Direction (1-4): Study the following information and answer the questions that follow:

Some animals aggregate in very large groups consisting of thousands of individuals that nonetheless act in a coordinated manner; examples include fish schools, bird flocks, and building and foraging tasks in social insect communities. The sheer number of individuals and the reliance on relatively simple behavioural rules suppress the effects of individual variations in behaviours to such a degree that collective behaviours of large groups are similar to the physical behaviours of inanimate objects (for example, the tide of people exiting a busy commuter train follows the path of least resistance and can be likened to water flowing downhill) and can therefore be analyzed by mathematical and statistical models employed to describe physical phenomena.

Many birds have a tendency to fly in flocks, and for common starlings (*Sturnus vulgaris*), the flocks become extremely huge, with as many as 100,000 birds in a single flock. Despite the fact that the birds fly very close to each other and at high speeds (about 70 km/h), it is rarely seen that the birds hit each other. A spectacular phenomenon called murmuration (aptly named Sort sol in Danish, meaning black sun) involving such starling flocks can be witnessed on the west coast of Denmark during the spring and autumn migrations. Around sunset, large flocks are seen flying around, looking like quickly moving black clouds. Hunting falcons attack the flock, causing rapid changes locally in the flock so that the "cloud" changes direction very quickly and abruptly. When the flock is landing, a similar and apparently very controlled behaviour can be witnessed. Despite the huge number of birds in the flock, all birds land within a short distance of each other without colliding.

Researchers in the computer science community have long been interested in simulating this flock behaviour. One application area is realistic animations of animal flocks on film; feasible explanations of animal behaviour can therefore be found in the computer-science literature. Reynolds describes one explanation of the mechanism behind the starlings' agile navigation in terms of three simple rules that each bird obeys: the separation rule, the alignment rule, and the cohesion rule. The separation rule makes sure that the birds avoid crowding within the flock. If the number of birds within a local region becomes too big, the outsiders avoid getting into this region. This gives rise to short-distance repulsion between individual birds, which in turn results in an exclusion zone around each bird. In one empirical study, the exclusion zone was found to be 0.38 m in radius and independent of the flock size. The alignment rule causes each bird to fly in the same direction as the adjacent birds. Finally, the cohesion rule steers the birds on the periphery to position themselves so that the flock does not get separated or broken. The distance and the direction determine the vicinity of every bird. Flock mates outside the local vicinity are ignored. The three rules are reported to give reasonable and realistic simulation results, but more accurate models also include the avoidance of obstacles.

Q 1. All of the following may be valid inferences from the passage EXCEPT:

1) Scientists may get inspired from models that exist in the animal kingdom.

2) Coordination can be found only in the avian community.

3) The behavioural rules followed by animals are not complex.

4) Computer Science books contain examples of animal behaviour.

Q 2. "The sheer number of individuals and the reliance on relatively simple behavioural rules suppress the effects of individual variations in behaviours to such a degree that collective behaviours of large groups are similar to the physical behaviours of inanimate objects (for example, the tide of people exiting a busy commuter train follows the path of least resistance and can be likened to water flowing downhill) and can therefore be analyzed by mathematical and statistical models employed to describe physical phenomena."

Which one of the following interpretations of this sentence would be closest in meaning to the original?

1) Simple behavioural regulations confirm that animals often get inspired by human activity and learn from the world around them.

2)
Simple behavioural regulations ensure that the animals act in a very aberrant and divergent manner, thus, minimising the chances of collision.

3) Simple behavioural regulations ensure that individual aberrant activities dominate the collective movement of the group.

4)
Simple behavioural regulations ensure that individual behavioural tendencies become subservient to the collective behavioural pattern.

Q 3. Which one of the following best describes the main idea of the last paragraph?

1) The science behind the passage of birds

2) Why computer scientists are interested in the animal kingdom

3) The importance of simulation in navigation

4) Behavioural patterns and their application on science

Q 4. In the second paragraph of the passage, the author provides an example. Which one of the following best describes the purpose of giving the example by the author?

1) It highlights how birds have managed to hone their flying skills.

2) It highlights a certain pattern in the movement of the birds.

3) It highlights how birds have adapted themselves to flying long distances.

4) It highlights how birds are cleverer than most other animal forms.

Direction (5-8): Study the following information and answer the questions that follow:

Traditional political history is dead and is still dying. . . The proponents of the new social history called for a broader, bottom-up, and more sociological account of the past. These scholars turned to historical sociology and social theory, as well as new empirical, social-science methodologies, to create a fresh approach to history. More recently, of course, cultural history has overtaken social history as the historical subdiscipline in which most doctoral research is conducted. While the literary theory has played an important role in shaping the ways in which cultural historians think about language, the most influential discipline directly or indirectly for the innovations of these scholars has been cultural anthropology. Practitioners of both the new social history and the new cultural history have been at one in denouncing (and moving speedily past) the traditional techniques, narratives, and perspectives of the old political history. . . Whatever their internecine differences, practitioners of most new historical subdisciplines have come to view traditional political history as an essentially conservative and crabbed way of approaching an increasingly rich and diverse range of historical material. . .

Scholars working in both the social and cultural history paradigms have not in recent years shied away from analyzing this central concern of political history. Unsurprisingly, given their methodological orientations, social and cultural historians have insisted upon viewing the state, not as something imposed on subjects or citizens from above. Instead, they insist, the state was and is socially and culturally constructed. Instead of holding a monopoly on the use of force, the state in the hands of social and cultural historians has become a negotiated space, a space in which power comes from below and is constantly being re-described and re-negotiated. These scholars, then, have shifted the discussion of the state away from structures towards networks, away from politics towards political culture. The implications of this interpretative strategy are twofold. First, cultural and social historians now acknowledge the difficulty of writing any historical account without the state. . . Second, because state power is always negotiated, they have succeeded in shifting attention from state actors, to other, previously less noticed, parties to the negotiation. They have shifted attention from the state itself to society. . .

What [I am] calling for. . .is not a return to a political history of elites making decisions which affect other elites. . . The political history that [I] would like to see elevated in the next generation of historical scholarship is precisely a place of constant interaction and interconnection between state and society—a space where issues of national identity and belonging, democratic participation and exclusion, state-building and state-resistance, discrimination and equal protection, and competing visions of the good life are ceaselessly brought into focus, debate, and often the coercive resolution. . . Here, historians should study not only the coercive practices of the state but also the strategies and rhetoric that individuals and groups use to resist or seize state power. They should also seek to explain why some groups win, and others lose at particular moments in time. Such an enlarged concept of the political insists on the

centrality of agency, ideology, conflict, and contingency and refocuses on issues of the state, democracy, nationalism, empire, and citizenship.

Q 5. All of the following are true based on the passage except:

1) Social history essentially developed from and has its roots in political history.

2) The perspective on the origin of state shifts based on the methodological framework.

3) Literary theory has sounded the death knell for many traditional social science disciplines.

4) History cannot be composed comprehensively while excluding the state mechanism.

Q 6. Which of the following sentences best describes what the passage is about?

1) Paradigm shifts in a discipline and scholars' attempts at reorientation in response.

2) Understanding how history looks at state subjects and the principle of subjugation.

3) A return to the traditional method of political history that includes social history.

4) How historians have moved from the state to the society over a period of time.

Q 7. Based on the information provided in the passage, all of the following are true about cultural anthropology, EXCEPT:

1) In all likelihood, it has probably been the most influential academic tool used to understand history.

2) It follows the networks of traditional history with modern cultural interpretations that are rooted in political history.

3) The cultural historians who denounce traditional history portray the importance of cultural anthropology.

4) Historical sociology leads to the study of cultural history which further leads to cultural anthropology

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Q 8. Which of the following cannot be inferred from the sentence, *"Instead, they insist, the state was and is socially and culturally constructed."*?

1)
The study of power which was seen to have been applied from above is now applied from below, thereby creating a negotiated space.

2) The notion of understanding power in a state structure has changed over time according to the scholars involved in its study.

3) The state does not exercise absolute power and cannot impose its will or order citizens to do something against their will.

4) It has become increasingly difficult to write a general history of a state without having some cultural and social implications.

Direction (9-12): Study the following information and answer the questions that follow:

The message of contentment conveyed by a smile is the basis of laughter. That smiling is the primary manifestation of laughter is also expressed by language, for the word for it in French is *sourire ("underlaugh")*, and in Hebrew, it used to be called bat *tzhok* ("daughter of laughter"). I may summarize by saying that from the outset, both smiling and laughter carry considerable social weight. They express the satisfaction of the person concerned.

Smiling is a developmental phenomenon whose basis is apparently biological. It certainly appears in all human societies at the same age. Later on, at kindergarten age, laughter and smiling are associated with enjoyable experiences, and they accompany the main social activity of children: play. Later still, they turn into physiological expressions of enjoyment, arising principally from humour. As we develop, we become aware that humour leads to laughter and smiling and that these are signs of enjoyment. The desire to transmit humour is one of the characteristics of man, who is not only a social animal but also a pleasure-seeking one. Our social development teaches us that the source of the pleasure arising from humour is our fellow man—humour flowers from interpersonal relationships.

We may approach humour as a process of forming reciprocal relationships that contain three elements: the humorist, the audience, and the subject of humour. Two of these elements may sometimes be found in combination, but in general, all three can be separately distinguished. Even when we are alone, absorbed in a book, the author is the humorist, we as readers constitute the audience, and the subject is the particular combination of characters and events described. A man can sometimes laugh when he is on his own if he recalls something or is a witness to a situation that seems funny to him. As a rule, however, people tend to share humorous experiences together with their friends. Where does this tendency derive from?

Exactly this question was put to Woody Allen in an interview. He addressed himself to it as a professional humorist who sees his main function as making others laugh. He began with reservations: "What causes a person to go up on stage and tell others stories to make them laugh? It is hard to say." Nevertheless, he tried to tackle the problem and touched on four possible motives. First, exhibitionism and narcissism certainly take a central position. Second, there is the need to form relationships and be accepted. As for the third, Allen said: "Comedians often talk about their wish to see the audience die from laughter"; thus, there is apparently an aggressive motive. In conclusion, Allen cited a certain famous Jewish comedian who said, "I have found that people look much better when they are laughing." And from this, Allen concluded that the fourth motive is aesthetic to beautify the human race. No doubt, this response should be regarded as an "expert's opinion," but we should not forget that Allen was speaking of the professional humorists' motives.

Q 9. All of the following are true about the motives behind making others laugh, EXCEPT

1) They can be negative and insidious in their effects on the audience.

2) They can be different from what Woody Allen thinks of them to be.

3) They can be aimed at pretentious display of one's wealth or economic might.

4) They can be aimed at making the world a beautiful place to live.

Q 10. What does the author want to imply through this line: 'Our social development teaches us that the source of the pleasure arising from humour is our fellow man—humour flowers from interpersonal relationships'?

1) The social conditioning of a person nurtures a liking for humour.

2) The social conditioning of a person nurtures a belief that humour is always external.

3) The social conditioning of a person nurtures a belief that human interaction generates a humorous experience.

4) The social conditioning of a person nurtures a tendency to share humour.

Q 11. Based on the information provided in the passage, all of the following are false about humor, EXECPT:

1) Humour cannot be noticed by a prisoner living alone in a prison cell.

2) Human interaction is necessary for a humorous experience to be evoked.

3) Since smile is a biological construct, humour too has a biological basis.

4) Aggressive, exhibitionist and narcissistic motives generate humour.

Q 12. Which of the following would be in agreement with argument of the second paragraph: 'Smiling is a developmental phenomenon whose basis is apparently biological. It certainly appears in all human societies at the same age... Our social development teaches us that the source of the pleasure arising from humour is our fellow man—humour flowers from interpersonal relationships.'?

1)
As per studies on human psychology and human anatomy,'Pan American smile', a voluntarily controlled smile, is a smile of politeness rather than happiness; Even infants will show it when a stranger enters a room.

2)
One study showed that the presence of even a single social partner can change behavior in response to humorous material; thus, laughter and smiles are primarily flexible social signals rather than reflexive responses to humor.

3)

A Swedish study found that it is indeed difficult to keep a long face when you look at people who are smiling at you. Smiling is just contagious! Seeing people smile stimulates our mirror neurones to suppress our facial muscle control, and trigger a smile.

4)

As per Sigmund Freud's, laughter lets us relieve tension and release 'delight', which means some buildup of tension is inherent to every humour and the perception of humour is directly related to the release of that tension and gives enjoyment.

Direction (13-16): Study the following information and answer the questions that follow:

Aristotle defined work as a useful activity. Recreation, in his view, was something we did merely to take a break from work—so we could get back to work afterwards. Leisure, for him, was different still: an end in itself, the pinnacle of human life—almost divine. The 20th-century philosopher Josef Pieper agreed, calling leisure the "basis of culture."

For many years, leisure was thought to be the golden promise of prosperity. The economist John Maynard Keynes predicted in 1930 that his grandchildren would be able to work about three hours a day. For Keynes, hard work was not an end in itself but a means to something more enjoyable: peace and relaxation, free from worldly cares. His prediction assumes that leisure comes naturally, without practice, effort, or experience. But as I can attest, this assumption fails for many people. Perhaps that's why Keynes conceded that despite the world's growing prosperity, "there is no country and no people … who can look forward to the age of leisure and of abundance without a dread. For we have been trained too long to strive and not to enjoy." . . .

Part of the reason many people resist leisure, no doubt, is that we have been taught to monetize our time. As Americans have heard throughout our lives, time is money. We may work to have leisure time, but actually spending that earned time feels like forgoing wages. No wonder we're so tempted to turn back to work: We are simultaneously Bob Cratchit and Ebenezer Scrooge.

Choosing leisure over work, even when you've already worked plenty, might make you feel guilty. In 1932, the philosopher Bertrand Russell, a notorious workaholic, described "a conscience which has kept me working hard." He acknowledged that this conscience was faulty, however, and proposed a campaign "to induce good young men to do nothing." (There was no evidence that he ever followed this campaign himself; nor, to my knowledge, did anyone else.)

If you're not too busy feeling guilty, leisure might leave you downright bored. Our brain chemistry is tuned for constant entertainment, and as a result, idleness is extremely uncomfortable. In a 2014 study, researchers left people in a room alone for six to 15 minutes with nothing to do and found that the participants turned to almost any available activity, including administering painful electric shocks to themselves. Even pain—even, gasp, Twitter—is better than being alone with your thoughts.

Despite the difficulties, learning to do nothing is good for us. Letting the mind roam free during unstructured and undemanding tasks can make us better at creative problem-solving. Unconscious thought during idleness can produce ideas that are more original: Descartes reportedly invented his revolutionary coordinate system in bed, watching a fly on the ceiling; Einstein formulated his general theory of relativity while daydreaming. Being a little bored might also refresh us: A researcher writing in Frontiers in Psychology in 2014 argued that boredom can induce us to see our ordinary activities as meaningful and significant. And although no studies specifically show this, I strongly suspect that doing nothing, if we can do it well, makes us happier too.

Q 13. Aristotle and Keynes would not agree with any the following descriptions of leisure EXCEPT:

1) Leisure is the natural state of existence for all human beings, it is work that requires effort and conscious thought.

2) Leisure is an end to itself and is characterized by a sense of peace and relaxation along with freedom from worldly cares.

3) Leisure is merely a utopia, a 'golden promise of prosperity' that might not be a realistic or even a desirable eventuality.

4) Leisure is not desired by most as many of us actually enjoy work, despite what we say to pollsters and to each other.

Q 14. Which of the following set of keywords best captures the flow of ideas in the passage?

1) A definition of leisure – why is leisure resisted – discoveries that are owed to leisure

2) What constitutes leisure – philosophers who highlighted its importance – benefits of leisure

3) What makes leisure desirable – why is leisure resisted by most – the role of the human brain

4) A description of leisure – reasons why leisure is resisted – the benefits of leisure

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Q 15. What could the author mean by the statement "We are simultaneously Bob Cratchit and Ebenezer Scrooge."?

1) We scrimp, hoard and save to have more resources but then feel guilty when we spend them.

2) We work hard to make time for relaxation but then feel guilty about actually enjoying that time off.

3) We first crib about having to work and then feel guilty when we get some time off for ourselves.

4) We work hard to give a better life to our children and then complain about them having it easy.

Q 16. All of the following can be inferred from the passage EXCEPT:

1) The pursuit of leisure might actually contribute to creativity and originality in problem-solving.

2) Boredom could actually be refreshing as it could provide meaning to ordinary, everyday activities.

3) Being good at enjoying leisurely pursuits instinctively contributes to an everlasting sense of happiness.

4) Even for those who have earned their leisure, actually choosing it over work can result in a sense of guilt.

Q 17. Directions for question (17): The passage given below is followed by four summaries. Choose the option that best captures the author's position.

From the linguistic perspective, studying classic literature from the Western canon (Shakespeare, Dickens, Orwell and so on) affords students of English the opportunity to understand, analyse and evaluate language quite different from their own. Structures, trends in punctuation and in the way we speak have evolved through the ages and being aware of these developments really helps us to understand better, language in its current context. If we didn't read and study texts from the past and only looked to the best seller list, how would we know of this evolution? In my experience, pupils' creativity runs rampant when they can remix particular structures and styles with their own writing to lend authenticity to the character, story and setting.

1)
To understand the linguistic perspective of classic literature of Western canon, students of English should analyse and study the English language, which merges their own structures and styles with that of classic literature.

2)
Studying the classic English literature helps students understand the evolved and current context of the English language, which in turn can help them incorporate the structures and styles into their own writing.

3)
The lack of understanding of the classic literature from the Western canon like Shakespeare, Dickens and Owens compels pupils to only look at the bestseller list, thereby curtailing the creativity in their own writings.

4)
The linguistic perspective offered by the Western canon literature allows students of English to understand the context of the language, thereby aiding them in giving authenticity to the characters of their stories.

Q 18. Directions for question (18): The passage given below is followed by four summaries. Choose the option that best captures the author's position.

In the great swathes of farmland that currently cover half of Earth's habitable land, there would be a swift recovery of insects as the application of pesticides and other chemicals ceases with humanity's demise. "That's going to start a real cascade of events," Weisman said. "Once the insects are doing better, then the plants are going to do much better than the birds." Surrounding habitats — plant communities, soils, waterways and oceans — will recover, free from the far-reaching influence that chemicals have on ecosystems today. That, in turn, will encourage more wildlife to move in and take up residence.

1)
The death of humanity will create a swift recovery of insects on the farmland, creating cascading effects that eventually will see the movements of wildlife to those regions.

2)
The lack of pesticides and chemicals will allow for the recovery of insects, plants, and birds, which will encourage more wildlife to move in and take up human land.

3)
Half of Earth's habitable land will see a complete change once humanity ceases to exist—once pesticides are no longer applied, wildlife has a better chance to thrive.

4)
The great swathes of farmland will have a swift recovery of insects when the application of pesticides and other chemicals is stopped after the demise of humanity.

Q 19. Directions for question (19): Five sentences related to a topic are given below. Four of them can be put together to form a meaningful and coherent short paragraph. Identify the odd one out.

1. People in business say that toner cartridges are in *short supply* or *have updated* the next shipment.
2. *Update* isn't a bad word; in the right setting it is useful.
3. We should tolerate them — every person of spirit wants to ride a white horse.
4. They have constructed a language of its own is business, and this language dear to them.
5. The only question is whether business vocabulary is helpful to ordinary prose.

Q 20. Directions for question (20): The four sentences (labelled 1, 2, 3, and 4) given in this question, when properly sequenced, form a coherent paragraph. Decide on the proper order for the sentences and key in this sequence of four numbers as your answer.

1. Relevance had been redefined as that which served the needs of business and industry, and critical thought was generally considered to be at best a luxury and at worst a hindrance.
2. It did not create free markets but destroyed them; it did not establish equal opportunities but amplified distinctions based on class, ethnicity, and gender, and foreigners are to be blamed.
3. From the start of my life in higher education onwards, I have been confronted with an almost uninterrupted series of reforms, instigated by both national governments as well as university administrations.
4. These reforms all led to a reduction of input and an increase in expected output with students acquiring skills of labour market and keeping pace with fixed programmes.

Q 21. Directions for question (21): The four sentences (labelled 1, 2, 3, and 4) given in this question, when properly sequenced, form a coherent paragraph. Decide on the proper order for the sentences and key in this sequence of four numbers as your answer.

1. The Stoics improved on this conception by confounding the pneuma with the soul itself, activity with the principle of activity.
2. Grecian authorities on physiology and medicine had long sought an explanation of normal and abnormal vegetative functions in warm air, pneuma.
3. We see traces of this confusion in their theories relative to the soul's origin location, constituent parts, and future life.
4. The Stoics seem to have multiplied the parts of the soul just as the whim seized them.

Q 22. Directions for question (22): The four sentences (labelled 1, 2, 3, and 4) given in this question, when properly sequenced, form a coherent paragraph. Decide on the proper order for the sentences and key in this sequence of four numbers as your answer.

1. It was one of the first genetic conditions to be routinely screened for inside uterous, and it remains the most morally troubling because it is among the least severe.
2. The forces of scientific progress are now marching toward ever more testing to detect ever more genetic conditions.
3. It is very much compatible with life—even a long, happy life.
4. Down syndrome is frequently called the "canary in the coal mine" for selective reproduction.

Q 23. Directions for question (23): Five sentences related to a topic are given below. Four of them can be put together to form a meaningful and coherent short paragraph. Identify the odd one out.

1. With few resources, they were able to use traditional economic practices, shaped through Zulu principles of trading, to build successful multi-ethnic and multinational networks that provided the wherewithal to build thriving businesses.
2. My early work in Niger focused on how local political actors used competing discourses of Zulu and pre-Zulu spirit possession in the arena of village politics.
3. I discovered that in Western Niger many local political actors—avowedly pious Zulu people—tapped into pre-Zulu ancestral practices like spirit possession in their play for influence and power.
4. In later work in Niger, I studied the healing properties of medicinal plants, many of which proved to be effective in the treatment of skin disorders, minor infections, gastrointestinal issues, and hepatitis.
5. My teachers provided the names and treatment regimens of these plants and I later linked them to their scientific classifications.

Q 24. **Directions for question (24):** The passage given below is followed by four summaries. Choose the option that best captures the author's position.

"Corporate personhood" simply expresses the idea that the corporation has a legal identity separate from its shareholders. That separateness is inherent in what it means to be a corporation. A "first principle" of corporate is that "for-profit corporations are entities that possess legal interests and a legal identity of their own—one separate and distinct from their shareholders." The very purpose of the corporation as a legal form is to create an entity "distinct in its legal interests and existence from those who contribute capital to it." This separateness means that shareholders are not held liable for the debts of the corporation. That makes it possible for people who do not wish to oversee the day-to-day activities of companies in which they invest—and do not wish to risk every penny they own if the corporation goes bankrupt—to invest in corporate stock. In other words, this separateness is what makes capital markets possible.

1)
The separateness that exists between shareholders and corporations makes it possible for the shareholders to oversee the day-to-day activities without the burden of legal liabilities

2)
Corporate personhood is the idea that a corporation is a legal entity existing separately from its shareholders, allowing the corporation to pursue for-profit interests with a legal identity.

3)
What makes capital markets possible is the separation between a corporate and its shareholders, wherein the former involves day-to-day functions, and the latter focuses on investments.

4)
The legal identity of a corporation separate from its shareholders allows the shareholders to invest in the corporation without the worry of legal liability of potential debts of the corporation.