

JSAT-Law Admission Test 2021

INSTRUCTIONS

Sample Question Paper

Total Questions: 60

Time: 90 minutes

Each question carries four marks.

Total marks: 240

There is no negative marking.

SECTION 1 – ANALYTICAL REASONING

Directions for questions 1 to 4: *Read the following passage and solve the questions based on it.*

In the recent fashion show LFW, seven fashion designers presented their clothes to the viewers. Names of the fashion designers have been withheld due to security reasons, however to identify their clothes it has been decided that the first letter of their names will be used for their outfits. The names of the different fashion designers:

C, L, W, G, D, J, and S. Outfits made by these designers have been placed in a row in the following order:

- (i) S is placed on the immediately left of C.
- (ii) C is fourth to the left of D.
- (iii) L is between G and W.
- (iv) D, which is the third to the right of G, is at one of the ends.

Q.1 How many outfits have been placed between J and G?

- (a) 4
- (b) 3
- (c) 2
- (d) 1

Q.2 What is the position of C?

- (a) Second to the left of L
- (b) Second to the left of W
- (c) Third to the left of G
- (d) Between S and J

Q.3 Which two outfits are at the two ends?

- (a) S and D
- (b) S and W
- (c) J and W
- (d) J and D

Q.4 Which of the following is not true?

- (a) S and C are consecutively placed.
- (b) J is at one of the ends.
- (c) There are two outfits between C and W.
- (d) Positions of J and W are interchangeable.

Directions for questions 5 to 9: *Read the following passage and solve the questions based on it.*

Five students—Pankaj, Jatin, Robin, Dinkar and Rahul went for the Group Discussion (GD) and the (Personal Interview) (PI). The panel judged these five students and gave them rankings for the GD and the PI in a descending order. Rahul, who was ranked first in the GD, was last in the PI. Robin had the same ranking in both and was just above Rahul in the PI. In the GD, Pankaj was just above Dinkar but in the PI he was in the middle, after Jatin.

Q.5 Who ranked first in the PI?

- (a) Jatin
- (b) Rahul
- (c) Robin
- (d) None of these

- Q.6** Who ranked fifth in the GD?
 (a) Dinkar (b) Jatin
 (c) Robin (d) Data inadequate
- Q.7** Who among the following has the same rank in both the GD and the PI?
 (a) Pankaj
 (b) Robin
 (c) Dinkar
 (d) None of the five students
- Q.8** To get the final selection list, the ranks of the students in the GD and the PI are added up. The lower the sum of the ranks, the better the performance. Who among the following has the maximum chances of getting selected. (The better the performance, the better are the chances of getting selected).
 (a) Pankaj (b) Jatin
 (c) Robin (d) Dinkar
- Q.9** In the last question, who among the following has the least chance of getting selected?
 (a) Pankaj (b) Jatin
 (c) Robin (d) Dinkar

Directions for questions 10 to 13: Read the information given below and solve the questions based on it.

Hosting Filmfare award ceremony is a big affair. There are lot of things to be done—anchoring, managing the filler entertainment on-stage performance, crowd management, security etc. To conduct the filler entertainment on-stage performances, name of two male actors—Abhi and Riteish—and three female actors—Rani, Shreya and Alia—have been finalized. These five actors will give a performance of a satire play named “Angrezo Bharat Aao” that has exactly eight roles.

Following conditions are to be kept in mind while allocating roles:

Roles 1, 2 and 3 must be played by male actors. Roles 4, 5 and 6 must be played by female actors. Roles 7 and 8 can be played by either male or female actors.

Each actor must play at least one role.

The pairs of roles below are the only pairs that do NOT require the actors playing the roles to be on stage at the same time:

Roles 1 and 2	Roles 3 and 6
Roles 3 and 7	Roles 4 and 5
Roles 4 and 8	Roles 5 and 8

Appearances in these roles are spaced far enough apart to allow time for costume changes for actors playing more than one role.

Rani and Shreya cannot play roles that require them to be on stage together at the same time.

- Q.10** Each of the following pairs of roles could be played by the same actor EXCEPT
 (a) roles 1 and 2 (b) roles 3 and 6
 (c) roles 3 and 7 (d) roles 4 and 8
- Q.11** If Riteish plays role 1, which of the following must be true?
 (a) Abhi plays role 2 (b) Abhi plays role 7
 (c) Shreya plays role 4 (d) Rani plays role 4
- Q.12** Which of the following is an acceptable assignment of roles 4, 5 and 6 respectively?
 (a) Rani, Rani, Rani (b) Rani, Alia, Rani
 (c) Rani, Shreya, Alia (d) Shreya, Alia, Rani
- Q.13** Abhi could play any of the following roles EXCEPT?
 (a) 1 (b) 2
 (c) 3 (d) 8

Directions for questions 14 to 17: Read the information given below and solve the questions based on it.

On a Sunday, five friends—ohn, Karan, Ranbir, Mithun and Onir—have gathered to play a game called Trios consisting of three rounds. In each round of the game, exactly three of these friends will play. Consider following rules regarding the participation:

No person can play in three consecutive rounds.

No person can sit out two consecutive rounds.

In any game, each of the five persons must play in exactly three rounds.

- Q.14** If John, Karan and Ranbir play in a first round, which of the following could be playing in that game’s second round?
 (a) John, Karan, Mithun
 (b) John, Karan, Onir
 (c) John, Ranbir, Mithun
 (d) Karan, Mithun, Onir
- Q.15** In an individual game, Karan, Ranbir and Mithun play in the first round and John, Ranbir and Mithun play in the third round. Then the players in the second round must be:
 (a) John, Karan, Ranbir
 (b) John, Karan, Mithun
 (c) John, Karan, Onir
 (d) Karan, Ranbir, Onir
- Q.16** In an individual game, Ranbir and Onir do not play in the first round. Which of the following must be true?

- (a) Ranbir plays in rounds three and four
- (b) Onir plays in rounds three and five
- (c) Ranbir and Onir both play in round four
- (d) Ranbir and Onir both play in round five

- Q.17** In an individual game, John, Ranbir and Mithun play in the first round, and Karan, Mithun and Onir play in the second round, which of the following must play in the fourth round?
- (a) John
 - (b) Karan
 - (c) Ranbir
 - (d) Mithun

Directions for questions 18 to 20: Read the information given below and solve the questions based on it.

When I went to buy an aquarium for my home, I was given a choice of seven fish species—F, G, H, I, J, K, and L—to be chosen from. I decided to put exactly six fishes (of same or different species) to be put in the aquarium. Though I was told by the owner of the shop that some of these fishes are quite violent towards other species of the fishes and if I put those fishes in the same aquarium tank, they will fight, and I obviously want to avoid that situation.

Consider the following restrictions

Fish of species F will fight with fish of species H, J, and K.

Fish of species I will fight with fish of species G and K.

If three or more fish of species I are in one aquarium tank, they will fight with each other.

Fish of species J will fight with fish of species I.

If a fish of species G is to be in an aquarium tank, at least one fish of species K must also be in the aquarium tank.

- Q.18** If an aquarium tank is to contain fish of exactly three different species, which of the following could be these species?

- (a) F, G and I
- (b) F, I and K
- (c) G, H, and I
- (d) H, I, and J

- Q.19** Only two species of the fishes are to be put in the aquarium tank with the condition that three fishes of species J have to be out of six fishes to be put in the aquarium tank. Other three fishes in that aquarium tank could be from which of the following species?

- (a) F
- (b) G
- (c) H
- (d) I

- Q.20** If aquarium tank is to contain fish of exactly four different species, which of the following species of the fish cannot be put?

- (a) F
- (b) G
- (c) H
- (d) J

SECTION 2 – LOGICAL REASONING

Direction for questions 21 to 24: Analyze the following statements and give an appropriate answer for the following questions. Questions are independent to each other.

Q.21 “If the forest continues to disappear at its present pace, the Royal Bengal tiger will approach extinction,” said the biologist. “So all that is needed to save the tiger is to stop deforestation,” said the politician. Which one of the following statements is consistent with the biologist’s claim, but not with the politician’s claim?

- (a) Deforestation continues and the tiger becomes extinct.
- (b) Deforestation is stopped and the tiger becomes extinct.
- (c) Reforestation begins and the tiger survives.
- (d) Deforestation is slowed and the tiger approaches extinction.

Q.22 There is little point in looking to artists for insights into political issues. Most of them hold political views that are less insightful than those of any reasonably well-educated person who is not an artist. Indeed, when taken as a whole, the statements made by artists, including those considered to be great indicate that artistic talent and political insight are rarely found together.

Which one of the following can be inferred from the passage?

- (a) There are no artists who have insights in political issues.
- (b) Some artists are no less politically insightful than some reasonably well-educated person who are not artists.
- (c) Every reasonably well-educated person who is not an artist has more insight into political issues than any artist.
- (d) Politicians rarely have any artistic talent.

Q.23 All intelligent people are nearsighted. I am very nearsighted. So, I must be a genius.

Which one of the following exhibits both of the logical flaws exhibited in the argument above?

- (a) Iacocca is extremely happy, so he must be extremely tall because all tall people are happy.
- (b) All chickens have beaks. This bird has a beak. So, this bird must be a chicken.
- (c) All geniuses are very nearsighted. I must be very near sighted since I am a genius.

(d) I must be stupid because all intelligent people are nearsighted and I have perfect eyesight.

Q.24 The district health officer boasts that the average ambulance turnaround time, the time from summons to delivery of the patient, has been reduced this year for top-priority emergencies. This is serious misrepresentation. This “reduction” was produced simply by redefining “top priority”. Such emergencies used to include gunshot wounds and electrocutions, the most time-consuming cases. Now, they are limited strictly to heart attacks and strokes.

Which one of the following would strengthen the author’s conclusion that it was the redefinition of “top priority” that produced the reduction in turnaround time?

- (a) The number of heart attacks and strokes decline this year.
- (b) The health officer redefined the district’s medical priorities this year.
- (c) One half of all last year’s top-priority emergencies were gunshot wounds and electrocution cases.
- (d) Other cities include gunshot wound cases in their category of top-priority emergencies.

Direction for question 25: Read the passage given below and solve the question based on it.

Hindi ought to be the official language of India. There is no reason for the government to spend money on printing the documents in different languages, just to cater to people who cannot read/write Hindi. The government has better ways to spend tax payers’ money. People across India should read/write Hindi or learn it at the earliest.

Q.25 Which of the following, if true, would weaken the speaker’s argument the most?

- (a) The government currently translates official documents into more than eighteen languages.
- (b) Hindi is the most difficult language in the world to speak.
- (c) Most people who travel across India learn Hindi within five years.
- (d) People who are multilingual usually pay maximum taxes.

Direction for questions 26 and 27: Read the passage given below and solve the questions based on it.

The Bistupur-Sakchi corner needs a speed-breaker. Loyola

school children cross this intersection, on their way to the school, and many a times do not check out for traffic. I get to read regular reports of cars and other vehicles hitting children. I know that speed-breakers are irritating for drivers, and I know that children cannot be protected from every danger, but this is one of the worst intersections in town. There needs to be a speed-breaker so that vehicles have to slow down and the children be made safer.

- Q.26** Which of the following arguments is used in the above passage?
- (a) Analogy—comparing the intersection to something dangerous.
 - (b) Emotive—referring to the safety of children to get people interested.
 - (c) Statistical analysis—noting the number of children hit by vehicles.
 - (d) Personalization—telling the story of one child’s near accident at the intersection.

- Q.27** According to a recent research conducted by the district road planning department, ten per cent students come with parents in cars, twenty per cent students use auto-rickshaws, twenty per cent students use taxis, forty per cent students use the school buses and ten per cent students live in the hostel inside the school.

Which of the following is true about the above paragraph?

- (a) It extends speaker’s argument using analogy.
- (b) It extends the speaker’s argument using Statistical Data.
- (c) It is similar to speaker’s argument.
- (d) It contradicts the speaker’s argument using Statistical Data.

Direction for question 28: Read the passage given below and solve the question based on it.

History, if viewed as a repository not merely of anecdotes or chronology, could produce a decisive transformation in the image of science by which we are now possessed. That image has previously been drawn, even by scientists themselves, mainly from the study of finished scientific achievements as these are recorded in the classics and, more recently, in the textbooks from which each new scientific generation learns to practice its trade.

- Q.28** Which of the following best summarizes the above paragraph?
- (a) Scientific achievements are recorded in classics and text books.
 - (b) History of science can be inferred from finished scientific achievement.

- (c) Different ways of looking at History can produce altogether different knowledge.
- (d) Text books may be biased.

Direction for question 29: Read the passage given below and solve the question based on it.

Silver is especially and repetitively savage about what he sees as the extravagant claims made for particle Physics, arguing that once the proton, neutron, and electron were found and their properties experimentally confirmed, the very expensive searches for ever more exotic particles, such as the Higgs Boson, were increasingly harder to justify other than by their importance to particle Physicists. Most of the particles resemble ecstatic happiness: They are very short-lived and have nothing to do with everyday life. His repeated assault goes to the level of sarcasm: “Finding the Higgs Boson will be a magnificent technical and theoretical triumph. Like a great Bobby Fisher game”. Of course, this is a tad unfair, even if some of the claims of its practitioners invite such assaults on their field.

- Q.29** Identify the statement(s) that is(are) logically consistent with the content of the paragraph:
- I. Silver is an ardent critic of Higgs Boson theory.
 - II. Everyday life has nothing to do with experimental confirmation of the properties of proton, neutron and electron.
 - III. Identifying more information about Higgs Boson is a significant contribution to particle Physics.
 - IV. Research on exotic particles in particle Physics is an expensive proposition.
- (a) Only I
 - (b) Only II
 - (c) Only II and IV
 - (d) Only I and IV

Direction for questions 30 to 32: Solve these questions independently.

- Q.30** Many environmentalists rank global warming as the most serious current threat to the world’s environment, citing evidence that over the past 30 years, the global temperature has risen an average of 2 degrees. However, the average global temperature this year is equal to the average global temperature of last year. Global warming, therefore, is not as a serious problem as these environmentalists claim.

The argument is most vulnerable to the criticism that it

- (a) argues that because a threat is present, that threat must be more serious than any other possible threat.

- (b) concludes that because there is lack of evidence for a problem, that problem does not exist.
- (c) attempts to refute a conclusion about a general trend by appealing to a single counterexample, even though such a counterexample may be consistent with the general trend.
- (d) relies on the ambiguous use of a key term.

Q.31 Any person who uses words ambiguously cannot become a journalist, since journalistic reporting cannot invite artistic interpretation.

Which of the following, if assumed, would allow the conclusion above to be properly drawn?

- (a) No person who invites artistic interpretation can use words ambiguously.
- (b) Any person who uses words ambiguously will invite artistic interpretation in their reporting.
- (c) Any journalist who invites artistic interpretation will sometimes use words ambiguously.
- (d) Either a journalist uses words ambiguously or that journalist invites artistic interpretation.

Q.32 Some people interpret the phrase “survival of the fittest” as “survival of the strongest.” However, inasmuch as “strong” is interpreted as “physical size and prowess”, this is incorrect. Although strength and size provide a survival advantage within a species in such tasks as breeding, fighting for food, and running from predators, a species will survive only if its overall resource requirement for maintaining its strength does not outweigh the resources available, as is often the case during a famine or other ecological disaster. Based on the passage above, which of the following statements must be true?

- (a) If a species’ resource requirement for maintaining its strength outweighs the resources available, that species will not survive.
- (b) Strength does not provide a survival advantage for hunting food.
- (c) The phrase “survival of the fittest” should not be used by the scientific community.
- (d) The species with the least strength is the most likely to survive in a famine.

Direction for questions 33 to 38: Read the passage given below and solve the questions based on it.

Though persons of any age can have cancer, recent research has shown that eating fiber rich diet may reduce risk of some types of cancer. Modern lifestyle has resulted in increased consumption of junk food that is low in fiber. We should fortify junk food with fiber.

Q.33 “NO JUNK FOOD, NO CANCER”!

- (a) The statement cannot be logically inferred from the passage.
- (b) The statement is a logical inference from the passage above.
- (c) The passage has contradicting statements.
- (d) None of the above.

Q.34 The average after-tax income for a household was 2.5% higher in 1983 than in 1982. At the same time, average after-tax income declined per households at the lower and middle income levels.

Which of the following can be most reasonably inferred from the information above?

- (a) There were more households overall in 1983 than in 1982.
- (b) There were fewer households at the upper income level in 1983 than in 1982.
- (c) Total after-tax income for all households at the lower and the middle income levels was higher in 1983 than in 1982.
- (d) Average after-tax income for the households at the upper income level rose by more than 2.5% between 1982 and 1983.

Q.35 Xenophobia against Asians in USA and UK has increased since 9/11, an elderly Sikh was murdered in USA, mistaken for an Arab. Intelligence Services tap twice as many as phones of Asians as they do of Nordics. Visa rules for Asians have been tightened unreasonably. Now Germany states will not allow Iranian or Middle East students to study nuclear Physics at their universities. Are these steps playing into the hands of terrorist recruiters?

What would you infer from this passage?

- (a) Al Qaida recruiters are delighted with these developments.
- (b) It is time for Asian countries to impose retaliatory tit-for-tat restrictions on UK and USA.
- (c) Increasing Xenophobia is a dangerous trend – it can cause problems, not solve them.
- (d) There is no sense showing anger against decent law abiding Asians. It would be better to utilize energy to catch terrorists.

Q.36 Opinion based, not fact based, reporting, seems to be the fad for most TV Channels these days. In the Aarushi murder case, the channels have already named at least three suspects as guilty, whereas the CBI is still groping in the dark. Each channel has made its own calculations on future confidence

vote of the Govt. and is presenting it as fact. Political analysts gleefully state their own speculations as gospel truths. Truth is indeed a casualty these days.

Which of these sentences would best conclude the paragraph?

- (a) The press – print and electronic – would be well advised to exercise restraint and may have self-regulatory bodies to oversee broadcasts for veracity.
- (b) It would not be a bad idea for the Government to impose some discipline in the press, through legislation. It has been done in other countries.
- (c) Freedom of press does not mean freedom to distort facts, present opinion as fact.
- (d) People must give a thumbs down to blatantly opinionated channels via poor viewership.

Q.37 With crude price touching 146 dollars/barrel it is time to think small cars and petrol savers. It is time to think electric autos and Hydrogen cell vehicles. It is time to think CNG vehicles and hybrid technologies. It is time to think ethanol locos and natural gas furnaces. It is even probable that in our anxiety to save petrol, we will actually lower pollution levels, since all the alternative technologies are more environment friendly than current petrol guzzlers.

Which of the following would strengthen the author’s argument?

- (a) Thank God for alternative technologies. We would be back in Stone Age without them.
- (b) It is time to seriously look for more petroleum resources by drilling more, perhaps in the seas and the poles, where huge reserves of the hydrocarbon apparently exist.
- (c) Human ingenuity has found ways out of every crisis in History. Mankind will find a solution to this problem too.
- (d) None of the above.

Q.38 Teenagers are best reached via their favourite pastimes and hobbies – internet, music, movies, peer groups, sports, etc. It is through these very formats they can be told of things that would be good for them in the long run – decency, patriotism, honesty, hard work, fair play, community feeling, harmony and tolerance. Being natural rebels, no teenager likes to be lectured. These values must be communicated to them in palatable ways of their own choice via their own favorite communication modes. Only then will the lessons stick.

Which of these can be derived from the passage?

- (a) Everything cannot be taught in schools and colleges.
- (b) Subtlety and sensitivity would help in reaching out to teenagers.
- (c) Being young, teenagers tend to have short attention spans. Long term issues must be communicated in special ways, which they are attracted to.
- (d) (a) and (b) both.

Direction for question 39: *Passage is followed by question based on its content. After reading passage, choose the best answer to question. Answer the question following a passage on the basis of what is stated or implied in that passage.*

Great comic art is never otherworldly, it does not seek to mystify us, and it does not deny ambiguity by branding as evil whatever differs from good. Great comic artists assume that truth may bear all lights, and thus they seek to accentuate contradictions in social action, not gloss over or transcend them by appeals to extra social symbols of divine ends, cosmic purpose, or laws of nature. The moment of transcendence in great comic art is a social moment, born out of the conviction that we are human, even though we try to be gods. The comic community to which artists address themselves is a community of reasoning, loving, joyful, compassionate beings, who are willing to assume the human risks of acting rationally. Without invoking gods or demons, great comic art arouses courage in reason, courage which grows out of trust in what human beings can do as humans.

- Q.39** The passage suggests that great comic art can be characterized as optimistic about the ability of humans to
- (a) act rationally
 - (b) rid themselves of pride
 - (c) transcend the human condition
 - (d) avoid social conflicts

Direction for question 40: *Answer the question independently.*

Q.40 Athletic director: “Members of our sports teams included, for the fall season, 80 football players and 40 cross-country runners; for the winter season, 20 wrestlers and 40 swimmers; for the spring season, 50 track-team members and 20 lacrosse players. Each team athlete participates in his or her sport five days a week for the whole three-month season, and

no athlete is on two teams during any one season. Therefore, adding these figures, we find that our team sports program serves 250 different individual athletes.”

In drawing the conclusion above, the athletic director fails to consider the relevant possibility that

(a) athletes can be on more than one team in a single season.

- (b) athlete can be on teams in more than one season.
- (c) some of the team sports require a larger number of athletes on the team than do others.
- (d) more athletes participate in team sports during one season than during another

SECTION 3 – READING COMPREHENSION

Direction for questions: Each passage is followed by questions based on its content. After reading passage, choose the best answer to each question. Answer all questions following a passage on the basis of what is stated or implied in that passage.

Passage 1

As Gilbert White, Darwin, and others observed long ago, all species appear to have the innate capacity to increase their numbers from generation to generation. The task for ecologists is to untangle the environmental and biological factors that hold this intrinsic capacity for population growth in check over the long run. The great variety of dynamic behaviours exhibited by different populations makes this task more difficult: some populations remain roughly constant from year to year; others exhibit regular cycles of abundance and scarcity; still others vary wildly, with outbreaks and crashes that are in some cases plainly correlated with the weather, and in other cases not.

To impose some other order on this kaleidoscope of patterns, one school of thought proposes dividing populations into two groups. These ecologists posit that the relatively steady populations have “density-dependent” growth parameters; that is, rates of birth, death, and migration which depend strongly on population density. The highly varying populations have “density-independent” growth parameters, with vital rates buffered by environmental events; these rates fluctuate in a way that is wholly independent of population density.

This dichotomy has its uses, but it can cause problems if taken too literally. For one thing, no population can be driven entirely by density-independent factors all the time. No matter how severely or unpredictably birth, death, and migration rates may be fluctuating around their long-term averages, if there were no density-dependent effects, the population would, in the long run, either increase or decrease without bound (barring a miracle by which gains and losses canceled exactly). Put another way, it may be that on average 99 per cent of all deaths in a population arise from density-independent causes, and only one per cent from factors varying with density. The factors making up the one present may seem unimportant, and their cause may be correspondingly hard to determine. Yet, whether recognized or not, they will usually determine the long-term average population density.

In order to understand the nature of the ecologist’s investigation, we may think of the density-dependent effects on growth parameters as the “signal” ecologists are trying to isolate and interpret, one that tends to make the population increase from relatively low values or decrease from rela-

tively high ones, while the density independent effects act to produce “noise” in the population dynamics. For populations that remain relatively constant, or that oscillate around repeated cycles, the signal can be fairly easily characterized and its effects described, even though the caustic biological mechanism may remain unknown. For irregularly fluctuating populations, we are likely to have too few observations to have any hope of extracting the signal from the overwhelming noise. But it now seems clear that all populations are regulated by a mixture of density-independent effects in varying proportions.

- Q.41** The author of the passage is primarily concerned with
- discussing two categories of factors that control population growth and assessing their relative importance.
 - describing how growth rates in natural populations fluctuate over time and explaining why these changes occur.
 - proposing a hypothesis concerning population sizes and suggesting ways to test it.
 - proposing a fundamental question about environmental factors in population growth and presenting some currently accepted answers.
- Q.42** According to the passage, which of the following is a statement about density-dependent factors in population growth?
- They ultimately account for long-term population levels.
 - They have little to do with long-term population dynamics.
 - They are always more easily isolated and described than those that are density-independent.
 - They include random environmental events.
- Q.43** According to the passage, all of the following behaviours have been exhibited by different populations except
- roughly constant population levels from year to year.
 - regular cycles of increases and decreases in numbers.
 - erratic increases in numbers correlated with the weather.
 - unchecked increases in numbers over many generations.

- Q.44** The discussion concerning population in the second paragraph serves primarily to
- underline the importance of even small density-dependent factors in regulating long-term population densities.
 - advocate more rigorous study of density-dependent factors in population growth.
 - prove that the death rates of any population are never entirely density-independent.
 - give an example of how death rates function to limit population densities in typical populations.
- Q.45** In the passage, the author does all of the following except
- cite the views of other biologists.
 - define a basic problem that the passage addresses.
 - present conceptual categories used by other biologists.
 - describe the results of a particular study.

Passage 2

Thomas Hardy's impulses as a writer, all of which he indulged in his novels, were numerous and divergent, and they did not always work together in harmony. Hardy was to some degree interested in exploring his characters' psychologies, though impelled less by curiosity than by sympathy. Occasionally he felt the impulse to comedy (in all its detached coldness) as well as the impulse to farce, but he was more often inclined to see tragedy and record it. He was also inclined to literary realism in the several senses of that phrase. He wanted to describe ordinary human beings; he wanted to speculate on their dilemmas rationally (and, unfortunately, even schematically); and he wanted to record precisely the material universe. Finally, he wanted to be more than a realist. He wanted to transcend what he considered to be the banality of solely recording things exactly and to express as well his awareness of the occult and the strange. In his novels these various impulses were sacrificed to each other inevitably and often. Inevitably, because Hardy did not care in the way that novelists such as Flaubert or James cared, and therefore took paths of least resistance. Thus, one impulse often surrendered to a fresher one and, unfortunately, instead of exacting a compromise, simply disappeared.

A desire to throw over reality a light that never was might give away abruptly to the desire on the part of what we might consider a novelist scientist to record exactly and concretely the structure and texture of a flower. In this instance, the new impulse was at least an energetic one, and thus its indulgence did not result in a relaxed style. But on other occasions Hardy abandoned a perilous, risky, and highly energizing impulse in favour of what was for him the fatally relaxing to classify and schematize abstractly. When a

relaxing impulse was indulged, the style – that sure index of an author's literary worth – was certain to become verbose. Hardy's weakness derived from his apparent inability to control the comings and goings of these divergent impulses and from his unwillingness to cultivate and sustain the energetic and risky ones. He submitted to first one and then another, and the spirit blew where it listed; hence the unevenness of any one of his novels. His most controlled novel, *Under the Greenwood Tree*, prominently exhibits two different but reconcilable impulses – a desire to be a realist-historian and a desire to be a psychologist of love – but the slight interlockings of plot are not enough to bind the two completely together. Thus even this book splits into two distinct parts.

- Q.46** Which of the following is the most appropriate title for the passage, based on its content?
- Under the Greenwood Tree: Hardy's Ambiguous Triumph.*
 - The Real and the Strange: The Novelist's Shifting Realms.
 - Energy *Versus* Repose: The Role of Ordinary People in Hardy's Fiction.
 - Hardy's Novelistic Impulses: The Problem of Control.
- Q.47** The passage suggests that the author would be most likely to agree with which of the following statements about literary realism?
- Literary realism is most concerned with the exploration of the internal lives of ordinary human beings.
 - The term "literary realism" is susceptible to more than a single definition.
 - Literary realism and an interest in psychology are likely to be odds in a novelist's work.
 - "Literary Realism" is the term most often used by critics in describing the method of Hardy's novels.
- Q.48** Which of the following words could best be substituted for "relaxed" without substantially changing the author's meaning?
- Informal
 - Risky
 - Wordy
 - Confined
- Q.49** The passage supplies information to suggest that its author would be most likely to agree with which of the following statements about the novelists Flaubert and James?
- They indulged more impulses in their novels than did Hardy in his novels.
 - They have elicited a greater degree of favourable response from most literary critics than has Hardy.
 - In the writing of their novels, they often took pains to effect a compromise among their

various novelists impulses.

- (d) Regarding novelistic construction, they cared more about the opinions of other novelists than about the opinions of ordinary readers.

Q.50 Which of the following statements about the use of comedy in Hardy's novels is best supported by the passage?

- (a) Hardy's use of comedy in his novels tended to weaken his literary style.
 (b) Hardy's use of comedy in his novels was inspired by his natural sympathy.
 (c) Comedy appeared less frequently in Hardy's novels than did tragedy.
 (d) Comedy played an important role in Hardy's novels though that comedy was usually in the form of farce.

Passage 3

The molecules of carbon dioxide in the Earth's atmosphere affect the heat balance of the Earth by acting as a one-way screen. Although these molecules allow radiation at visible wavelength, where most of the energy of sunlight is concentrated, to pass through, they absorb some of the longer-wavelength, infrared emissions radiated from the Earth's surface, radiation that would otherwise be transmitted back into space. For the Earth to maintain a constant average temperature, such emissions from the planet must balance incoming solar radiation. If there were no carbon dioxide in the atmosphere, heat would escape from the Earth much more easily. The surface temperature would be so much lower that the oceans might be a solid mass of ice.

Today, however, the potential problem is too much carbon dioxide. The burning of fossil fuels and the clearing of forests have increased atmospheric carbon dioxide by about 15 per cent in the last hundred years, and we continue to add carbon dioxide to the atmosphere. Could the increase in carbon dioxide cause a global rise in average temperature, and could such a rise have serious consequences for human society? Mathematical models that allow us to calculate the rise in temperature as a function of the increase indicate that the answer is probably 'yes'.

Under present conditions, a temperature of -18°C can be observed at an altitude of 5 to 6 kilometers above the Earth. Below this altitude (called the radiating level), the temperature increases by about 6°C per kilometer approaching the Earth's surface, where the average temperature is about 15°C . An increase in the amount of carbon dioxide means that there are more molecules of carbon dioxide to absorb infrared radiation. As the capacity of the atmosphere to absorb infrared radiation increases, the radiating level and the temperature of the surface must rise.

One mathematical model predicts that doubling the atmospheric carbon dioxide would rise the global mean

surface temperature by 25°C . This model assumes that the atmosphere's relative humidity remains constant and the temperature decreases with altitude at a rate of 6.5°C per kilometer. The assumption of constant relative humidity is important, because water vapour in the atmosphere is another efficient absorber of radiation as infrared wavelengths. Because warm air can hold more moisture than cool air, the relative humidity will be constant only if the amount of water vapour in the atmosphere increases as the temperature rises. Therefore, more infrared radiation would be absorbed and redirected back to the Earth's surface. The resultant warming at the surface could be expected to melt snow and ice, reducing the Earth's reflectivity. More solar radiation would then be absorbed, leading to a further increase in temperature.

- Q.51** The primary purpose of the passage is to
- (a) warn of the dangers of continued burning of fossil fuels.
 (b) discuss the significance of increasing the amount of carbon dioxide in the atmosphere.
 (c) explain how a constant temperature is maintained on the Earth's surface.
 (d) describe the ways in which various atmospheric and climatic conditions contribute to the Earth's weather.

- Q.52** According to the passage, the greatest part of the solar energy that reaches the Earth is
- (a) concentrated in the infrared spectrum.
 (b) concentrated at visible wavelengths.
 (c) absorbed by carbon dioxide molecules.
 (d) absorbed by atmospheric water vapour.

- Q.53** According to the passage, atmospheric carbon dioxide performs all of the following functions except
- (a) absorbing radiation at visible wavelengths.
 (b) absorbing infrared radiation.
 (c) absorbing outgoing radiation from the Earth.
 (d) helping to retain heat near the Earth's surface.

- Q.54** Which of the following best describes the author's attitude towards the increasing amount of carbon dioxide in the atmosphere and its consequences?
- (a) Incredulous
 (b) Completely detached
 (c) Objective yet concerned
 (d) Angry yet resigned

- Q.55** It can be concluded from information contained in the passage that the average temperature at an altitude of 1 kilometer above the Earth is about:
- (a) 15°C (b) 9°C
 (c) 2.5°C (d) -12°C

- Q.56** It can be inferred from the passage that the construction of the mathematical model mentioned in the passage involved the formulation of which of the

following?

- (a) An assumption that the amount of carbon dioxide added to the atmosphere would in reality steadily increase.
- (b) An assumption that human activities are the only agencies by which carbon dioxide is added to the atmosphere.
- (c) Assumption about social and political consequences of any curtailment of the use of fossil fuels.
- (d) Assumptions about the physical conditions that are likely to prevail during the period for which the model was made.

Passage 4

The modern world requires us to repose trust in many anonymous institutions. We strap ourselves in a flying tin can with two hundred other people not because we know the pilot but because we believe that airline travel is safe. Our trust in these institutions depends on two factors: skill and ethics. We expect that the people who run these institutions know what they are doing. That they build and operate machines that work as they are supposed to and that they are looking out for our welfare even though we are strangers.

When one of these factors is weak or absent, trust breaks-down and we either pay a high price in safety-as in the Bhopal tragedy-or a large welfare premium such as the elaborate security measures at airports. Trust-deficient environments work in the favour of the rich and powerful, who can command **premium** treatment and a ord welfare premiums. Poor people can command neither; which is why air travel is safer than train travel, which in turn is safer than train travel, which in turn is safer than walking by the road side.

Every modern society depends on the trust in the skills and ethics of a variety of institutions such as schools and colleges, hospitals and markets. If we stopped believing in the **expertise** of our teachers, doctors and engineers, we will stop being a modern society.

As the Institution among institutions, it is the duty of the state to ensure that all other institutions meet their ethical **obligations**. The Indian state has failed in its regulatory role schools to turn out good graduates, we well trained engineers and we cannot guarantee that our engineers will turn out to be good products.

Last year, I was invited to speak at an undergraduate research conference. Most of the participants in this conference were students at the best engineering colleges in the State. One student who was driving me back and forth **recounted** a story about the previous year's final examination. One of his papers had a question from a leading text book to which the textbook's answer was wrong. The student was in a dilemma: should he write the (wrong) answer as given in the textbook or should he write the right answer using his own analytical skills. He decided to do the latter and received a zero on that question. Clearly,

as the student had suspected, the examiners were looking at the textbook answer while correcting the examination papers instead of verifying its correctness.

The behaviour of these examiners is a breakdown of institutional morals, with consequences for the skills acquired by students. I say institutional morals, for the failure of these examiners is not a personal failure. At the same conference, I met a whole range of college teachers, all of whom were drafted as examiners at some time or the other. Without exception, they were dedicated individuals who cared about the education and welfare of their students.

However, when put in the institutional role of evaluating an anonymous individual, they fail in fulfilling their responsibilities. When some of our best colleges are run in this fashion, is it any wonder that we turn out **unskilled** engineers and scientists? It, as we are led to expect, there is a vast increase in education at all levels and the regulatory regime is as weak as it is currently. Is not it likely that the trust deficit is only going to increase?

We are all aware of the consequences of ignoring corruption at all jewels of society. While institutional failures in governance are obvious, I think the real problem lies deeper, in the failure of every day institutions that are quite apart from institutions that impinge on our lives only on rare occupying on our lives only on rare occasions. It is true that our lives are made more **miserable** by government **o** cials demanding bribes for all sorts of things, but what about the everyday lying and cheating and breaking of rules with people who are strangers?

Let me give you an example that many of us have experienced. I prefer buying my fruits and vegetables from roadside vendors rather than chain stores. To the vendor, I am probably an ideal customer, since I do not bargain and I do not take hours choosing the best pieces, instead, letting the vendor do the selecting. The market near my house is quite busy: as a result, most vendors are selling their wares to strangers. It takes a while before a particular vendor realizes that I am a **repeat** customer, in such a situation trust is crucial. I have a simple rule: if a vendor **palms o** a bad piece whose defects are obvious, I never go back to that person again it is amazing how often that happens.

In my opinion, the failure of institutional ethics is as much about these little abuses of trust as anything else. Everyday thievery is like roadside trash: if you let it accumulate the whole neighbourhood stinks.

Q.57 What is the meaning of the phrase **palms o** as used in the passage?

- (a) Steals from
- (b) Hides away from
- (c) Buys quickly
- (d) Passes on by deception

Q.58 Why according to the author do people repose trust in institutions they do not know?

- (a) The marketing strategies adopted by these institutions make them trustworthy in the eyes of the public.
- (b) Many other people before them have done the same thing thus they feel safe.
- (c) People learn from the experiences of their richer counterparts who have availed of the services of these institutions.
- (d) They believe that these institutions have the requisite knowledge and will act only in favour of the general public.

- Q.59** Which of the following is possibly the most appropriate title for the passage?
- (a) Modifications in Institutional Ethics.
 - (b) Little Deceptions Add to Larger Trust-Deficit.
 - (c) India-A Country Without Ethics.

- (d) Failure of the Government.

- Q.60** What according to the author happens when there is a breakdown of trust?
- A. Less affluent people have to compromise on quality.
 - B. Our well-being is compromised.
 - C. We pay a higher prices for services.
- (a) Only A
 - (b) Only A and C
 - (c) Only B and C
 - (d) All A, B and C