

COGNITIVE SCIENCE JOINT ENTRANCE TEST - 2018

COGJET-2018

Part I

Instructions:

1. The paper has 4 sections and a total of 50 multiple choice questions (MCQ) in 14 pages including this page.
2. The total time available is 120 minutes.
3. No paper of any kind (except admit card and original ID proof) or any electronic gadget is allowed in the examination hall.
4. Answers should be marked on the separate answer sheet provided.
5. Each question has 4 choices as possible answers. There is only ONE correct or the closest approximate or appropriate answer.
6. To answer you must darken your chosen option (a circle) for each question with a black/blue pen - do not use a pencil.
7. Ensure that you write your application number and name in the answer sheet.
8. Each correct answer gets 3 marks and each wrong answer gets (-1) mark. Questions that are not attempted do not get any marks.
9. Do not spend too much time on one section. Look through other sections. You may find you are able to do some section(s) better than others.
10. Do not ask for any clarifications on the question paper or questions from the invigilators. They have been advised not to respond to any such clarificatory queries.
11. Both the answer sheet and question paper must be returned at the end of the test.

Section 1: Quantitative

Question 1. Two cyclists A and B are at a distance d apart on a straight road. A can cover the distance d in 40 minutes, B can cover it in 30 minutes. A's pet parrot who is sitting on A's cycle handle bar can fly at a speed 4 times faster than A's cycling speed. A and B start cycling at the same time and the parrot also starts and flies from A's cycle to B's cycle then back to A's cycle and so on till A and B meet. The total distance covered by the parrot till A and B meet is:

- A. $\geq 2d$. B. Between $1.75d$ and $2d$. C. Between $1.5d$ and $1.75d$. D. $\leq 1.5d$

Question 2. If $27 + 33 = 61$ how much is $132 + 187$?

- A. 319 B. 320 C. 331 D. 330

Question 3. A rational number r is one which can be written in the form $\frac{m}{n}$ where m and n are any integers and $n \neq 0$. Define a subset of rational numbers R as follows:

i) $\frac{1}{2}$ is in set R

ii) if r is any rational number in R then $\frac{1}{r+1}$ and $\frac{r}{r+1}$ are also in R .

Which of the following is true of the set R ?

- A. R contains all rational numbers r in the interval $\frac{1}{2} \leq r < 1$.
B. R contains all rational numbers r in the interval $0 \leq r \leq 1$.
C. R contains all rational numbers r in the interval $0 < r < 1$.
D. R contains all rational numbers r in the interval $0 < r < \infty$

Question 4. Two numbers x and y are written as shown below where m is a positive integer and all the numbers $f_i, g_i, i = 1..m$ are positive fractions less than 1:

$$\begin{aligned} a &= 4 + f_1 + f_2 + \dots + f_m, & f_1, f_2 \text{ etc. are positive fractions less than } 1 \\ b &= 2 + g_1 + g_2 + \dots + g_m, & g_1, g_2 \text{ etc. are positive fractions less than } 1 \end{aligned}$$

The value of the smallest positive integer necessarily larger than $a - b$ is:

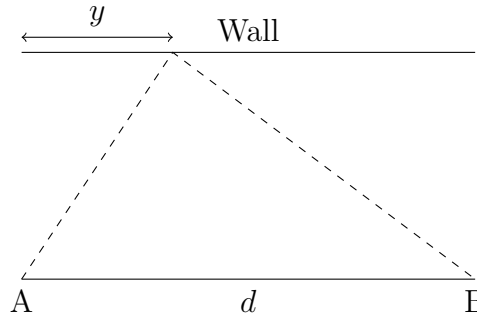
- A. $m+2$ B. $m+1$ C. m D. Cannot say depends on the value of the fractions.

Question 5. A is three times faster than B in doing a piece of work and is able to finish the work in 12 days less than B.

How much time will it take if they did the work together?

- A. 3 days B. 3.5 days C. 4 days D. 4.5 days

Question 6. Look at the figure below. The distance between A and B is d . You are standing at A. You have to run towards the wall touch it at a distance y from the left end of the wall and then run to B. You clearly have the option of touching any point on the wall before running to B. Four possible values of y are given, where y is the distance from the left end of the wall. (Assume the left end is directly opposite A.) For which value of y will you take the minimum time to reach B assuming you run at a constant speed throughout and in a straight line. The dashed line shows one possible run path.



- A. $y = 0$. B. $y = \frac{d}{4}$ C. $y = \frac{d}{3}$ D. $y = \frac{d}{2}$

Question 7. At a highway toll station the toll for a car is Rs.7.00 and for a bus is Rs.20.00. In one hour a total of 151 cars and buses pay toll at the station and the total collection is: Rs.2331.00. Assume c cars and b buses paid the toll. Then the value of $(c - b)$ is:

- A. 45 B. -45 C. 54 D. -54

Question 8. Consider an equilateral triangle that is circumscribed (that is the triangle is inside) by a circle whose radius is 4. The area of the triangle is:

- A. $12\sqrt{3}$ B. $6\sqrt{3}$ C. 12 D. $6(2 + \sqrt{3})$

Question 9. For proper growth a certain crop requires an intake of at least 500 units of Nitrogen per day. Two Nitrogen fertilizers are Urea and Ammonium Nitrate. Assume these fertilizers provide the following units of Nitrogen per 100gm of fertilizer used: Urea - 75units, Ammonium Nitrate - 57units.

A farmer uses x grams of urea and y grams of Ammonium Nitrate per day for his crop. Which of the following expressions correctly represents the amounts x and y if the crop is to get the right amount of Nitrogen per day.

- A. $75x + 57y > 500$ B. $75x + 57y \geq 500$ C. $7.5x + 5.7y \geq 500$ D. $7.5x + 5.7y > 500$

Question 10. The value of $(i + 1)^{32}$, where $i = \sqrt{-1}$, is:

- A. 2048 B. 4096 C. $256 + 256i$ D. $256 - 256i$

Question 11. Assume that x satisfies the inequality, $-\frac{9}{5} > 1 - 3x > -\frac{7}{4}$. Which of the following is a possible value for x ?

- A. 5 B. 5.25 C. 5.35 D. 5.4

Question 12. What is the value of $\sum_{k=1}^{10} \frac{1}{(2k)^2 - 1}$?

- A. $\frac{9}{11}$ B. $\frac{10}{21}$ C. $\frac{5}{11}$ D. $\frac{5}{9}$

Question 13. When we reverse the digits of the number 31, the number decreases by 18. How many other two-digit numbers decrease by 18 when their digits are reversed?

- A. 5 B. 6 C. 7 D. 8

Part I: Section 2: Reasoning

Questions 14 to 17 are based on the following information.

Chinatown, a neighborhood restaurant, is open for business every Monday through Saturday but is closed Sundays. The restaurant serves only Mughlai food on Mondays, Tuesdays and Thursdays and only Chinese food on Wednesdays, Fridays and Saturdays. The restaurant's floor is cleaned and its dishes washed only on days that it is open for business, according to the following rules:

- i) Dishes are washed two days each week, but never on consecutive days and never on the same day that the floor is cleaned.
- ii) The floor is cleaned on Monday and two other days each week, but never on consecutive days and never on the same day that dishes are washed.

Question 14. According to the schedule, which of the following could be true?

- A. Dishes are washed on Wednesday.
- B. Floor is cleaned on Tuesday.
- C. Chinese is served on Thursday.
- D. Dishes are washed on Monday.

Question 15. According to the schedule, the restaurant's floor is cleaned on either:

- A. Tuesday or Wednesday B. Tuesday or Thursday C. Wednesday or Thursday
- D. Thursday or Saturday

Question 16. If Chinese is served on a day that dishes are washed, which of the following must be true?

- A. Dishes are washed on Tuesday. B. Floor is cleaned on Thursday. C. Floor is cleaned on Wednesday.
- D. Dishes are washed on Saturday.

Question 17. Assume that the floor must be cleaned on consecutive instead of non-consecutive days but that all other scheduling policies are unchanged. For how many of the six days can it be determined both whether dishes are washed and whether floors are cleaned?

- A. three B. four C. five D. six

Questions 18 to 21 are based on the following information.

A, B, C and D are attending a dance party, where they meet 1, 2, 3 and 4. They want to pair off and go dancing, but the girls have several constraints the boys must respect.

- i) 2 will not dance with B
- ii) 4 will consider dancing with A only if C will dance with 1
- iii) If C won't dance with 1, 4 will dance with B

iv) 3 is open to dancing with any of the four

Question 18. Which is likelier?

- A. C will dance with 1
- B. 4 will dance with A
- C. Both are equally likely
- D. Data insufficient for answering the question

Question 19. Who is likeliest to dance with 1?

- A. A B. B C. C D. D

Question 20. Who is likeliest to dance with A?

- A. 1 B. 2 C. 3 D. 4

Question 21. What is the probability that 4 will dance with B?

- A. 1 B. $\frac{3}{4}$ C. $\frac{2}{3}$ D. $\frac{1}{3}$

Questions 22 to 25 are based on the following information.

In a sports event, different games are scheduled to be held on seven days, starting on Monday and ending on Sunday. Two games are scheduled to be held on Saturday as well as on Sunday and one game on each of the remaining five days. The games to be held on these seven days are: basketball, football, boxing, sprinting, swimming, shooting, weightlifting, wrestling and cycling, but not necessarily in the same order. Shooting is scheduled to be held on Thursday. Boxing and cycling are scheduled to be held on the same day. Wrestling is scheduled to be held three days before basketball, i.e. two sports are scheduled between wrestling and basketball; wrestling is not scheduled to be held on Wednesday. Weightlifting is scheduled immediately after the day boxing is scheduled. Football is scheduled immediately after the day wrestling is scheduled. Swimming is not scheduled on Monday.

Question 22. Which of the following games is scheduled to be held on Friday?

- A. Basketball B. Wrestling C. Swimming D. Weightlifting

Question 23. Which of the following games is scheduled to be held on Sunday?

- A. Football B. Wrestling C. Cycling D. Swimming

Question 24. On which of the following days is sprinting scheduled?

- A. Friday
- B. Wednesday
- C. Monday
- D. Cannot be determined

Question 25. Shooting is related to Basketball in the same way as Wrestling is related to what?

- A. Sprinting B. Football C. Weightlifting D. Boxing

Part I: Section 3: Data interpretation

Questions 26 to 28 are based on the table below.

Bank	2011	2012	2013	2014	2015
B1	180	230	450	300	700
B2	270	330	180	410	370
B3	290	290	220	170	110
B4	310	160	280	320	430
B5	130	190	270	340	420
Total	1180	1200	1400	1540	2030

The table shows the loan disbursed to the socially disadvantaged sector by 5 banks during the 5 year period 2011 to 2015. The amounts are in crores of Rupees.

Question 26. For which combination of bank and year was the total contribution of the bank in that year the lowest as a percentage of the total disbursed in that year?

- A. B3, 2015 B. B2, 2013 C. B3, 2014 D. B1, 2014

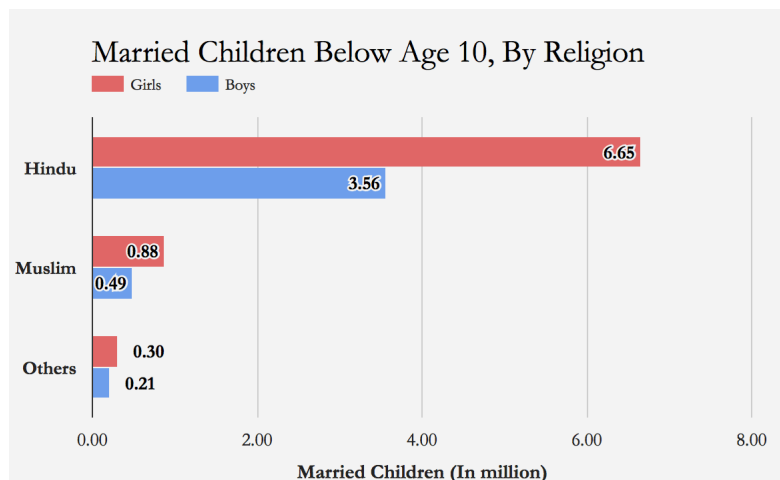
Question 27. In which year was the percentage increase in loans disbursed compared to the previous year the highest?

- A. 2013 B. 2015 C. 2014 D. 2012

Question 28. For an award a bank should have disbursed at least 20% of the total disbursed in that year for the previous four consecutive years. For 2015 which of the following banks qualify?

- A. B1 B. B2 C. B3 D. None of the previous.

Questions 29 to 31 are based on the data in the following graphic.



Question 29. How many non-Hindu children below the age of 10 are married?

- A. 0.88 million B. 1.37 million C. 1.88 million D. 3.56 million

Question 30. What percentage of total married children under 10 are Hindu girls?

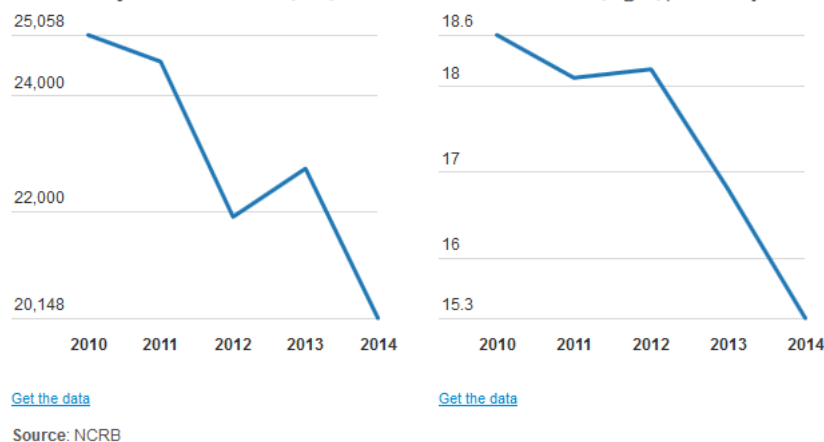
- A. 55% B. 45% C. 6.65% D. 29.4%

Question 31. From this data, we can infer that:

- A. Hindus are more likely than Muslims to marry off their children when they are below 10 years age
B. Hindu girls are more likely to be married below age 10 than any other demographic group
C. Both conclusions are valid based on the data
D. Neither conclusion can be validly drawn from the data

Use the graphs below to answer questions 32 to 34.

Suicides By Home-makers (left) & As % Of Total Suicides (right), 2010-14



Question 32. Based on this data, between 2010 and 2014

- A. The number of suicides by home-makers increased by about 20
B. The number of suicides by home-makers dropped by about 25
C. The number of suicides by home-makers dropped by about 20
D. The number of suicides by home-makers increased by about 25

Question 33. Based on this data, between 2010 and 2014, the total number of suicides

- A. Dropped by around 3% B. Increased by around 5% C. Cannot be determined
D. Dropped by around 5%

Question 34. The following observations, if true, would be inconsistent with the data presented in these graphs

- A. The number of home-makers decreased between 2010 and 2014

- B. The total number of suicides increased between 2010 and 2014
- C. The number of suicides by home-makers increased between 2004 and 2009
- D. The total number of suicides increased between 2008 and 2017

Questions 35 to 38 are based on the data given below.

In a group of 250 students where the ratio of boys to girls is 2 : 3 each student likes one or more of the following 3 subjects: English, Mathematics and Science. The following data is given about the group:

- i) 19% of the boys and 16% of the girls like only English.
- ii) 11% of the boys and 18% of the girls like only Mathematics.
- iii) 16% of the boys and 12% of the girls like only Science.
- iv) 15% of the boys and 18% of the girls like English and Mathematics.
- v) 17% of the boys and 14% of the girls like English and Science.
- vi) 15% of the boys and 16% of the girls like Mathematics and Science.
- vii) The remaining boys and girls like all 3 subjects.

Question 35. Let m , n be respectively the number of girls and boys who like at least two subjects. Then the value of $(m - n)$ is:

- A. 27 B. 28 C. 26 D. 30

Question 36. How many boys do not like Science?

- A. 30 B. 40 C. 45 D. 47

Question 37. How many students like at least one of English and Mathematics?

- A. 202 B. 216 C. 220 D. 222

Question 38. What is the boy to girl ratio for students who like mathematics?

- A. 15 : 8 B. 28 : 16 C. 29 : 16 D. 31 : 16

Part I: Section 4: Comprehension

Read the following two passages carefully, and choose the most appropriate answer for the questions given at the end of each passage.

Passage I [Source: Richard Dawkins - The Blind Watchmaker]

We animals are the most complicated things in the known universe. The universe that we know, of course, is a tiny fragment of the actual universe. There may be yet more complicated objects than us on other planets, and some of them may already know about us. But this doesn't alter the point that I want to make. Complicated things, everywhere, deserve a very special kind of explanation. We want to know how they came into existence and why they are so complicated. The explanation, as I shall argue, is likely to be broadly the same for complicated things everywhere in the universe; the same for us, for chimpanzees, worms, oak trees and monsters from the outer space. On the other hand, it will not be the same for what I shall call simple things, such as rocks, clouds, rivers, galaxies and quarks. These are the stuff of physics. Chimps and dogs and bats and cockroaches and people and worms and dandelions and bacteria and galactic aliens are the stuff of biology. The difference is one of complexity of design. Biology is the study of complicated things that give the appearance of having been designed for a purpose. Physics is the study of simple things that do not tempt us to invoke design. At first sight, man-made artefacts like computers and cars will seem to provide exceptions. They are complicated and obviously designed for a purpose, yet they are not alive, and they are made of metal and plastic rather than of flesh and blood. They are also biological objects.

The reader's reaction to this may be to ask, Yes, but are they really biological objects? Words are our servants, not our masters. For different purposes we find it convenient to use words in different senses. Most cookery books class lobsters as fish. Zoologists can become apoplectic about this, pointing out that lobsters could with greater justice call humans fish, since fish are far closer kin to humans than they are to lobsters. And, talking of justice and lobsters, I understand that a court of law recently had to decide whether lobsters were insects or animals (it bore upon whether people should be allowed to boil them alive). Zoologically speaking, lobsters are certainly not insects. They are animals, but then so are insects and so are we. There is little point in getting worked up about the way different people use words although in my nonprofessional life, I am quite prepared to get worked up about people who boil lobsters alive. Cooks and lawyers need to use words in their own special ways, and so do I. Never mind whether cars and computers are really biological objects. The point is that if anything of that degree of complexity were found on a planet, we should have no hesitation in concluding that life existed, or had once existed, on that planet. Machines are the direct products of living objects, they derive their complexity and design from living objects, and they are diagnostic of the existence of life on a planet. The same goes for fossils, skeletons and dead bodies.

I said that physics is the study of simple things, and this, too, may seem strange at first. Physics appears to be a complicated subject, because the ideas in physics are difficult for us to understand. Our brains are designed to understand hunting and gathering, mating and child-rearing: a world of medium-sized objects moving in three dimensions at moderate speeds. We are ill-equipped to comprehend the very small and the very large; things whose duration is measured in picoseconds and gigayears; particles that do not have position; forces and fields that we cannot see or touch, which we know of only because they affect things that we can see and touch. We think that

physics is complicated because it is hard for us to understand, and because physics books are full of difficult mathematics. But the objects that physicists study are still basically simple objects. They are clouds of gas or tiny particles, or lumps of uniform matter like crystals, with almost endlessly repeated atomic patterns. They do not, at least by biological standards, have intricate working parts. Even large physical objects like stars consist of a rather limited array of parts, more or less haphazardly arranged. The behaviour of the physical non-biological objects is so simple that it is feasible to use existing mathematical language to describe it, which is why physics books are so full of mathematics.

Physics books may be complicated, but physics books, like cars and computers, are the product of biological objects - human brain. The objects and phenomena that a physics book describes are simpler than a single cell in the body of its author. And the author consists of trillions of those cells, many of them different from each other, organized with intricate architecture and precision-engineering into a working machine capable of writing a book. Our brains are no better equipped to handle extremes of complexity than extremes of size and the other difficult extremes of physics. Nobody has yet invented the mathematics for describing the total structure and behaviour of such an object as a physicist, or even of one of his cells. What we can do is to understand some of the general principles of how things work, and why they exist at all.

That is where we come in. We wanted to know why we and all other complicated things exist. And we can now answer that question in general terms, even without being able to comprehend the details of the complexity itself. To take an analogy, most of us don't understand in detail how an airliner works. Probably its builders don't comprehend it fully either: engine specialists don't in detail understand wings, and wing specialists understand engines only vaguely. Wing specialists don't even understand wings with full mathematical precision: they can predict how a wing will behave in turbulent conditions, only by examining a model in the wind tunnel or a computer simulation the sort of thing a biologist might to understand an animal. But however incompletely we understand how an airliner works, we all understand by what general process it came into existence. It was designed by humans with the aid of other machines designed by the humans, screwed, riveted, welded or glued the bits together, each in its right place. The process by which an airliner came into existence is not fundamentally mysterious to us, because humans built it. The systematic putting together of parts to a purposeful design is something we know and understand, for we have experienced it at first hand, even if only with our childhood building toys. What about our own bodies? Each one of us is a machine, like an airliner only much more complicated. Were we designed on a drawing board too, and were our parts assembled by a skilled engineer? The answer is no. It is a surprising answer, and we have known it for no more than one and half centuries.

Question 39. According to the passage, which of the following statements come closest to defining the difference between simple and complicated things:

- i) Simple and complicated things are designed differently.
- ii) Simple and complicated things are governed by different kinds of laws.
- iii) Simple things belong to the physical universe and complicated things belong to the biological universe.
- iv) Simple and complicated things are designed differently but governed by the same kinds of laws.

A. ii) and iii) B. i) and iv) C. i) and iii) D. iii) and iv).

Question 40. Which of the following statements best sums up the argument in the passage about cars and computers as biological objects:

- A. Cars and computers are biological objects because they are man-made.
- B. It doesn't matter whether cars and computers are biological objects or not; what matters is how they are named.
- C. Categorization of cars and computers as biological objects is no more arbitrary than other categorizations made by humans.
- D. Cars and computers are biological objects because they are complicated and were designed with a purpose.

Question 41. According to the passage, physics books are full of mathematics because:

- A. Physics deals with calculations of large magnitudes.
- B. Physics deals with simple objects.
- C. Physics deals with complicated objects.
- D. Physics deals with fields and forces that we cannot access with our sensory motor abilities.

Question 42. What we can do is to understand some of the general principles of how things work, and why they exist at all. What does the word things refer to?

- A. Man-made objects B. Physical objects C. Biological objects D. Physical and biological objects

Question 43. What purpose does the airliner design analogy serve in the passage?

- A. The analogy is used to show that a complex design cannot be understood except in terms of the interrelationships of its parts.
- B. The analogy is used to show that a complex design can be studied even when all its parts are not fully understood.
- C. The analogy is used to show that an airliner is a biological object designed with a purpose.
- D. The analogy is used to show that the human body is a machine.

Question 44. Which of the following statements can be inferred from the passage?

- i) Physical objects are simple and can be studied mathematically.
- ii) Biological objects are complicated and designed with a purpose.
- iii) Biological objects are complicated but not designed with a purpose.
- iv) Machines are really biological objects.

A. ii) and iv) B. i) and ii) C. i) and iii) D. i) and iv)

Passage II [Source: Guy Deutscher - Through the Language Glass: Why the World Looks Different in Other Languages]

Language has two lives. In its public role, it is a system of conventions agreed upon by a speech community for the purpose of effective communication. But language has another, private existence, a system of knowledge that each speaker has internalised in his or her own mind. If language is to serve as an effective means of communication, then the private systems of knowledge in speakers minds must closely correspond with the public system of linguistic conventions. And it is because of this correspondence that the public conventions of language can mirror what goes on in the most fascinating and most elusive object in the entire universe, our mind. The fundamental aspects of our thought are influenced by the cultural conventions of our society to a much greater extent than is fashionable to admit today. It is clear that the way our language carves up the world into concepts has not just been determined for us by nature, and what we find natural depends largely upon the conventions we have been brought up on. That is not to say, of course, that each language can partition the world arbitrarily according to its whim. But within the constraints of what is learnable and sensible for communication, the ways in which even the simplest concepts are delineated can vary to a far greater extent than what plain commonsense would ever respect. For what common sense finds natural is what it is familiar with.

The linguistic conventions of our society can affect aspects of our thought that go beyond language. The demonstrable impact of language on thinking is very different from what was touted in the past. In particular, no evidence has come to light that our mother tongue imposes limits on our intellectual capabilities and constrains our ability to understand concepts or distinctions used in other languages. The real effects of the mother tongue are rather the habits that develop through the frequent use of certain ways of expression. The concepts we are trained to treat as distinct, the information our mother tongue continuously forces us to specify, the details it requires us to be attentive to, and the repeated associations it imposes on us - all these habits of speech can create habits of mind that affect more than merely the knowledge of language itself. We find examples from three areas of language: spatial coordinates and their consequences for memory patterns and orientation, grammatical gender and its impact on associations, and the concepts of color, which can increase our sensitivity to certain colour distinctions.

According to the dominant view among linguists and cognitive scientists today, the influence of language on thought can be considered significant only if it bears on genuine reasoning - if, for instance, one language can be shown to prevent its speakers from solving a logical problem that is easily solved by speakers of another language. Since no evidence for such constraining influence on logical reasoning has ever been presented, this necessarily means - or so the argument goes - that any remaining effects of language are insignificant and that fundamentally, we all think in the same way. But it is all too easy to exaggerate the importance of logical reasoning in our lives. Such an overestimation may be natural enough for those reared on a diet of analytic philosophy, where thought is practically equated with logic and any other mental processes are considered beneath notice. But this view does not correspond with the rather modest role of logical thinking in our actual experience of life. After all, how many daily decisions do we make on the basis of abstract deductive reasoning, compared with those guided by gut feeling, intuition, emotions, impulse, or practical skills? How often have you spent your day solving logical conundrums,

compared with wondering where you left your socks? Or trying to remember where your car is in a multilevel parking lot? How many commercials try to appeal to us through logical syllogisms, compared with those that play on colours, associations, allusions? And finally, how many wars have been fought over disagreements in set theory?

The influence of the mother tongue that has been demonstrated empirically is felt in areas of thought such as memory, perception, and associations or in practical skills such as orientation. And in our actual experience of life, such areas are no less important than the capacity for abstract reasoning, probably far more so.

These questions are ages old, but the serious research on the subject is only in its infancy. Only in recent years, for example, have we understood the dire urgency to record and analyze the thousands of exotic tongues that are still spoken in remote corners of the globe, before they are all forsaken in favour of English, Spanish, and a handful of other dominant languages. Even in the recent past, it was still common for linguists to claim to have found a "universal of human language" after examining a certain phenomenon in a sample that consisted of English, Italian, and Hungarian, say, and finding that all of these three languages agreed. Today, it is clearer to most linguists that the only languages that can truly reveal what is natural and universal are the hosts of small tribal tongues that do things very differently from what we are used to. So a race against time is now under way to record as many of these languages as possible before all knowledge of them is lost forever. The investigations into the possible links between the structure of society and the structure of the grammatical system are in a much more embryonic stage. Having languished under the taboo of "equal complexity" for decades, the attempts to determine to what extent the complexity of various areas in grammar depends on the complexity of society are still mostly on the level of discovering the "how" and have barely begun to address the "why".

But above all, it is the investigation of the influence of language on thought that is only just beginning as a serious scientific enterprise. Its history as a haven for fantasists is of much longer standing, of course. The three examples I referred to - space, gender, and colour - seem to me the areas where the impact of language has been demonstrated most convincingly so far. Other areas have also been studied in recent years, but not enough reliable evidence has yet been presented to support them....No doubt further areas of language will be explored when our experimental tools become less blunt. Can the habits of speech induced by a language have a measurable effect on the speakers' habits of mind beyond language? In years to come, questions such as this will surely become amenable to empirical study.

Question 45. According to the passage, which of the following comes closest to how language partitions the world:

- A. Language partitions the world as ordained by nature.
- B. Language partitions the world as dictated by frequently occurring linguistic expressions.
- C. Language partitions the world in terms of conventions of a given community.
- D. Language partitions the world in arbitrary ways.

Question 46. Which of the following statements about the relationship between language and thought can be inferred from the passage:

- i) Our language constrains our intellectual capabilities.
- ii) Our language habituates us into thinking in certain ways.
- iii) Our language comes in the way of our understanding of distinctions made in other languages.
- iv) Our language influences our memory and perception.

A. i) and ii) B. ii) and iii) C. i) and iv) D. ii) and iv).

Question 47. According to the passage, which of the following need to be targeted in language research:

- i) Exploring universals underlying languages
- ii) Exploring differences between languages
- iii) Exploring the relationship between grammatical structure and social structure
- iv) Exploring the lesser known languages of the world

A. i) and iii) B. iii) and iv) C. i) and ii) D. i) and iv)

Question 48. Which of the following best captures the duality in the phrase ‘the two lives of language’ used in the passage?

- A. Spoken language and language of writing
- B. Language of thought and language of communication
- C. Language production and language understanding
- D. Linguistic knowledge and linguistic convention

Question 49. Which of the following statements is NOT consistent with what the passage says on the state of the art in language-thought relationship research?

- A. The field has been guided by fantasies in the past.
- B. Research in some of the domains has yielded good results.
- C. The available results in the field are not reliable.
- D. The experimental tools used in the field are not reliable.

Question 50. Which of the following statements reflect the position on logical reasoning taken in the passage?

- i) Logical reasoning is central to our cognitive processes.
- ii) Logical reasoning occupies a very small part of our cognitive processes.
- iii) The place of logical reasoning in our cognitive processes has been duly acknowledged.
- iv) Our day-to-day activities would be possible even if we didnt have logical reasoning.

A. ii) and iv) B. i) and iii) C. ii) and iii) D. iii) and iv).