax policy

14. Chaharshanbe Suri ritual ……. back to at least 1700 B.C. and is linked to the Zorostrian religion.

A) dates
B) if it dates
C) dated
D) that dates

15. Silver iodide, a yellow compound, is packed into a flare and ignited …….. storm systems pass over the flare's location.

A) which
B) whenever
C) meanwhile
D) with whom

16. Long-term recovery efforts in flooded provinces should include…….. damaged infrastructure which is directly related to the production potential.

A) the restoration
B) that restoration
C) to restore
D) restoring

17. Shoals of fish **such as** tuna, **can gathered** only in the **absence** of **predatory sharks**.

18. Proto-Iranian tribes **inhabiting** **most of** the Iranian Plateau and created the **very first** specimens of pottery art **around** 4,000 years ago.

19. The fact that America has the most guns in the world **is** at the center of **why** the US's civilian **gun death** rate is nearly four times **it** of Switzerland.

20. Academics **maintain** that nanotechnology, the manipulation of matter **on** a molecular and sub-molecular scale, has enjoyed the **highest rate** of progress in the category of **science material** during the past decade.

21. Painting is usually **believed** to **have** five elements: color, **tonal**, line, shape, space, and **texture**.

22. The relief fund **was started** by the government to **assisting** university graduates **pay back** their student **loans**.

23. **Anthropologists** have encountered **similarities** between the flood myths of distant cultures **either** in the characters of the story and in **the way** the events unfold.

24. Ornithologists usually **classify** birds by **assigning them** to groups segregated based **on** their **intelligent**, the color of their plumage, and the shape of their bills.

25. In probability theory **and** statistic, the variables **contained** in a subset of **a collection** can have either a **marginally** or a restrictive distribution.

26. In **the late** 13th century **the first** Iranian parliament **was approved** the Persian Constitution which was adapted from **that of** Belgium.

27. What enables giraffes to consume **massive** amounts of leaves is their **capable** to **process** fiber through their digestive tract in **a matter of** hours.

28. We are inhabited by **as many of** ten thousand bacterial species outnumbering **those** which we consider **our own** by ten to one, and weighing about three pounds- the same **as** our brain.

29. **In** 1356, Mojtaba Minovi's family **donated** his **20000-volumes** library to the Iranian **government**.

30 One rule of thumb for players of the barbat, **a Persian** musical instrument, **are** that they should **support** the weight with the thigh and right arm **so that** the left hand is free to move around the fingerboard.

Reading 1

The central Processing unit of the laptop computer you use on a daily basis resides in a thin silver of silicon, about one square centimeter in area. This small chip contains over 100.000.000 silicon MOSFETs- some type of tiny transistors- each about a thousand times smaller than the diameter of a human hair!
The slender computer that you **nonchalantly** stuff into your backpack has more computing power than a vacuum-tube computers that occupied an entire room 50 years ago. when you answer an incoming call on your cell phone you, may wonder inside your sleek 'mobile'. if you opened it up, and knew where to look, you'd find some HBTs- Heterojunction Bipolar Transistors. These transistors operate at the high frequencies required for local-area-network telecommunications, and they can deliver the power necessary for the transmission of signals.

Of course, a cell phone nowadays is no longer just a replacement for those clunking, **tethered**, hand-sets of not so long ago: it is also a camera and a juke box. The immense storage requirements of these applications are met by flash memory, comprising more millions of silicon MOSFETs. Your cell phone is really a PDA – Personal Digital Assistant – and probably also allows internet access, in which case you may wonder how signals from around the globe find their way into our machine. Somewhere in the communications chain there's probably a low-noise amplifier to receive tiny signals and not add undue noise to them. HBTs are good for this, but even better are HEMTs – High Electron Mobility Transistors. If satellites are involved, then the base station will employ high power transistors, possibly lateral- diffused silicon MOSFETs, or may be HJFETs – Heterojunction Field-Effect Transistors.

So, without **straying** very far from where you are sitting, you have tangible evidence of the dramatic influence electronics has on the way many of us conduct our business and recreation. All the different transistors mentioned above have the ability to reform in high-speed digital logic: at high frequencies; with low noise; at high output power, in semiconductor memory. Of course, our electronics-oriented activities would not be possible if the supply of electricity were **curtailed**. This could happen, either by the exhaustion of the Earth's store of fossil fuels, or by the threat to our habitable environment that the extraction and use of them **entails**.

The size of a silicon MOSFET is
A) 1.000 millimeters in diameter
B) 1/100.000.000 of a centimeter
C) About 1 cm2 in area
D) 1/1.000 of the diameter of a human hair

Heterojunction Bipolar Transistors
A) still use the vacuum-tube technology
B) make it possible for a mobile phone to transmit signals
C) make a lot of noise when they work
D) used to occupy an entire room fifty years ago

It is implied in paragraph 3 that much of cell phone memory storage is used up by
A) camera and music applications B) flash memory applications
C) communication applications D) hand-set amplifiers

It can be inferred from paragraph four that to continue using electronic devices we are ultimately dependent on
A) fossil fuels B) habitable environment
C) the eastern countries D) electrical appliances

All of the following are some kind of transistors except

A) HBTs B) PDAs C) HEMTs D) HJFETs

The word "nonchalantly" in paragraph 2 is closest in meaning to
A) unexpectedly B) forcefully C) casually D) nervously

The word "tethered" in paragraph 3 is closest in meaning to
A) weighty B) dull C) tied D) bulky

The word "straying" in paragraph 4 is closest in meaning to
A) pretending B) drifting C) aligning D) enquiring

The word "curtailed" in paragraph 4 is closest in meaning to

A) destroyed B) stretched C) replaced D) decreased

The word "entails" in paragraph 4 is closest in meaning to
A) involves B) explores C) survives D) supplements

Reading 2

We think of the most popular moralist in Persian literature, indeed one of the most famous of all Persian poets, not as a stern mentor but as a jovial, laughing person, with perhaps a glimmer of good-humored roguishness. That is at any rate the kind of person who emerges from his works. The biographical facts that have been handed down contribute little towards this portrait. And even Sa'di's own words cannot altogether be trusted; they cannot be taken literally and this makes it extremely hazardous to base a reconstruction of his life on the many stories which he tells, presumably only to entertain and instruct. There is no contemporary information about him; uncertainties **abound** at every point.

Both his own works and tradition confirm that he was born in Shiraz, a town to which he remained most **movingly** loyal throughout his life and for which, no doubt, he longed passionately when travelling abroad. Thanks largely to the considerable culture of his father, Sa'di received a careful education from an early age. His mother continued the same routine after his father died. When Sa'di was only about twelve.

Traditional **maintains** that he was sent to Baghdad where he was supported by the Salghurid atabeg of Shiraz; but he certainly cannot have gone there as early as 592, since it is said that he studied at the famous university, the Nezamiyyeh. Moreover, it is scarcely credible that the atabeg would have accorded such a favor to a boy oh humble **albeit** educated background. After completing his studies, he set off on travels. The many impossible ingredients in the story of how he destroyed the infamous idol in temple of Somnal exclude the likelihood Kashghar, which, if true, would suggest that even before the completion of the *Golestan* his fame as a poet had spread to such remote areas. This objection is **corroborated** by the fact that the best Persian *Ars Poetica, al-Mu jam (630)* by Shams-e Qais , contains no quotations from Sa'di, though there are a great many from other poets of that period.

11. Based on what we find about him in his own works, Sa'di could best be described as
A) an unethical man B) an insignificant poet C) a joyful person D) a serious mentor

12. All of the following are true about Sa'di EXCEPT A)
His father was man of culture.
B) His mother continued with his education after his father died.
C) His father died when he was 12.
D) He stayed in Shiraz throughout his lifetime.

13. Sa'di's education at the Nezamiyyeh of Baghdad may not have been supported by atabeg of Shiraz because:
A) Sa'di wasn't educated enough to receive such a support.
B) Sa'di didn't come from an aristocratic family.
C) Sa'di was too young to have studied there.
D) Baghdad was a dangerous place at that time.

14. All of the following biographical information about Sa'di are most probably false EXCEPT:
A) He set off on travels after finishing his studies.
B) He visited India.
C) He destroyed the idol in the temple of Somnat.
D) He was in Baghdad by 592.

15. The author suspects that Sa'di's story of meeting with a boy in Kashghar is not based on the life events because then it would mean that:
A) books could reach remote areas in very short periods of time.
B) Sa'di was well-known even before writing Golestan.
C) Sa'di was the true author of al-Mujam.
D) of the quotations in shams-e-Qais al-Mujam

16. The word "abound" in paragraph 1 is closest in meaning to…

A) are dubious B) are numerous C) are fake D) are contradictory

17. The word "movingly" in paragraph 2 is closest in meaning to…
A) cautiously B) randomly C) touchingly D) shakily

18. The word "maintains" in paragraph 3 is closest in meaning to…

A) claims B) retains C) arranges D) alerts

19. The word "albeit" in paragraph 3 is closest in meaning to…
A) although B) altogether C) definitively D) broadly

20.The word "corroborated" in paragraph 4 is closest in meaning to…
A) merged B) announced C) disputed D) verified

Reading 3

Most sports entail an element of personal risk. The main function of a safety helmet is to protect the human skull and its **fragile** contents by absorbing as much as possible of the kinetic energy that is violently transferred during a collision.

The three principal damaging consequences of sudden impact are fracture of the skull, linear acceleration of the brain relative to the skull, and rotational acceleration of the brain. Although linear and rotational acceleration may occur at the same time, many mechanical testing procedure for helmets concentrate upon linear acceleration and use it as **criterion** of protection in specifications.

A typical helmet consists of an outer shell and a foam liner. The shell is usually made from a strong, durable and rigid material that is capable of spreading and redistributing the impacting forces without suffering brittle fracture. This reduction in pressure lessens the risk of skull fracture. The foam liner has a cellular structure that absorbs energy when crashed by impact. Specialized designs of helmets are used in cycling, horse riding, canoeing, mountaineering, skiing, skateboarding, ice hockey, etc. Some designs are quite **rudimentary** and offer minimal protection. In general, the wearer expect the helmet o be comfortable to wear lightweight, not restrict **peripheral** vision unduly and be reasonably compact and/or aerodynamic.

Production costs should be low. Increasing the liner thickness is beneficial but, if the use of helmets is to be **promoted**. There are size constraints. Thus, for a cricket helmet, acceptable shell and liner thicknesses are about 2-3 mm and 15 mm, respectively strong and tough helmet shells have been produced from ABS and GRP. The great majority of shock-absorbent foam linings are made from polystyrene polypropylene and polyurethane are also used.

21. What does the passage mainly discuss?
A) function and form of safety helmets
B) speed limits in racing sports
C) element of risk in sports

D) safety measures in cycling and hockey

22. A safety helmet protects the head by…
A) moving violently during a collision
B) absorbing kinetic energy in a collision
C) absorbing the contents of the skull
D) transferring the kinetic energy to the skull

23. When manufacturing a helmet, the most important damage factor usually considered is…
A) fracture of the skull B) linear acceleration of the brain
C) sudden impact D) rotational acceleration

24. To absorb the energy of the impact, the foam liner is made of…
A) a rigid material B) a durable material
C) a material wit brittle fractures D) a material with cellular structure

25. According to paragraph 4, the most common material used in helmet linings is…
A) ABS B) GRP C) polystyrene D) polyurethane

26. The word "fragile" in paragraph 1 is closest in meaning to…
A) delicate B) expansive C) restricted D) elastic

27. The word "criterion" in paragraph 1 is closest in meaning to…
A) excuse B) benchmark C) analysis D) exception

28. The word "rudimentary" in paragraph 3 is closest in meaning to…
A) comfortable B) basic C) profound D) distinct

29. The word "peripheral" in paragraph 3 is closest in meaning to…
A) mental B) hind C) outlying D) superior

30. The word "promoted" in paragraph 4 is closest in meaning to…
A) estimated B) encouraged C) banned D) granted

Reading 4

Private managers are free to advance the interests of their firms as they see fit, as long as their actions are not specifically prohibited by law. Public managers, by contrast, are free to act only within the scope of their lawfully delegated authority and in accordance with externally imposed systems of rules and procedures. Consequently, public managers encounter many more constraints and enjoy much less freedom of choice than their private sector **counterparts**. This limits their ability to pursue organized objectives in a purposeful and deliberate fashion.

Having identified appropriate courses of action, public mangers find it much more difficult to put their decisions into effect. The use of rules and procedures to constrain managerial discretion reflects the emphasis placed on accountability in a democratic state. Because public officials exercise the coercive powers of the state and spend tax dollars, democratic norms require that they be held accountable for their actions. As noted earlier, where accountability cannot be achieved by setting clear goals and monitoring results, the apparent alternative is to replace managerial discretion with rules.

Historically, legislative bodies have relied upon centralized control systems to prevent fraud, waste, and misuse of authority, and to ensure fairness in hiring employees, distributing benefits, and awarding contracts. Merit-based personnel systems were instituted to safeguard the merit principle against the **intrusions** of patronage and to protect employees from arbitrary, capricious, or discriminatory treatment: line-item budgets and standardized accounting procedures to ensure that funds are expanded for their authorized purposes and in a fiscally responsible manner; and purchasing and bidding systems to ensure that supplies and equipment are obtained at the best available price and that contracts are awarded in a fair and **unbiased** manner. Not only do these systems specify the rules and procedures that managers must follow but they are also enforced by central personnel, budget, and purchasing offices that demand strict **compliance**.
The problem with centralized control system is that "constraining people from doing anything wrong often simultaneously constrains them from doing anything right". This was a major theme in Vice President Gore's 1993 National Performance Review, which described "structures of over control and micromanagement" in the federal government that leave "good people trapped in bad systems. Although much red tape can be eliminated, operating in a democratic system of governance means that public managers are and will continue to be subject to a degree of accountability that is far more detailed and **pervasive** than that in the private sector.

31. What does the passage mainly discuss?
A) financial rules in public organizations
B) constrains on public managers
C) role of government in economy
D) control system in private sector

32. In comparison with managers in the public sector, private managers…
A) can pursue organizational objectives more easily
B) encounter many more constraints
C) have much less freedom of choice
D) are specifically prohibited by law in many regards

33. In the public sector, the emphasis placed on accountability in a democratic state translate into…
A) less coercive powers

B) line-item budget and accounting procedure
C) merit-based personnel system
D) IT monitoring and communication system

34. It can be inferred from paragraph 3 that in public organizations the merit principle is enforced by..
A) the central personnel office
B) the central budget office
C) the central purchasing office
D) the central research and development office

35. The word "counterpart" in paragraph 1 is closest in meaning to…

A) relatives B) clients C) competitors D) equivalent

36.The word "intrusions" in paragraph 3 is closest in meaning to…
A) interferences B) interchanges C) interpretations D) introduction

37. The word "unbiased" in paragraph 3 is closest in meaning to…
A) undetermined B) unidentified C) impartial D) improper

38. The word "compliance" in paragraph 3 is closest in meaning to…
A) consistency B) obedience C) teamwork D) investigation

39. The word "pervasive" in paragraph 4 is closest in meaning to…
A) offensive B) occasional C) official D) extensive