

# Analytical Decision Making

## INTRODUCTION

Analytical Decision Making is based on a set of relationships laid out, generally arbitrarily, from which new information can be deduced. This involves two steps—first of analysis and second of reasoning. Analytical decision making deals with questions in which you have to decide upon the course of action taken upon a candidate who has applied for a post or membership to an institution keeping in mind the essential requisites and the data given for the candidate. We can classify such questions into a few major categories.

### Category I

In this type a vacancy is being declared. The necessary qualifications required by the recruiting agencies are given with certain exceptions. The qualifications and the merits of the candidates are mentioned. The decision about each candidate has to be made from amongst the five choices given, which state the courses of action to be taken as per the candidate's potential.

### Category II

Here the eligibility conditions for joining a course or availing certain benefits etc are given as against the vacancies mentioned in the former category. The qualifications of the candidates are also mentioned. The decision about each candidate is to be made from amongst the five answer choices given.

## FORMAT OF THE QUESTION

**Example Directions:** Read carefully the informations given below and answer the questions based on it:

The following are the given conditions for the recruitment of a candidate as a family member in a computer institute:

- (i) The candidate must be in the age range of 23 years to 28 years as on 1st November, 2013.
- (ii) The candidate must have work experience as a teacher or programming experience of at least 2 years.
- (iii) The candidate must have a PG degree in computer application, [MCA, M.Tech. or M.Sc. (computer science)] with not less than 60% marks.
- (iv) Out of total 50 marks in the interview, the candidate must obtain 50%. In the case when a candidate
- (v) Fulfils the above conditions, he/she shall be appointed as senior teacher.
- (vi) Has less than 60% but more than 50% marks in his/her PG degree in computer application, he/she will be appointed as junior teacher.
- (vii) Is of age more than 28 years but less than 32 years as on 1<sup>st</sup> November, 2013, the case may be referred to the GM of the institute.

On the basis of the above mentioned conditions and information about each of the candidates in the question below, you have to decide which of the following courses of action should be taken against each candidate. Point to be noted that nothing extra will be assumed except the given information. The decision must be based only on the data provided.

**Mark your answer:**

- (a) If the candidate is to be selected as a Junior teacher
- (b) If the candidate is to be selected as a Senior teacher
- (c) If the case will be referred to the GM of the institute.
- (d) If the data are inadequate
- (e) If the candidate is not to be selected.

## QUESTIONS:

1. **Mukesh Verma** was born on 31<sup>st</sup> July, 1985. He is an M.Tech. in computer engineering with 70% marks. He has been working in an institution as a programmer for the last 7 years.
2. **Karishma Tiwari** is MCA with 72% marks. Her date of birth is 14<sup>th</sup> August, 1990. She has worked as a computer teacher for 4 years. She has got 35 marks in interview.
3. **Brijesh Shankar** is an M.Tech. with 54% marks. He was born on 31<sup>st</sup> December, 1991. He has been working as a programmer for the last 5 years. He has obtained 45 marks in the interview.
4. **Mansi Ranjan** is M.Sc. (computer science) with 55% marks. Her date of birth is 10 July, 1988. She has been working as a computer programmer for 6 years. She has obtained 40% marks in the interview.
5. **Subodh Saxena** is MCA with 54% marks. He has 4 years work experience as a computer teacher. His date of birth is 12<sup>th</sup> February, 1989. He has got 55% marks in interview.

## What You See in the given Question Format?

In the given format you can see the following things:

- (1) Informations about some candidates have been provided.
- (2) Some conditions have been given for candidates to fulfil in order to get selected for a particular job/post. In case of the given format, four conditions have been given.
- (3) When a candidate fulfils all the criteria except some, then different course of action has to be taken for him.

## Some more things to understand

**Basic conditions:** In the given question format, there are four basic conditions — (i), (ii), (iii) and (iv). They are called basic conditions because they are the original conditions.

**Additional conditions:** In the given question format, there are two more conditions apart from the basic conditions and they are (vi) and (vii). point to be noted that (v) will not be on additional condition as it does not talk of exceptions. In fact (v) is only a totality of the four basic or original conditions given in the question format.

## What is data inadequacy?

As one of the answer is given as 'data inadequate' we must be clear about what exactly does data inadequacy mean? When details given about any candidate provide no information as required by the basic conditions/additional conditions then this would be the case of data inadequacy. For example, let us see the 1<sup>st</sup> question given in the format. No information is given about what marks have been obtained by Mukesh Verma in the interview. Hence, the data is inadequate here.

## How to solve a given problem?

Let us consider the questions given in the format and start one stepwise process.

### STEP I

Write the name of the candidates in the left side and then write the symbols (i, ii, iii, iv) of the basic conditions to the top right. Now, put the symbols of the additional conditions (vi and vii) below the symbols of that basic condition with which these might be related. For example, (vi) is a condition about educational qualification and so, it is an exception of (iii). Hence (vi) should be written below (iii). Similarly, (vii) should be written below (i). Now, after the completion of step I, the following format will be prepared:

|   |                 | i<br>(vii) | ii | iii<br>(vi) | iv |
|---|-----------------|------------|----|-------------|----|
| 1 | Mukesh Verma    |            |    |             |    |
| 2 | Karishma Tiwari |            |    |             |    |
| 3 | Brijesh Shankar |            |    |             |    |
| 4 | Mansi Ranjan    |            |    |             |    |
| 5 | Subodh Saxena   |            |    |             |    |

**NOTE :** To differentiate between basic conditions and additional conditions. The additional conditions have been encircled.

### STEP II

At the 2<sup>nd</sup> step just see the given answer choices carefully and decide which combination of the conditions leads to which conclusion. If we see the given question format with serious eye, we find that the following combination can be formed.

$i + ii + iii + iv \rightarrow 2$  [Senior teacher]

$vii + ii + iii + iv \rightarrow 3$  [Case will be referred to GM]

$i + ii + vi + iv \rightarrow 1$  [Junior teacher]

When we have decided the above three combination giving answer choices remain and the answer choice (a), (b) and (c), two answer choices remain and they are answer choice (d) and answer choice (e). The answer choice (e), which says that the candidate is not to be selected, should be chosen when any one or more of the given conditions is violated. The answer choice (d), which tells that the data are inadequate, should be chosen when no information is given about any one or more conditions.

### How to examine data?

After step II you are required to read all the statements carefully. Just take each question one by one and compare then with the given conditions. Examinees are suggested to use following symbols while doing this comparison:

- I If a basic condition is fulfilled mark '✓' sign below it.
- II If a basic condition is violated and it is not attached with an additional condition then mark 'X' sign below it.
- III If a basic condition is violated but it is attached with an additional condition then.
- (A) Mark a '×' sign below it if additional condition is also violated.
- (B) Mark a '✓' sign below it if additional condition is fulfilled.
- IV In case of unavailability of any information about any condition, a mark '?' Will be put below that condition.

To understand point (i) to point (iv) let us see the presentation given below:

| Question No. | I | II/V | III/VI | IV |
|--------------|---|------|--------|----|
| 1            | ✓ | ✓    | ✓      | ×  |
| 2            | ✓ | ✓    | ✓      | ✓  |
| 3            | ✓ | (✓)  | (✓)    | ✓  |
| 4            | ✓ | ✓    | (×)    | ✓  |
| 5            | ✓ | ?    | ✓      | ✓  |

Now just see the explanation of above table:

- (1) I, II, III and IV are basic conditions while (V) and (VI) are two additional conditions. (V) is attached to II and (VI) is attached to III.
- (2) In question (1), I, II and III are satisfied while VI is violated
- (3) In question (2), all the basic conditions I, II, III and IV are satisfied
- (4) In question (3), the basic conditions I and IV are satisfied while II and III are violated. Though the basic conditions, II and III are violated, the additional conditions (IV) and (VI) are satisfied
- (5) In question (4), III and (VI) are violated but I, II and IV are satisfied
- (6) In question (5), No information is given about II or (V) but the basic condition I, III and IV are satisfied

### STEP III

- (i) One by one, read the questions very carefully and compare the facts given with the various condition.
- (ii) Mark the appropriate sign or '✓' or '×' (✓) or (×)? As required
- (iii) When a '×' or a (×) sign is obtained, then stop examining further and without any hesitation select the answer choice "not to be selected" for that particular question. In another words whenever you get '×' or (×) sign, do not take any botheration to examine the remaining condition, select your answer as "not to be selected and quickly move on to the next question. It so happens because, if a condition as well as its additional condition is violated, it does mean that one necessary requirement is not being fulfilled. Hence, we reach at a conclusion that the selection is not possible even if other conditions are fulfilled.

### STEP IV

Now, this is the time to select your answer choices on the pattern given below:

- (i) If find a '×' or (×) below any condition, go for the answer choice "not to be selected"
- (ii) If you find no cross mark but there is a question mark below any condition, your answer choice would be "data are inadequate".

- (iii) If you find neither any cross mark nor any question mark, then compare the combination with the three answer combinations obtained in step II and select the answer choice accordingly.

After understanding the above steps, now we are at a position of solving the question given in the question format. Let us see the solution:

**Solution:**

| Question No. |                 | (i) / (vii) | (ii) | (iii)/ (vi) | (iv) |
|--------------|-----------------|-------------|------|-------------|------|
| 1            | Mukesh Verma    | (✓)         | ✓    | ✓           | ?    |
| 2            | Karishma Tiwari | ✓           | ✓    | ✓           | ✓    |
| 3            | Brijesh Shankar | (×)         | ✓    | (✓)         | ✓    |
| 4            | Mansi Ranjan    | ✓           | ✓    | (✓)         | ×    |
| 5            | Subodh Saxena   | ✓           | ✓    | (✓)         | ✓    |

Condition (V) is attached to II while the additional condition is VI attached with the basic condition III.

### STEP WISE EXPLANATION OF ABOVE TABLE:

#### Step I

At the step I level, we read the question carefully and find out that there are four, basic conditions i, ii, iii and iv and two additional conditions vii and vi. further, it is clear that 'vii' is an exception of 'i' and 'vi' is an exception of 'iii'. Now we write the name of the candidates in extreme left and then put the basic conditions i, ii, iii and iv at the top-right of the candidate in question 1. Next, we write additional condition 'vii' below 'o' and additional condition 'vi' below 'iii'.

#### Step II

At the 2<sup>nd</sup> level, we look at the answer choices and prepare one answer combinations accordingly. This will be:

$$\begin{aligned} i + ii + iii + iv &\Rightarrow b \\ vii + ii + iii + iv &\Rightarrow c \\ i + ii + vi + iv &\Rightarrow a \end{aligned}$$

#### Step III

At the step III level, we read every question carefully and compare the facts given in it with the various conditions. Let us see the detailed analysis of every candidate question wise.

#### Q.1 Mukesh Verma

He is an M.Tech in computer engineering with 70% marks. This fulfills condition C. Hence we write '✓' mark below C. Next, his date of birth is 31<sup>st</sup> July, 1985. Here, we do a mental calculation that on 31<sup>st</sup> July, 2013 he turned 28<sup>th</sup>. This is the reason that on 1<sup>st</sup> November 2013, he is more than 28 years. Therefore, (i) is violated, but the additional condition of (i) is (vii) which is fulfilled and we write (✓) mark here. Further, Mukesh Verma is having a programming experience of 7 years (more than 2 years). So we mark (✓) below (ii). Lastly, there is no information about marks of Mukesh in the interview. Thus the sign of question mark '?' is put below d.

#### Q.2. Karishma Tiwari

Karishma is an MCA with 72% marks. This fulfills (iii), so we put the mark '✓' below (iii). Her date of birth is 14<sup>th</sup> August, 1990, So on 1<sup>st</sup> November, 2013, she is more than 23 years. This fulfills '(i)' and hence we put a (✓) mark below '(i)'. She is a computer teacher from last 4 years. This fulfills (ii) and we put (✓) mark below (ii), lastly, she has obtained 35 marks in the interview. This marks is more than the required 50% (25 marks out of 50 marks), therefore (iv) is also fulfilled and we put (✓) mark below (iv).

#### Q.3 Brijesh Shankar

He is an M. Tech. with 54% marks and this violates the basic conditions (iii). But it is also clear that an additional condition (vi) is attached to (iii) and we see that (vi) is fulfilled and thus a (✓) mark is put over there. This date of birth is 31<sup>st</sup> December, 1991, so he is certainly below 23 years in 2013. This violates basic condition '(i)'. We see that an additional condition (vii) is attached to '(i)' but (vii) too is violated. Hence we put a (×) mark here and stop our after for this question as we know that if a '×' or (×) is obtained then there is no need to go further and in this case we select our answer choice "not to be selected" and move on to the next question.

#### Q.4 Mansi Ranjan

She is an M.Sc. with 55% marks. This violates the basic condition '(iii)' but fulfills the attached additional condition (vi). Hence we put a (✓) mark over here. She is born in 1968, so it is clear that she is roughly 25 years old. Thus '(i)' is fulfilled and we put (✓) below '(i)'. She has a programming experience of 6 years. This fulfills (ii) and thus we put ✓ mark below (ii). She has got 40% marks in interview which is less than required 50% and thus is violates 'd' and we put '×' mark below '(iv)'.

#### Q.5 Subodh Saxena

He is an MCA with 54% marks. This violates (iii) but fulfills (vi). Hence, we put (✓) mark here. He has a programming experience of 4 years. This fulfills (ii) and we put (✓) mark below '(ii)'. He was born in 1969, so he is roughly 24 years old. Here '(i)' is fulfilled and we put (✓) mark below '(i)'. As he has got 50% marks in the interview, therefore (iv) is fulfilled and we put (✓) mark below '(iv)'.

#### Step IV

At 4<sup>th</sup> level we select the answer choices.

**Q.1** No cross mark. But a question mark is available. Hence data is inadequate.

Therefore correct answer is option d.

**Q.2**  $i + ii + iii + iv \Rightarrow b$  [step II]

Therefore, correct answer is option b.

**Q.3** A cross mark is available, Hence "not be selected" therefore, option e is the correct answer.

**Q.4** Option e is the correct answer as a cross mark exists.

**Q.5**  $i + ii + (vi) + iv \Rightarrow a$  [step II]

Hence correct option is option a.

# EXERCISE

**Directions(Qs.1-5):** Study the following information carefully and answer the questions given below:

Following are the eligibility criteria for becoming member of an exclusive club:

- (i) The applicant should have annual income of at least ₹5 lakhs and should be able to pay one-time membership fee of ₹1 lakh.
- (ii) The annual income and one-time membership fee is relaxed up to 50% for former defence personnel.
- (iii) For the sons and daughters of the existing members the criterion of annual income is reduced to ₹3 lakhs and membership fee to ₹70 thousand.
- (iv) Serving court judges are offered membership free and also the stipulation of annual income is waived.
- (v) A national level sports personnel is eligible to become a member by paying ₹20 thousand as membership fee irrespective of annual income.

Below in each question, data/information about an individual is given. You have to decide, based on the information provided, under which criterion/criteria the individual is eligible to obtain membership. Please note that an individual can be eligible under more than one criteria. You are not to assume anything other than the information provided in each question.

1. Ashok Malhotra has been working in a Private Airlines Company as a pilot. His annual income is ₹10 lakhs. He is ready to pay ₹50 thousand as one-time membership fee. His father is a retired army officer.
  - (a) Not eligible
  - (b) Eligible under (ii) and (iii) only
  - (c) Eligible under (ii) only
  - (d) Eligible under (iv) only
  - (e) None of these
2. Navin Singh can pay ₹70 thousand as membership fee. He has been playing in the national football team and he works in a major public sector bank in the country. His father is a member of the club.
  - (a) Not eligible
  - (b) Eligible under (v) only
  - (c) Eligible under (iii) and (v) only
  - (d) Eligible under (iv) only
  - (e) None of these
3. Prabhu Sharma's annual income is ₹6 lakhs. He is a retired judge of the supreme court. He can pay ₹1 lakh as the membership fee. He played cricket for his home state.
  - (a) Not eligible
  - (b) Eligible under (i) and (v) only
  - (c) Eligible under (i) only
  - (d) Eligible under (i) and (iii) only
  - (e) None of these
4. Meena Jaswani is daughter of an existing member of the club. Her annual income is ₹4 lakh. She can pay ₹80 thousand as membership fee. She works in Indian Navy.
  - (a) Eligible under (i) and (iii) only
  - (b) Eligible under (i) and (iv) only

- (c) Eligible under (iii) only
- (d) Eligible under (iv) only
- (e) Eligible under (iii) and (iv) only

5. Shobha Patil works in a bank. She represents National Badminton team. Her father is retired judge of the local high court. Her annual income is ₹6 lakhs. She can pay ₹1 lakhs as membership fee.
  - (a) Eligible under (i) only
  - (b) Eligible under (v) only
  - (c) Eligible under (i) and (ii) only
  - (d) Eligible under (i) and (v) only
  - (e) None of these

**Directions (Qs. 6-10):** Study the following information carefully and answer the questions given below:

Following are the criteria for granting admission to the candidates in the Post-Graduate course in Software Technology:

The candidate must:

- (A) have engineering degree with 65% marks.
- (B) not be more than 28 years of age as on 1.12.2010.
- (C) have obtained at least 50% marks in the entrance test.
- (D) pay a sum of ₹1,00,000 at the time of admission as course fee.

However, if a candidate fulfils all the criteria except:

- (i) D above, but can pay the fee in two installments, the case may be referred to the Director of the Institute.
- (ii) B above, but he/she has passed post-graduation exam in science with 75% marks, his/her case may be referred to the Admission Coordinator.

**Based on the above criteria and information provided against each candidate take a decision in each case. You are not to assume anything. If the data given are not adequate to take a decision mark your answer 'Data inadequate'. The following cases are given to you as on 1.12.2010. Give answer:**

- (a) if the candidate is to be admitted
- (b) if the candidate is not to be admitted
- (c) if the case is to be referred to the director
- (d) if the case is to be referred to the admission coordinator
- (e) if data are inadequate
6. Sneha was 26 years old as on 3rd March, 2010. She has secured 75% marks in post-graduation in chemistry and she is ready to pay ₹1,00,000 at the time of admission. She has secured 72% marks in graduation in engineering and the entrance test.
7. Ashutosh has secured 62% and 68% marks in the entrance test and graduation in engineering respectively. He was 27 years old as on 1 April, 2010. He can pay ₹1,00,000 at the time of admission.
8. Rishikant was 26 years old as on 22 January, 2007. He has secured 65% marks in graduation in engineering and 83% marks in post-graduation in physics. He has secured 60% marks in the entrance test. He is ready to pay ₹1,00,000 at the time of admission.

9. Damodar was born on 19 May, 1985. He has secured 60% and 73% marks in the entrance test and post-graduation respectively. He is ready to pay ₹ 1,00,000 at the time of admission.
10. Khemchand has secured 69% and 65% marks in graduation in engineering and the entrance test respectively. He was born on 10 November, 1983. He is ready to pay ₹ 75,000 at the time of admission and the rest ₹ 25,000 after three months.

**Directions (Qs. 11-17):** A public charitable trust desires to select 'Medical Officers' for its rural hospital based on following criteria. The applicant must

- be holding MBBS degree with minimum 50% marks.
  - have minimum 4 years of experience of full-time practice in rural areas.
  - be ready to execute a bond of 3 years of service.
  - have good knowledge of the local language.
- In case of the applicant who satisfies all other criteria except—
- at (B) above, but has 4 years of full-time experience of either urban or semi-urban area and spent at least 5 years in rural area any time during his life, be referred to Secretary of the Trust.
  - at (D) above, but has working knowledge of Hindi, be referred to Assistant Secretary of the Trust.
  - at (A) above, but has minimum 45% of marks at MBBS and has done MS or MD with minimum 50%, be referred to the Chief Medical Officer (CMO).
  - at (C) above, but is ready to give ₹ 25,000 as security money, be referred to the President of the Trust.
- Based on these criteria and the information provided below, decide the course of action in each case. You are not to assume anything. If the data provided is not adequate to decide the given course of action, your answer will be 'data inadequate'. All cases given to you fulfil criterion of age and therefore, no details of age are provided. The cases are given to you today.
11. Sidhant has studied in rural areas while doing his schooling. His father is a farmer. Sidhant completed his MBBS from Mumbai and has six years of experience of practice in a big city. He has good knowledge of the local language and working knowledge of Hindi. He is ready to execute 3 years bond of service. He has done MS with 53% marks.
- To be selected
  - Data inadequate
  - Refer to the CMO
  - Not to be selected
  - Refer to the Secretary
12. Mangesh has secured 47% marks at MBBS and has done his MD with 62% marks. He has 5 years of experience of running a dispensary in a village and can read, write and speak the local language. He is ready to give a bond of only two years of service and is unable to give security money as he wants to start a rural hospital afterwards in Andhra Pradesh.
- Data inadequate
  - To be selected
  - Not to be selected
  - Refer to the President of the Trust
  - Refer to the CMO
13. Romila is born and brought up in a big urban city. Her father is an industrialist. She has secured 87%, 56% and 48% at HSC, MBBS and MD respectively. She is willing to give a bond of 3 years of service. She has worked for 5 years in a

rural hospital but can hardly speak the local language. However, she has working knowledge of Hindi. After this experience she plans to settle abroad.

- Refer to Asst. Secretary
  - Refer to President
  - To be selected
  - Not to be selected
  - Data inadequate
14. Dr Murthy has stood first at MBBS after having obtained 78% marks. He has also completed MS with distinction. As he is planning to go abroad he is unwilling to give three years bond of service. Dr Murthy is fluent in the local language. He has six years of experience of practice in a rural hospital and he is not in a position to give ₹ 25,000 as security money.
- Refer to the President
  - To be selected
  - Not to be selected
  - Data inadequate
  - None of these
15. Jenifer did her MD after doing her MBBS. She is ready to execute three years bond of service. She has good command over local language as well as Hindi. She has practised for  $5\frac{1}{2}$  years in a remote village out of her love for social service. She has obtained 77%, 88%, 47% and 56% at SSC, HSC, MBBS, and MD respectively
- Refer to Assistant Secretary
  - Data inadequate
  - To be selected
  - Not to be selected
  - None of these
16. Iqbal Kureshi, son of a local politician, has been born and brought up in a village till SSC. Afterwards he studied in a big city and did his MBBS with 69% of marks followed by MS with 57% marks. He is ready to execute a bond of service for 3 years only. He has very good knowledge of the local language. He has done  $4\frac{1}{2}$  years practice in the urban areas. He plans to start a rural hospital after this experience.
- Refer to the Secretary
  - Refer to the CMO
  - Data inadequate
  - To be selected
  - Not to be selected
17. Durga, after obtaining her MBBS and MS, decided to practise in her native village for five years. She knows the local language very well. Her dispensary and small hospital were very popular in the nearby villages. She plans to go to USA and UK after spending 4 more years in India. She has secured more than 60% marks in all the examinations right from SSC to MS. She is ready to execute a bond of 3 years of service.
- Refer to CMO
  - Not to be selected
  - Data inadequate
  - To be selected
  - None of these

**Directions (Qs. 18-25):** Study the following information carefully and answer the questions given below:

Following are the criteria for recruiting Managers in an organisation:

The candidate must

- be a graduate with at least 60% marks or a post-graduate with 60% marks either at graduation or at post graduation.
- not be less than 23 years and not more than 30 years as on 1.6.2013.
- have secured at least 50% in the competitive written examination and at least 40% marks in the interview.

- D have at least three years' work experience after completing graduation and/or post-graduation.  
In the case of a candidate who satisfies all the criteria except at
- (i) A above, but has obtained a PhD degree, his/her case, is to be referred to the Managing Director.
  - (ii) B above, but has, put in more than five years of work experience, his/her case is to be referred to the Chairman.

Now, based on the criteria and waivers given above and the information provided in each of the following questions, you have to decide a proper course of action as regards status of the candidates. You have are not to assume anything other than the information provided in each question. These cases are given to you as on 1.6.2013. You have to pick-up one of the following answers.

**Mark answer (a)** if the candidate is not to be recruited.

**Mark answer (b)** if the case is to be referred to the Chairman.

**Mark answer (c)** if the candidate is to be referred to the Managing Director.

**Mark answer (d)** if the candidate is to be recruited.

**Mark answer (e)** if the data provided is not adequate to take a decision.

18. Adesh Kulkarni has secured 65% marks in his post graduation. He was born on 21st April 1986. He has secured 55% and 45% marks in the competitive written examination and. interview respectively. He has been working for the last five years after his post-graduation.
19. Suresh Oberoi secured 65% marks in post-graduation at the age of 26 in the year 2007. He has been working since then. He has secured 55% and 40% marks in the competitive written examination and interview respectively.
20. Vidisha Ghosh has secured 65% and 60% marks in the competitive written examination and interview respectively. She has also obtained her PhD degree. She was born on 25th November, 1986. She has secured 55% marks in both graduation and post-graduation.
21. Jayant Desai was 28 years old as on 1.7.2011. He has secured 45% and 60% in graduation and post-graduation respectively. He has been working for the last three years after his post-graduation. He has secured 60% marks in the interview.
22. Joseph D'Souza is a first-class post-graduate in Economics. He has been working for four years since then. He has secured 50% and 40% marks in the competitive written examination and interview respectively. He was born on 11th May 1983.
23. Neha Khoobchandani was born on 27th October 1982. She has been working for the last seven years after her graduation in which she secured 65% marks. She has secured 45% and 55% marks in competitive written examination and interview respectively.
24. Arun Bhosle was born 2nd January 1989. He has been working for the last three years after obtaining his PhD in management. He has secured 50% and 55% marks in the competitive written examination and interview respectively; He has secured 55% marks in post-graduation.
25. Usha Agrawal has been working for the last eight years after her graduation, She, has secured 65% and 55% marks in competitive written examination and interview respectively. She was born on 10th August 1985. She is a first-class graduate.

**Directions (Qs. 26-30) :** Read the following information carefully and answer the questions given below

Following are several eligibility criteria for applying for the post of Manager, IT in an organization :

- (i) The candidate should be a postgraduate in Computer Science or information Technology with at least two years' work experience.
  - (ii) The candidate should be a postgraduate in Mathematics/Statistics with one-year post graduate diploma in Computer Science/Information Technology and at least five years' work experience.
  - (iii) The candidate should be an engineer with specialisation in Computer Science/Information Technology with at least six years' work experience.
  - (iv) The candidate should be a graduate having Mathematics as one of the subjects, Master's degree in Computer Applications and at least three years' work experience.
  - (v) The candidate should be a postgraduate engineer in Electronics and have work experience of at least one year.
- An applicant can be eligible under one or more of the conditions given above:  
In each question below, details of a candidate are given. You have to study the information provided and decide under which criteria the candidate will be eligible and then find out the appropriate answer given below each question. You are not to assume anything other than the information provided.
26. Mrinal Awasthi has completed her postgraduation in Information Technology after completing her postgraduate degree in Engineering with Electronics. She has been working for the last fifteen months.
    - (a) Eligible under (i) and (v) only
    - (b) Eligible under (ii) and (v) only
    - (c) Eligible under (v) only
    - (d) Eligible under (ii) only
    - (e) Not eligible
  27. Jacob Mistry completed his postgraduation in Mathematics. He then completed his postgraduation in Information Technology. He has been working for the last two years.
    - (a) Eligible under (i) and (ii) only
    - (b) Eligible under (i) and (iii) only
    - (c) Eligible under (i) only
    - (d) Eligible under (ii) only
    - (e) Not eligible
  28. Ketan Shah is a graduate engineer in Information Technology. He then completed a postgraduate engineering course in Electronics. He has been working for the last eight years.
    - (a) Eligible under (i) only
    - (b) Eligible under (iii) and (v) only
    - (c) Eligible under (v) only
    - (d) Eligible under (i) and (ii) only
    - (e) Not eligible
  29. Arun Singh has completed his graduation in Computer Science. He has also obtained Master's degree in Computer Applications. He has been working for the last seven years.
    - (a) Eligible under (ii) only
    - (b) Eligible under (iv) only
    - (c) Eligible under (iii) and (v) only
    - (d) Eligible under (iii) and (iv) only
    - (e) Not eligible

30. Sushil Phandse is a first-class Science graduate. He then completed his Master's degree in Computer Applications. He has been working for the last four years. He has also obtained a diploma in Information Technology.
- Not eligible
  - Eligible under (iv) only
  - Eligible under (iii) and (iv) only
  - Eligible under (ii) and (iv) only
  - Eligible under (ii) only

**Directions (Qs. 31-35):** Read the following information carefully and answer the questions given below: Following are the conditions for shortlisting candidates for the post of Customer Relations Officers (CRO) for XYZ Ltd.

The candidate to be called for interview must

- be a graduate in Science, i.e., B.Sc., with minimum 55% marks.
  - have at least 3 years experience in selling/marketing.
  - have participated in debating or drama or sports at the intercollegiate level onwards.
  - have secured minimum 60% marks in the Written Examination (WE).
  - be ready to deposit ₹10,000 as security deposit. However, in case of a candidate who fulfils all these criteria except
- (iv) above, but has secured minimum 60% at B.Sc., may be referred to the Chief Manager, Customer Relations (CR).
  - (i) above, but has passed M.Sc., i.e., Post-Graduation in Science, with minimum 50% marks, may be referred to DGM (CR).

Based on these criteria and information provided below, decide the course of action in each case. You are not to assume anything. If the data provided is not adequate to decide the given course of action, your answer will be 'data inadequate'. All the candidates given below fulfil the criterion for age.

Mark answer

- Selected for interview
  - Not to be selected
  - Data inadequate
  - Refer to the Chief Manager (CR)
  - Refer to the DGM (CR)
31. Rohan is the son of a marketing executive. Rohan has obtained many prizes in inter-university debates and drama events. He has worked as marketing executive for 5 years after completing his B.Sc. and M.B.A., with 62% and 70% marks respectively. He is ready to give security deposit of ₹10,000. He has obtained 65% marks in WE.
32. Kamal Kanchan has 6 years experience in marketing cosmetic products. She has done her B.Sc., M.Sc. and M.B.A. with 65%, 56% and 62% marks respectively. She is ready to pay the security deposit. She is good at debating and has won many prizes in inter-college/university events. She is interested in social work.
33. Dinkar has won many prizes in sports at the inter-college/university level. He has seven years experience in direct sales. He has scored 65%, 56%, and 53% marks in WE, B.Sc. and M.Sc. respectively. He is ready to give security deposit and desires to make a career in selling.
34. Krupa is a successful sportsperson having won several prizes in sports and debating at intercollegiate level onwards. At B.Sc., M.Sc. and WE, she has obtained 62%, 55% and 65% marks respectively. She has 5 years experience in sales. Her father is a successful businessman.

35. Jadunath is a Science graduate having done postgraduate diploma in Journalism. He is having 4 years experience of marketing consumer products. He is ready to deposit ₹10,000 as security deposit. He had been participating in dramas at the intercollegiate level and above and has won many prizes. He has secured 58% and 65% marks respectively at WE and B.Sc. respectively.
36. Chandrakant is a 30-year-old officer who has worked as sales representative for five years. He is a keen sportsman and actor and has won many prizes in college-university level events. He is ready to pay security deposit of ₹10,000. He has obtained 67%, 58% and 55% marks at B.Sc., WE and Diploma in Business. Management respectively.
37. Deepali is a 26-year-old girl having obtained 60% marks at post-graduation, i.e., M.Sc., and 53% and 64% at B.Sc. and WE respectively. Deepali has worked as sales executive for three-and-a-half years. She has obtained many prizes in inter-collegiate events in debating and is ready to deposit ₹10,000 as security deposit.

**Directions (Qs. 38-44) :** Read the following information and answer the questions given below :

A business house desires to recruit Marketing Manager based on the following criteria.

The candidate must :

- be having an MMM (Master's degree in Marketing Management) with 55% or above marks
- have minimum 60% marks at graduation
- have at least 3 years experience as Assistant Marketing Manager
- provide a security deposit of ₹50,000

However, if a candidate fulfils all the other criteria except at

- 'C' but has at least five years of marketing experience out of which 2 years as Assistant Marketing Manager, be referred to Chief Manager.
- 'D', but can give a bond of service for 3 years, be referred to A.G.M.
- 'A', but has more than 70% marks at graduation and minimum 50% at M.M.M., be referred to DGM.

The age limit is between 27 years and 32 years and all the cases given below fulfil this requirement. Now, based on the above criteria and the information given below, you have to take decision in regard to each case. You are not to assume any information. No further information is available. Mark answer if

- to be referred to DGM
  - to be referred to AGM
  - to be referred to Chief Manager
  - the candidate is to be selected
  - the candidate is to be rejected
38. Punam Mitra is a dynamic lady having 7 years of marketing experience, out of which 4 years as Assistant Marketing Manager. She has less than 55 per cent marks at MMM but is a keen sportswoman. She has 65% marks at graduation and 72% marks at post-graduation in English literature. She can pay ₹50,000 as security deposit.
39. Mohan Balwani comes from a rich family. He has done his MMM with 60 per cent marks and has secured 57 per cent at graduation. He has 6 years of marketing experience, of which 3 years as Assistant Marketing Manager in a big company. He is ready to provide bond of service as well as security deposit of ₹50,000. His father was a reputed businessman.
40. Sneha Bhat is ready to pay ₹50,000 as security deposit. She has seven years of marketing experience but was

- promoted as Assistant Marketing Manager only two-and-a-half years ago. She has excellent academic record having 70 per cent and above marks right from graduation to MMM.
41. Mulayam Bahl has done his MMM after doing his B.Com. and M.Com. He joined as Marketing Trainee and after two years became Assistant Marketing Manager. After four years as Assistant Marketing Manager he has been promoted as Deputy Marketing Manager. He can give ₹ 50,000 as security deposit. He has 65 per cent, 50 per cent and 57 per cent marks at B.Com., M. Com. and at MMM respectively.
  42. Ajinkya Deo has been securing 70 per cent and above marks right from SSC to graduation and at MMM also. He is ready to pay security deposit of ₹ 50,000. He has 5 years experience in marketing, out of which three-and-a-half years as Assistant Marketing Manager.
  43. Chintan De Souza has done his B.Tech. (Engineering Degree) from I.I.T. Kharagpur and his MMM from a prestigious management institute. He joined as Marketing Trainee and in one year became Assistant Marketing Manager. After working for 3 years he was promoted as Deputy Marketing Manager two years ago. He desires to give bond of service for 3 years. His marks at graduation and MMM are 65 per cent and 60 per cent respectively.
  44. Keval Sharma has 8 years of total marketing experience. For last four years he has been working as Assistant Marketing Manager. He is ready to give ₹ 50,000 as security deposit. He was sick at MMM examination and secured 53 per cent marks. His father is a lawyer. Keval has secured 75% and above marks at SSC, HSC as well as at graduation.

**Directions (Qs. 45-50):** Study the following information carefully to answer the questions given below:

The Institute of Technology runs BC college of Engineering. It applies following criteria for selection of students for admission to the BC College. The student should

- A have been born **before** 1.3.81 and **after** 28.2.78
- B have obtained minimum 80% marks in aggregate and minimum 90% marks in Maths and Science at HSC,
- C have passed intermediate drawing examination conducted by the State government.
- D be willing to pay a deposit of ₹ 15,000 as laboratory security
- E be found physically fit in the medical examinations being conducted by the institute.

- However, if the student fulfills all other criteria except
- (i) criteria B, but has obtained minimum 85% marks in aggregate as well as in Maths and Science his case may be referred to the Vice-President of the institute.
  - (ii) criteria C, but has won award in inter-school drawing competition, his case may be referred to the Principal of the college.
  - (iii) criteria D, but is a relative of a member of Board of Trustees of the institute, his case may be referred to the chairman of the admission committee.

Based on the above criteria and the information given in each case, you have to take a decision. You are not to assume anything. These cases are given to you as on 28.2.1999.

**Mark Answer If**

- (a) the student is to be admitted
  - (b) the student is to be referred to Vice-President of the Institute
  - (c) the student is to be referred to the Principal of college
  - (d) the student is to be referred to the chairman of the admission committee
  - (e) the student is not to be admitted
45. Ninad, the only son of a Chartered Accountant who is also a trustee of the Institute has passed the drawing examination of state and has just passed HSC examination securing more than 90% marks in aggregate as well as in Maths and Science. His date of birth is 15.6.1980. He is physically fit as per the medical examination report of the institute. He cannot pay more than ₹ 10,000 against the security deposit. He has passed the state level intermediate drawing examination with grade B.
  46. Narendra, whose date of birth is 21.4.79, is a student of Electrical Engineering diploma course. He has scored 85% marks in aggregate and 89% marks in Maths and Science at HSC examination. He has done a part-time course in computer operating. He is medically fit as reported by the Institute's team. He has passed the state level intermediate drawing examination in 1994, obtaining 'A' grade. He has no problem in paying the amount of deposit.
  47. Sunita has passed HSC examination with 82% marks in aggregate and 92% marks in Maths and Science. She is found fit in the medical examination and can pay the required amount of deposit. Her date of birth is 1.3.81. She has passed the state level intermediate drawing examination.
  48. Virendra, born on 19th January 1980, has passed the HSC examination with 91% marks in Maths and Science and an aggregate score of 84%. He will manage to pay the amount of ₹ 15,000 as security deposit to the institute. He is medically fit as per the report of the institute's team of doctors. He has passed intermediate drawing examination of the state. However, he could never win a prize in any of the inter-school drawing competitions.
  49. Ravi, an 18-year-old boy, is the nephew of an industrialist who is a trustee of the institute. Although he did not appear in the drawing examination of state he has won gold medal in an interschool drawing competition. His aggregate marks in HSC is 81% and the marks in Maths and Science are 91%. He is found to be physically fit by the team appointed by the institute. He is not in a position to pay any amount against deposit.
  50. Sujit, a 20-year-old boy, has passed his HSC examination securing 87% marks in aggregate and 88% marks in Maths and Science. He is willing to deposit ₹ 15,000 as lab security deposit and is found fit by the team of doctors conducting medical examination. He has passed the intermediate drawing examination of the state.

## ANSWER KEY

|   |     |    |     |    |     |    |     |    |     |    |     |    |     |    |     |    |     |
|---|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|
| 1 | (a) | 7  | (a) | 13 | (a) | 19 | (b) | 25 | (d) | 31 | (a) | 37 | (e) | 43 | (d) | 49 | (e) |
| 2 | (b) | 8  | (d) | 14 | (c) | 20 | (e) | 26 | (c) | 32 | (c) | 38 | (e) | 44 | (a) | 50 | (b) |
| 3 | (c) | 9  | (e) | 15 | (e) | 21 | (e) | 27 | (c) | 33 | (a) | 39 | (e) | 45 | (d) |    |     |
| 4 | (c) | 10 | (c) | 16 | (a) | 22 | (a) | 28 | (b) | 34 | (c) | 40 | (c) | 46 | (b) |    |     |
| 5 | (d) | 11 | (b) | 17 | (e) | 23 | (a) | 29 | (e) | 35 | (d) | 41 | (d) | 47 | (e) |    |     |
| 6 | (a) | 12 | (c) | 18 | (d) | 24 | (c) | 30 | (a) | 36 | (d) | 42 | (d) | 48 | (a) |    |     |



# Hints & Explanations

(1-5) :

| Q. No. | Person | i | ii | iii | iv | v | Answer |
|--------|--------|---|----|-----|----|---|--------|
| 1.     | Ashok  | × | ×  | ×   | ×  | × | (a)    |
| 2.     | Navin  | × | ×  | ×   | ×  | √ | (b)    |
| 3.     | Prabhu | √ | ×  | ×   | ×  | × | (c)    |
| 4.     | Meena  | × | ×  | √   | ×  | × | (c)    |
| 5.     | Shobha | √ | ×  | ×   | ×  | √ | (d)    |

(6 – 10)

|     | A | B/(ii) | C | D/(i) | Answer |
|-----|---|--------|---|-------|--------|
| 6.  | √ | √      | √ | √     | (a)    |
| 7.  | √ | √      | √ | √     | (a)    |
| 8.  | √ | (√)    | √ | √     | (d)    |
| 9.  | — | √      | √ | √     | (e)    |
| 10. | √ | √      | √ | (√)   | (c)    |

 $A + B + C + D = \text{Option a}$  $A + (ii) + C + D = \text{Option d}$  $A + B + C + (i) = \text{Option c}$  $A + (ii) + C + (i) \text{ or}$ 

Anything not fulfilling = Option b

Anything not given = Option e

(11-17):

| Q.No | A/(iii) | B/(i) | C/(iv) | D/(ii) | Answer |
|------|---------|-------|--------|--------|--------|
| 11.  | —       | √     | (√)    | √      | (b)    |
| 12.  | (√)     | √     | ×      | √      | (c)    |
| 13.  | √       | √     | √      | (√)    | (a)    |
| 14.  | √       | √     | ×      | √      | (c)    |
| 15.  | (√)     | √     | √      | √      | (e)    |
| 16.  | √       | (√)   | √      | √      | (a)    |
| 17.  | √       | ×     | √      | √      | (e)    |

 $A + B + C + D = \text{Selected}$  $(iii) + B + C + D = \text{referred to CMO}$  $A + (i) + C + D = \text{referred to Secretary}$  $A + B + (iv) + D = \text{referred to President}$  $A + B + C + (ii) = \text{referred to Assistant Secretary}$ 

Any other combination = not to be selected

Anything missing = Data inadequate

(18-25) :

| Q. No. | A/(i) | B/(ii) | C | D | Answer |
|--------|-------|--------|---|---|--------|
| 18.    | √     | √      | √ | √ | (d)    |
| 19.    | √     | (√)    | √ | √ | (b)    |
| 20.    | (√)   | √      | √ | — | (e)    |
| 21.    | √     | √      | — | √ | (e)    |
| 22.    | √     | ×      | √ | √ | (a)    |
| 23.    | √     | (√)    | × | √ | (a)    |
| 24.    | √     | √      | √ | √ | (c)    |
| 25.    | √     | √      | √ | √ | (d)    |

(26-30) :

| Q.No | Condition Person | (i) | (ii) | (iii) | (iv) | (v) |
|------|------------------|-----|------|-------|------|-----|
| 26.  | Mrinal           | ×   | ×    | ×     | ×    | √   |
| 27.  | Jacob            | √   | ×    | ×     | ×    | ×   |
| 28.  | Ketan            | ×   | ×    | √     | ×    | √   |
| 29.  | Arun             | ×   | ×    | ×     | ×    | ×   |
| 30.  | Sushil           | ×   | ×    | ×     | ×    | ×   |

26. (c) 27. (c) 28. (b) 29. (e) 30. (a)

(31-35) :

| Q.No | i/(B) | ii | iii | iv/(A) | v | Answer |
|------|-------|----|-----|--------|---|--------|
| 31.  | √     | √  | √   | √      | √ | (a)    |
| 32.  | √     | √  | √   | —      | √ | (c)    |
| 33.  | √     | √  | √   | √      | √ | (a)    |
| 34.  | √     | √  | √   | √      | — | (c)    |
| 35.  | √     | √  | √   | (√)    | √ | (d)    |
| 36.  | √     | √  | √   | (√)    | √ | (d)    |
| 37.  | (√)   | √  | √   | √      | √ | (e)    |

 $(i) + (ii) + (iii) + (iv) + (v) = \text{Option (a)}$  $(i) + (ii) + (iii) + (A) + (v) = \text{Option (d)}$  $(B) + (ii) + (iii) + (iv) + (v) = \text{Option (e)}$ 

Anything missing = Option C

(38-44) :

| Q.No | A/(iii) | B   | C/(i) | D/(ii) | Answer |
|------|---------|-----|-------|--------|--------|
| 38.  | (×)     | √   | √     | √      | (e)    |
| 39.  | √       | (×) | √     | √      | (e)    |
| 40.  | √       | √   | (√)   | √      | (c)    |
| 41.  | √       | √   | √     | √      | (d)    |
| 42.  | √       | √   | √     | √      | (d)    |
| 43.  | √       | √   | √     | √      | (d)    |
| 44.  | (√)     | √   | √     | √      | (a)    |

(45-50) :

| Q.No | A | B/(i) | C/(ii) | D/(iii) | E | Answer |
|------|---|-------|--------|---------|---|--------|
| 45.  | √ | √     | √      | (√)     | √ | (d)    |
| 46.  | √ | (√)   | √      | √       | √ | (b)    |
| 47.  | × | √     | √      | √       | √ | (e)    |
| 48.  | √ | √     | √      | √       | √ | (a)    |
| 49.  | √ | √     | (√)    | (√)     | √ | (e)    |
| 50.  | √ | (√)   | √      | √       | √ | (b)    |

 $A + B + C + D + E = \text{option a}$  $A + (i) + C + D + E = \text{option b}$  $A + B + (ii) + C + D = \text{option c}$  $A + B + C + (iii) + E = \text{option d}$ 

any other combination = option e