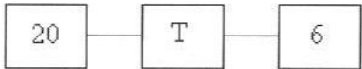
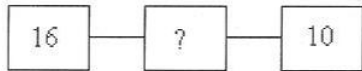
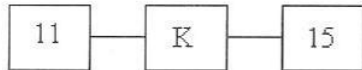


Sample Paper (Reasoning)

1. Which letter of the alphabet will fit in the blank space?



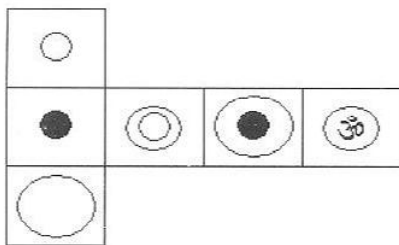
- (a) P (b) Q (c) O (d) None of these

2. You are one of the deputy collectors of a region severely affected by an earthquake. Life has yet not come to normalcy and thousands are living in make shift camps. You are supervising the management of a number of camps in the sub-divisional town. In this hour of adversity lots of institutions have sent food packets from places far and wide. Some of the packets are torn and in many foods has become stale. Which are the courses of action you would take?

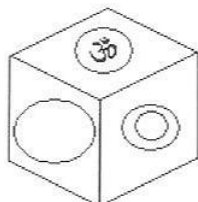
1. Ask juniors to destroy all the food packets.
2. Take steps to start cooking fresh food for the camps.
3. Distribute the available packets without scrutiny.
4. Put a few members of staff with experience to check quality of food packet so that only hygienic packets are used.

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

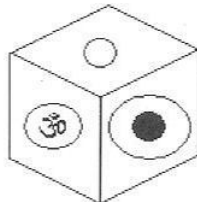
3.



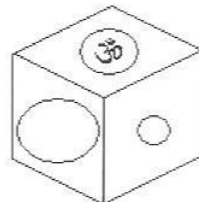
When the above is folded to form a cube, just one of the following can be produced. Which one?



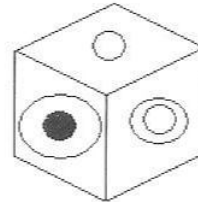
(a)



(b)



(c)



(d)

4. Mr. X is a medical officer of the Community Health Centre (CHC) in Y village in the Himalayan hills. There has been a land slide last night and a substantial number of people are injured. Among those injured are Gram Pradhan's son and another close relation of Gram

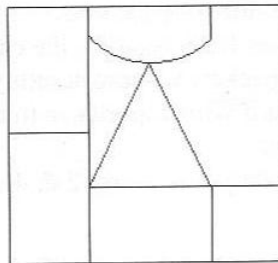
Pradhan. The CHC has limited number of beds for indoor patients and there is shortage of beds so as to admit all needy patients. Gram Pradhan insists that his son and the relative must be admitted. However, their injuries are very minor such that they should be treated only as outdoor patients. X has a personal work pending with Pradhan, which Pradhan has not been doing for months despite a couple of requests.

What should X do?

1. Surrender to Pradhan's insistence and allot beds to these two persons.
2. Explain to the Pradhan the superficial nature of their injuries and assure that they would safely reach home in a matter of hours.
3. Ignore Pradhan's presence in CHC and keep taking care of serious patients with the help of CHC's medical team.
4. Keep Pradhan waiting for some time, hoping that he would on his own initiate dialogue about X's personal matter.

(a) 1 only (b) 2 only (c) 3 and 4 only (d) 4 only

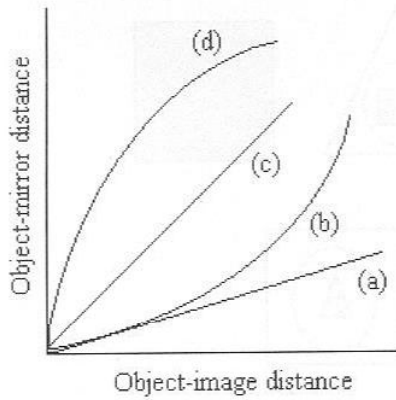
5. In the figure below a rectangular region has been divided into various parts. Each part or area has to be coloured so that no two adjacent areas have the same colour. What is the minimum number of colours required? (Two areas are adjacent even if there is only one common point between them.)



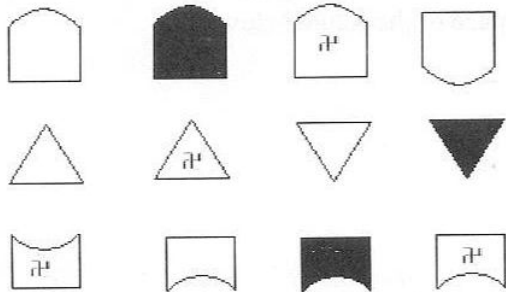
(a) 3 (b) 4 (c) 5 (d) 6

Each of the following two questions has four statements and each statement has three segments. Choose the alternative where the third segment in the statement can be logically deduced using both the preceding two but not just from one of them.

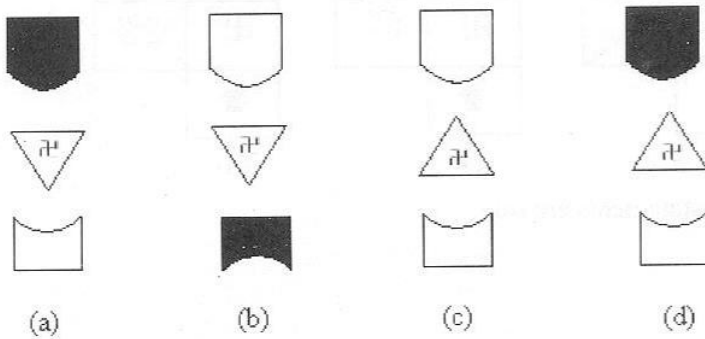
6. A. MD is an actor. Some actors are pretty. MD is pretty.
 B. Some men are cops. Some men are brave. Some brave people are cops.
 C. All cops are brave. Some men are cops. Some men are brave.
 D. All actors are pretty. MD is not an actor; MD is not pretty.
 (a) D only (b) C only (c) A only (d) B and C
7. A. All IITs are in India. No MITs are in India. No IITs are MITs.
 B. All IITs are in India. No MITs are in India. No MITs are IITs.
 C. Some IITs are not in India. Some MITs are not in India. Some IITs are MITs.
 D. Some IITs are not in India. Some MITs are not in India. Some MITs are IITs.
 (a) A and B (b) C and D (c) A only (d) B only
8. Distance of a three dimensional object from a plane surface is defined by the distance of a pre-selected point within object from the surface. With that convention consider the distance of an object from a plane mirror and its distance (as it appears) from the its own image in the mirror. Then which of following graphs depicts that relationship approximately.



9. Consider the following sequence



Which of the following would be the next?

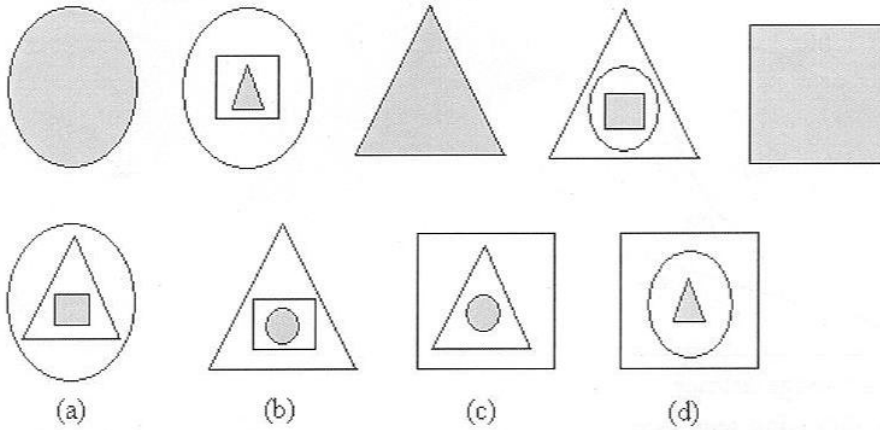


10. Which numbers would fill in blank spaces?

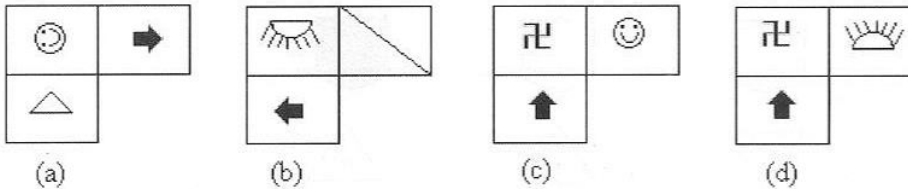
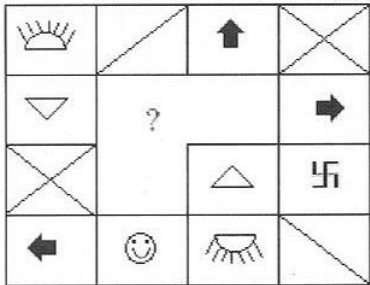
6	9		3	9		8	7
5	4		?	?		5	6

- (a) 2 & 7 (b) 7 & 6 (c) 6 & 8 (d) None

11. Which figure would come next?



12. Which of the following could fit in blank space of the figure below?



13. Assume that the following statements are true.
 Some books are novels.
 Some novels are not plays.
 Some plays are poems.
 Some poems are novels.
 Which of the following conclusions are correct?

- (1) No poem may be a book.
 - (2) Some plays are books.
 - (3) All books may be poems.
 - (4) All plays are books.
- (a) only 1 (b) only 2 (c) 2 and 3 only (d) 1 and 3 only

Directions (14): In each of these questions a statement is followed by the courses of action/assumption numbered I, II, and III. A course of action is a step or administrative decision to be taken for improvement, follow-up, etc. You have to assume everything in the statement to be true, and then decide which of the suggested courses of action/assumption logically follow(s).

14. **Statement:**
Nuclear strike capability cannot make a country secure.
Courses of Action:
I. We must stop further expenses on increasing our nuclear arsenal.
II. We must destroy our nuclear capability.
III. We must concentrate on modernising defence machinery in totality.
(a) Only II (b) Only I and III (c) Only III (d) None
15. **Statement**
“We must be prepared to face any eventuality and all the assignments must be completed as per their schedule”, the Director told the faculty members.
Assumptions:
I. There is possibility of any serious eventuality.
II. Dates are fixed for all the assignments.
III. Faculty Members are supposed to complete all the assignments.
(a) All are implicit. (b) Only II & III are implicit.
(c) Only III is implicit. (d) Only I is implicit.
16. **Statement**
Training must be given to all the employees for increasing productivity and profitability.
Assumptions:
I. Training is an essential input for measurement of profitability.
II. Employees can't function effectively without proper training.
III. Profitability and productivity are supplementary to each other.
(a) None is implicit. (b) All are implicit.
(c) Only II is implicit. (d) Either I or II is implicit.

Directions (17 to 18): Read the following and answer these questions:

In a certain code language '4β8' means 'Sky is blue' and '608' means 'Sea looks blue', and 4λ6μ7 means 'Sky and sea are vast'.

17. What number is the code for vast?
(a) 4 (b) 7 (c) μ (d) λ
18. What number is the code for 'blue'?
(a) 8 (b) 2 (c) 1 (d) 9
19. If Harish is the laziest person in the group, then he must be the last person to finish his exercise. Since he was the last person to finish his exercise, it follows that Harish is the laziest person in the group.
The logic of the above argument is most nearly paralleled by which of the following?
(a) If the library has good collection of Indian literature, it will have a copy of Gita. The collection does contain a copy of Gita; therefore, the library has a good collection of Indian literature.
(b) If the moon has a face, it follows that the sun too has a face. The moon does have a face, so the sun must have a face.
(c) Either helium or hydrogen is the lightest element of the periodic table. Helium is not the lightest element of the periodic table, so hydrogen must be the lightest element of the periodic table.

(d) If Sushma is taller than Bobby, and Bobby, taller than Isha, then Sushma is taller than Isha.

Direction (20 & 21): Read the following and answer the questions.

20. Kalyan Shah struggled throughout his life in various business ventures and achieved noteworthy success late while he was in his fifties. He made a will which put a compulsion on his heirs to use his vacant land and substantial cash for betterment of society with the help of a well reputed NGO.

Mrs. Shah, widow of late Kalyanbhai is executing the will. Which of the following activities in the vacant could be considered as meeting the objectives of the will?

- (a) making a cricket ground
- (b) constructing an open air theatre
- (c) making a commercial drive-in-cinema
- (d) using the land for a charitable hospital

21. After some years when a NGO has built and started a charitable hospital on the land, a newspaper starts writing against the specific NGO suggesting that it is a front for some politicians and alleges that it is using the black money of the politician. What should Mrs. Shah do?

- (a) Try to take over management of hospital.
- (b) Go to the court, asking for reversion of the property to her family.
- (c) Watch the development and if necessary ask some private detective agency to investigate facts.
- (d) Seek an explanation from the NGO in writing.

22. Ranijheel is large lake in a city which is getting bigger. Around the lake markets have developed along the pathway around the lake. A large number of eateries by the side of the pathway serve variety of food in unhygienic conditions. Moreover, leftovers are thrown in neighbouring areas thus creating health risk to the residents around the lake.

Satish Bansal is the Chief Officer of the Municipal Corporation. Which of the following actions are appropriate in the situation?

- I. Mr. Bansal should close down the eateries.
- II. Make visitors to the lake area aware of the health risk in consuming unhygienic food.
- III. Plan setting up covered stalls with potable water supply and waste disposal arrangement. He may allocate the stalls to the owners of existing eateries in an open competitive process.
- IV. Send inspectors to taste food and allow only eateries that serve tasty food.

- (a) I only (b) IV only (c) III only (d) II only

Direction (23 & 24): In the next two questions find the statements that are contradictory to each other.

23. 1. Everyday there are many flights from Ahmedabad to Dubai and Sarjah.
2. Ahmedabad is not a well-known international airport.
3. There are no direct flights from Ahmedabad to destinations in Europe and North America.
(a) 1 and 2 (b) 2 and 3 (c) 1 and 3 (d) no contradiction

24. 1. Every winter Nalsarovar gets at least 2.5 lakhs of guest birds belonging to a minimum of 31 different species.
 2. Nalsarovar is a bird watcher's paradise.
 3. In 2004, the number of species guest avifauna had dropped to thirty only
 4. A bird watcher's paradise must have excellent boarding and lodging, supply of good cameras and binoculars on hire, an interpretation centre and good guides.
 (a) 1 and 4 (b) 2 and 3 (c) 1 and 3 (d) 3 and 4
25. In a row there are 60 students among whom are A, B and C (taken from right to left in that order). Counting from the left C is seventh and between C and B there are 13 students. A is twenty first from the right. How many students are there between A and B?
 (a) 17 (b) 18 (c) 19 (d) 21
26. Cigarettes constitute a mere 20% of tobacco consumption in India and fewer than 14% of the 210 million tobacco users consume cigarettes. Yet these 14% contribute 90% of tax revenues to the exchequer from tobacco sector. High tax rate on cigarettes has kept the tax base narrow and reduction of tax rate will expand the base.
 Which of the following would support the conclusion?
 (a) Cigarette manufacturers spend a lot on advertisement.
 (b) Cigarette smoking is not as harmful as consuming tobacco in other forms.
 (c) If tax rate on cigarettes is reduced consumers of other form of tobacco will shift to tobacco consumption.
 (d) Tax rate on other tobacco products is not as high as the tax rate on cigarettes.
27. Each of four friends Balbir, Chandran, Harsh and Sameer plays one outdoor and one indoor game. The outdoor games are volley-ball, hockey, cricket and badminton. The indoor games are chess, cards, ludo and carom. The following are known.
 1. Sameer does not play volley-ball and hockey.
 2. The first letter of one person's name is the same as the games played by him.
 3. Balbir does not play hockey or any other game starting with letter 'c'.
 4. The hockey player plays cards too.
 5. Chandran does not play carom.
 Which of the following statement could be true. This morning:
 I. Balbir was playing a badminton match.
 II. Chandran was taking part in the chess contest in a club.
 III. Sameer just loved the carom game he played.
 IV. Harsh's team won the volley-ball match.
 (a) I & II (b) III & IV (c) I & IV (d) II and III

Questions (28 & 29)

Osman Omer is an aquarium seller in Surat is setting up tanks in clients' premises using only seven species of fish A, B, C, D, E, F & G (to simplify biological names), so chosen that none of the fish in any tank will fight. Because of the traits of the species there are restrictions:

Fish of species A will fight with fish of species C, E and F

Fish of species D will fight with fish of species B and F

Fish of species E will fight with fish of species G

If a fish of species B is to be in a tank, at least one fish of species F must be chosen.

28. If a tank is to contain fish of exactly three different species, these could be
 (a) A, B and D (b) A, D, and F (c) B, C, and D (d) C, D, and E

29. If a tank is to contain fish of exactly four different species, it cannot contain fish of species
(a) A (b) B (c) F (d) G

Questions (30 to 32)

A dramatist is writing a drama with a cast of seven: four female characters - Preeti, Teresa, Vinita and Zindagi - and three male characters Mitul, Rehman and Shovan.

The writer has decided that during each scene of act one, there will always be a balance of characters according to gender, with either one woman and one man or two women and two men on stage. The playwright will observe the following restrictions in act one.

- (1) At most four characters can be on stage during any one scene.
 - (2) Characters who are on stage at the start of a scene cannot leave during the scene and no new character can enter the stage during the scene.
 - (3) No character can be on stage for two or more consecutive scenes.
 - (4) Rehman and Shovan cannot be on stage together.
 - (5) If either Mitul or Vinita is on stage, the other must be on stage at the same time.
 - (6) Teresa and Shovan must be on stage during scene 1.
30. If four characters are on stage during scene 1, which of the following must be one the characters on stage during scene 2?
(a) Rehman (b) Preeti (c) Zindagi (d) none of these
31. What is the minimum number of scenes the playwright must write for act one if each of the seven characters is to be on stage in at least one scene during act one?
(a) two (b) three (c) four (d) five
32. If each of act one's first three scenes has only two characters in it and no character is on stage for the second time until scene 4, which of the following must be on stage for the first time in scene 4 of act one?
(a) Teresa (b) Preeti
(c) Zindagi (d) Preeti or Zindagi

Questions (33 & 34)

Six peace negotiators A, B, C, D, E and F are to be seated in a round table with exactly six chairs uniformly arranged for the negotiators. There are a few restrictions.

- (1) C cannot sit next to F
 - (2) A cannot sit next to E.
 - (3) D and A sit next to each other.
33. If A sits next to C, which of the following is a complete and accurate list of those who can sit next to C on C's other side?
(a) B (b) B and E (c) B, E, and D (d) B, E and F
34. If F sits directly across the table from B, who must sit on either side of C
(a) A and B (b) A and E (c) B and D (d) B and E

Questions (35 & 36): In these two questions identify the fallacy in the arguments.

35. Dr. Ketan Patel with a flourishing practice in diabetes management, lectures a lot on what to eat and how much to eat. Dr. Patel however relishes Surti Ghari and Jalebi with Rabdi a lot. You should not care about the advice he tenders.
(a) Illicit generalisation (b) You too

- (c) Me too (d) Straw-man
36. In China, when Chairman Mao Zedong used to be worshipped the practice of hanging his picture from the rear-view mirrors of automobiles to ward off accidents became widespread. A taxi driver in the Chinese capital city narrated:
“Everybody else is doing it, so I thought it would be a good idea too”.
 What is the fallacy in the taxi driver’s thinking?
 (a) An appeal to pity (b) Ad Hominem
 (c) An appeal to Inappropriate Authority (d) An appeal to populism

37. **Questions (37 & 38)**

In the next two questions there are statements, belonging to one or more of the following categories: an inference (I), an assumption (A), a fact (F) and an opinion (O). Label the statements in the order they appear.

- (1) Narendra Modi’s ‘Praveshotsav’ has brought far reaching transformation on the canvass of primary education in Gujarat.
 (2) Statistical evidence unmistakably shows that enrolment has increased to x%.
 (3) Sample Survey by a reputed institution points out that dropout rate has very significantly decreased to less than y%.
 (4) Without a breakthrough in education Gujarat could not have positioned herself as a progressive state of India.
- (a) IFFO (b) FOIO (c) OFIO (d) IFFI
38. (1) Desert mountaintops make good sites for observatory.
 (2) Being high they sit above a portion of the atmosphere, enabling a star’s light to reach a telescope without having to pass through the depth of atmosphere.
 (3) Being dry the desert is relatively cloud-free.
 (4) Haze or cloud can render a sky useless for many astronomical measures.
- (a) FIOF (b) IFFF (c) IFFO (d) IFFA

Questions (39 & 40)

Jayshanker, Sushil, Udayan and Pranlal are engaged in different fields of art. One is a dancer, one is a painter, one is a singer and one is a writer though not necessarily in that order. The following facts are given:

- (1) Jayshanker and Udayan were in audience recently when the singer was on stage.
 (2) Both Sushil and the writer have got their portraits painted by the painter.
 (3) The writer whose biography of Pranlal is a best seller is planning to write a biography of Jayshanker
 (4) Jayshanker has never heard of Udayan.
39. Who is the painter?
 (a) Pranlal (b) Jayshanker (c) Sushil (d) Udayan
40. Which of the following is true?
 (a) Jayshanker is the writer and Sushil is the Dancer.
 (b) Pranlal is the singer and Jayshanker is the dancer.
 (c) Udayan is the singer and Pranlal is the painter.
 (d) none of this

Answer Key: Model Paper 2

1	a	11	c	21	c	31	b
2	c	12	c	22	c	32	d
3	d	13	a	23	d	33	d
4	b	14	c	24	c	34	d
5	b	15	a	25	b	35	b
6	b	16	c	26	c	36	d
7	a	17	b	27	d	37	a
8	a	18	a	28	d	38	b
9	a	19	a	29	a	39	a
10	a	20	d	30	a	40	d

Solution: Sample Paper
(Reasoning)

1. Let us focus on the top line. We know that K is 11th letter from beginning. It is also 16th from Z, i.e. before K 15 letters come. This description matches with, of course, different numbers for the bottom row.

Hence the letter P would be in the blank space.

Hence (a)

2. All the suggested action points may be decided by application of common sense. The suggested action 1 is commonly described as 'throwing with baby with bathtub'. All the packets are not spoiled. It is necessary to separate the acceptable from the spoilt stuff. In this situation the packets have value because it takes some time to make arrangement for preparation of fresh food.

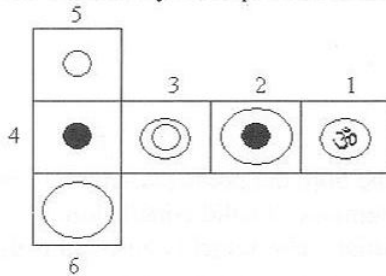
Yes, 2 must be done.

Action 3 is risky because unhygienic food may bring additional complication.

Action 4 is necessary if some of the available material is to be used.

Hence (c)

3. Let us identify the squares as follows



Answer choice (a) is ruled out because faces (1) and (3) are shown to be adjacent. In (b)

orientation of Om is not correct. It should have been mirror image of Om . That is not possible.

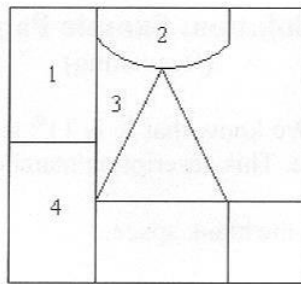
In (c) faces (5) and (6) have been shown to be adjacent. That is impossible. Choice (d) has no problem.

4. Many officers fall into the kind of decision trap that options 1, 3 and 4 lays. 1 is incorrect thing to do as a medical professional. Pleasing Pradhan does have a value but that cannot be done at the cost other patients. Option 3 is bad because it is emerging perhaps from a subconscious grievance that he did not earlier do X's legitimate work.

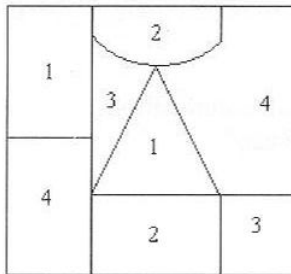
Option 4 is founded on the idea of quid pro quo. The Pradhan may be tempted to give that assurance but the expectation is unethical. Treating every patient appropriately is an absolute duty in the sense of Kantian Ethics and cannot be conditional on Pradhan offering to do something else.

Option (b)

5. In a problem of this type it is good to begin colouring a patch of contiguous areas with minimum number of colours. One could start from one corner, so that minimum number of colours is needed. Suppose we start at North-west corner; we may begin with four colours as follows.



Finally you would get the figure below.



Hence (b)

6. A: Actor is the middle term which is undistributed in the both the premises. Invalid conclusion.
 B: Men, the middle term is undistributed in both the premises. Invalid conclusion.
 C: Middle term 'cops' is distributed in the first premise. The conclusion has no distributed term. Valid conclusion.
 D. The term pretty is distributed in the conclusion but not in the first premise where it occurs. Invalid conclusion.
 Hence (b)
7. By application of common sense, one can see that both A and B yield valid conclusions.
 C and D: There cannot be any valid conclusion from two negative premises.
 Hence (a)
8. From experience you should know that object image distance is twice the object-mirror distance. Hence (a)
9. There are three geometrical designs. The π sign starting at bottom; goes up one level each time and again starts at bottom.
 When π leaves an enclosure, the enclosure gets water reflected. Meanwhile the enclosure which had no activity due to in-and-out movement of π alternately gets darkened and whitened.
 Hence (a)
10. The pattern is simple in the two grids where numbers are filled in.
 $6 \times 9 = 54$ and $8 \times 7 = 56$
 Hence (a)

11. From the first figure to the second, the circle gets free of shading. Two other geometrical shapes come inside, one into another and the smallest is shaded. In the third the smallest becomes large and alone remains and it gets shading. In the next stage like it happened in transition from the first to the second the triangle gets free from shading. Inside it a circle comes which was the largest figure two steps before and within it a shaded square appears. Next the square alone remains and becomes shaded. In the next step the square would remain as the outer most. Inside the next figure has to be triangle first and then a small shaded circle.
Option (c)
12. Too many symbols in the problem could confuse the reader. Actually the empty arrangement of 16 squares is symmetrical about the centre. Looking from the centre, there are four quadrants. Two symbols of the first quadrant (in the sense of co-ordinate geometry i.e. north-east quadrant) are present in third quadrant with a mirror reflection along the vertical line of symmetry of the four squares in first quadrant. The other two we may easily identify as ☺ and ↑.
Now all the three symbols in the second quadrant are present in the fourth with water image of the respective symbol. So the third empty square should have water image of '☺' i.e. '↑'.
Hence (c)
13. Take the conclusion I. Note that the conclusion is not a categorical statement because of the presence of may. The connection between poem and book can be established only from the first and the fourth premises. No valid conclusion is possible from the two statements because middle term is not distributed. However the suggested conclusion is only a possibility and is valid.
Hence (a)
14. Nuclear strike capability may not make a country secure. But nuclear capability certainly signals deterrence to potential aggressors and thus helps in enhancing security. Also there is always a need to upgrade facilities, weapons system etc. So completely cutting off all expenses for nuclear arms would not promote security. Statement I, therefore does not embody a sensible course of action.
Statement II, if implemented would actually make the nation weaker in relation to other competing powers. Surely, such a course of action would not be sensible unless all nations with nuclear power collectively take the same decision.
Statement III is sensible because more wars are fought on conventional war machine – men and weapons system. Nuclear capability alone is never sufficient. So a nation should not ignore to upgrade non-nuclear military machine. Hence (c)
15. When the Director is telling the faculty that they should be prepared to face any eventuality the possibility of some real eventuality cannot be ruled out. The assignments must have the submission dates, otherwise the Director would not mention schedule.
Hence (a)
16. Only II is implicit. Training may not be connected with measurement of profitability. It is reasonable to presume that employees cannot function effectively without proper training.

Otherwise training would not be necessary for increasing productivity and profitability. Statement III is making an assumption which is not necessary for the argument. Hence (c)

17 & 18

It is reasonable to presume that codes are in the same sequence as the words in the respective sentence.

The only common word in the first two sentences is blue and the only common code is 8. Following the sequence of words and codes for the last sentence code for vast has to be 7.

Hence (b) for 17 and (a) for 18.

19. It is easy to see that there is no parallelism between the given argument and the arguments in (c) and (d). Both (c) and (d) provide logically sound arguments, whereas the given argument is a misapplication of "If X then Y" type conditional statement. The given argument claims that if Y is true then X will also be true. The argument in (a) parallel and is invalid. If Y is true we cannot say that X will be also true.

Argument in (b) is not parallel as it states that since X is true Y has to be true. That surely is implied by "If X then Y".

Hence (a)

20. Options (a) and (b) do serve a public cause but are weaker compared to (d). Option (c) is inappropriate because the land had to be used for a charitable purpose.

21. Option (a) is an over reaction. Managing a hospital is no easy task. The allegation does not even concern management of the hospital. On what basis can she make such a claim? Not a sensible thing to do.

Supposing she writes to NGO; what answer is expected? It would be a futile thing to do.

It is early to ask for court intervention. Moreover, the will may not have a reversion clause. This kind of provision in the will is necessary if the property or the management of hospital has to revert back to the family.

She should watch. If there be substance in the allegations proof of wrong doing would be gradually revealed. She should therefore watch developments. Meanwhile, just to get a sense of the happenings she could get the matter investigated by a private detective agency.

Hence (c)

22. Why are the visitors to the area going to these eateries? The obvious reason is that the visitors need refreshments. Thus closing down the eateries would not be good for the visitors.

The eateries are unhygienic because they are open air and management may be unprofessional. First proper infrastructure should be created. This is not difficult for a municipality. By periodic checking quality of food will be improved.

Action point IV is irrelevant. The issue is of hygienic quality of food, not just taste.

Hence only III should be done.

23. The fact that Ahmedabad is not a well known international airport does not contradict the fact that there are daily flights to Dubai and Sarjah. There are no direct flights to Europe and North America because Mumbai, Delhi and Dubai act as hubs. For that reason international status of Ahmedabad airport may not be known to a large segment of travellers outside of Gujarat. There is no contradiction. Option (d)

24. Reading the statements you shall recognize that potential contradiction can arise only from the pairs 1 and 3 and 2 and 4.

There are certain requirements for a paradise. No statement asserts that any particular requirement is not met. Do not bring your personal experience into this. Thus 2 and 4 do not contradict each. However, the pairs 1 and 3 do because in a particular year the number of guest

species fall below 31 and statement 1 asserts that every year at least 31 species arrives in Nalsarovar.

25. B is 21st from the left and A is 21st from the right. Therefore, between A and B there will be $60 - 21 - 21 = 18$ students. Hence (b)

26. Clearly statements (a) and (b) are not related to the issue of high tax rate on cigarettes and consequent narrowing of tax base.

Statement (d) is certainly true but it is an inference from the factual statement that a small percentage of tobacco consumers contribute a large portion of tax revenue.

Statement is not supporting the conclusion of the argument.

Statement (c) supports the conclusion. If reduction in tax rate on cigarettes shift other tobacco consumers to cigarette then tax base will be widened as more taxpayers will be contributing to the exchequer.

27. We may write the conditions and sharpen data as more information become available.

1. Sameer: ~~Volley-ball, hockey~~

2. This implies

Chandran: cricket, chess/cards/carom

At this stage indoor game not known

3. Balbir: ~~hockey~~, ludo

4. Hockey player has to be Harsh: Thus

Harsh: hockey, cards

5. Chandran's indoor game: chess, using information of (4)

Thus Sameer: Badminton, carom

Chandran: Cricket, chess

Balbir: Volley-ball, ludo

Harsh: Hockey, cards

Hence (d)

28 & 29

The conditions are easy to write in if then format.

1. $A \rightarrow C, E, F$

2. $D \rightarrow B, F$

3. $E \rightarrow G$

4. $B \rightarrow F$

28. Answer choice (a) is not valid as it violates condition 4.

Answer choice (b) violates condition 1

Answer choice (c) violates condition 2 as B and D cannot be together.

Answer choice (d) is feasible.

29. There are seven species. Fish from species A fights with fish from three species.

Inclusion of A implies exclusion of C, E and F. Is A, B, D and G feasible? The answer is 'No' because inclusion B implies inclusion of F which is contradictory to condition 1. Thus A cannot be included in a set of four species of fish.

Hence (a)

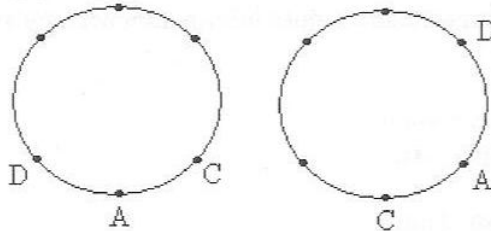
30. In scene 1, Shovan and Teresa are there. One female-male pair of actors are needed to get four on stage in scene 1. Rehman is excluded because of Shovan's presence. So in scene 1 Mitul and Vinita would be there.

In the next scene Rehman has to be taken because the other two males cannot be in that scene by virtue of condition (3). Hence (a)

31. Even if the playwright begins first scene with four actors, two females remaining out in the first scene cannot be adjusted in the second scene because a male actor cannot be repeated in consecutive scenes. Hence three scenes will be required in the minimum. Hence (b)
32. The first scene has Teresa and Shovan only. In the second there could be Mitul and Vinita or Rehman with either Preeti or Zindagi. One of the pairs which do not figure in the second will come in the third. So at the end of the third scene either Preeti or Zindagi would be one of the actors who has not yet come on stage. Whosoever is left out in for the first three scenes must come in two fourth.

Since one of Preeti and Zindagi would have been left out for appearance on stage at the end of 3rd scene, one of them must be appearing first time in the fourth scene. Hence (d)

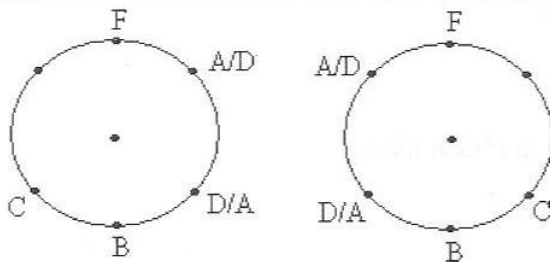
33. A sits next to C. This could happen two ways. Let us draw the diagram. We have kept in view condition (3).



Now next to C, F cannot sit by virtue of condition (1). Therefore, only B or E must sit next to C. Clearly D cannot be next to C. By virtue of condition (1) F cannot sit next to C.

Hence (d)

34. We note that C cannot be next to F and draw the diagram accordingly.



Clearly on two sides of C, B and E sit.

Hence (d)

35. Medical advice must be distinguished from the actual behaviour of a doctor. Simply because the doctor's is not strict about his own diet does not make his advice useless. This is an example of 'You too' fallacy.
36. Clearly the driver is following a fashion of the times without understanding whether such a practice would ever serve the purpose (prevention of accident). Hence (d)
37. Statement (1) clearly is an inference supported by the evidence of very substantial progress in enrolment and dropout reduction
Statements (2) & (3) are obviously facts used to arrive at the inference or conclusion (1)
Statement (4) is not directly connected with the details of the argument. It states somebody's opinion about contribution of education in lifting the status of Gujarat among the states in India.

Hence the right labelling is IFFO. Option (a)

38. It is clear that the first sentence is the conclusion supported by facts stated in the next three sentences. Hence (b)

39 & 40.

This is an attribute search question. The implications of the statements are:

- (1) Jayshanker and Udayan are not singers.
- (2) Sushil is not the painter. Sushil is not the writer either.
- (3) Pranolal and Jayshanker are not writers.

Combining (2) and (3) one concludes that Udayan is the writer. Jayshanker cannot be the painter as he has never met Udayan. Udayan's live portrait must have been made by a person who had a sitting with Udayan. Therefore painter must be Pranolal. Jayshanker must be the dancer.

Ans 39(a) and 40(d)