Table :
Q1 to Q4 are based on the table and information given below. Answer the questions based on it(1994) :
Bankatlal works x hours a day and rests y hours a day. This pattern continues for 1 week, with an exactly opposite pattern next week, and so on for four weeks. Every fifth week he has a different pattern. When he works longer than he rests, his wage per hour is twice what he earns per hour when he rests longer than he works.
The following are his daily working hours for the weeks numbered 1 to 13.

	1st week	5th week	9th week	13th week
Rest	2	3	4	-
Work	5	7	6	8

A week consists of six days and a month consists of 4 weeks.

Q1 . If Bankatlal is paid Rs. 20 per working hour in the 1st week. What is his salary for the 1st month?
(a) Rs.1760
(b) Rs.1440
(c) Rs.1320
(d) Rs.1680

Q2. Referring to the data given in Q.187, Bankatlal's average monthly salary at the end of the first four months will be ?
(a) Rs.1780
(b) Rs.2040
(c) Rs.1830
(d) Rs.1680

Q3. The new manager Khushaldas stipulated that Rs.5 be deducted for every hour of rest and Rs. 25 be paid per hour starting 9th week, then what will be the change in Bankatlal's salary for the 3rd month? (Hourly deductions are constant for all weeks starting 9th week)
(a) Rs.540
(b) Rs.480
(c) Rs.240
(d) Rs.120

Q4. Using the data in the previous questions, what will be the total earning of Bankatlal at the end of sixteen weeks ?
(a) Rs.7320
(b) Rs.7800
(c) Rs.8400
(d) Rs.9600

Directions for questions 5 and 6 Answer the questions based on the following information(1999):
The following table presents the sweetness of different items relative to sucrose, whose sweetness is taken to be 1.00.

Lactose	0.16
Maltose	0.32
Glucose	0.74
Sucrose	1.00
Fructose	1.70
Saccharin	675.00

Q5 . What is the minimum amount of sucrose (to the nearest gram) that must be added to one gram of saccharin to make a mixture that will be at least 100 times as sweet as glucose?
a. 7 b. 8 c. 9 d. 100

Q6 Approximately how many times sweeter than sucrose is a mixture consisting of glucose, sucrose and fructose in the ratio of 1 : 2 : 3?
a. 1.3 b. 1.0 c. 0.6 d. 2.3

DIRECTIONS Q7 to Q12 (2002): Study the following tables carefully and answer the questions that follow.
There are 6 refineries, 7 depots, 9 districts. The refineries are BB, BC, BD, BE, BF, BG. The depots are AA, AB, AC, AD, AE, AF and AG and the districts are AAA, AAB, AAC, AAD, AAE, AAF, AAG, AAH, AAI.
Table A shows the cost of transporting one unit from refinery to depot.
Table B shows the cost of transporting one unit from depot to districts.

Table A

	BB	BC	BD	BE	BF	BG
AA	928.2	537.2	567.8	589.9	800.1	323.4
AB	311.8	595.7	885.7	759.9	793.1	420.1
AC	451.1	0	320.1	720.1	1000.1	404.5
AD	371.1	50.1	350.1	650.4	980.1	525.3
AE	1137.3	314.5	0	1157.7	406.3	617.5
AF	617.1	516.8	756.5	1065.9	623.9	509.4
AG	644.3	299.2	537.2	1093.1	725.8	827.4

Table B

	AA	AB	AC	AD	AE	AF	AG
AAA	571.1	205	352	159	434.5	178	337
AAB	200	337.5	291	201	0	980.7	434
AAC	100	0	275	277	850	770.5	835
AAD	0	415.7	350	760	300	560	444.7
AAE	223.5	300	440	1033	880	325	526.5
AAF	577.5	725	443.5	560	1035.3	570	530
AAG	340	410.6	886.7	0	800.7	680.5	800
AAH	627	556.5	1023	1024	759	1025.7	300
AAI	439	738	980	1031.7	1024	900	757

Q7. The minimum cost of sending one unit from any refinery to any district is
(1) Rs.0 (2) Rs.350 (3) Rs.320 (4) Rs.50

Q8. How many possible ways are there for sending one unit from any refinery to any district?
(1) 63 (2) 42 (3) 54 (4) 378

Q9. The largest cost of sending one unit from any refinery to district is
(1) Rs.2172.60 (2) Rs.2193.0 (3) Rs.2091.0 (4) None of the above

Q10. The minimum cost of transportation of one unit from refinery BD to any district is
(1) Rs.125 (2) Rs.0 (3) Rs.375 (4) None of the above

Q11. The minimum cost of transportation from any refinery to AAG district is
(1) Rs.0 (2) Rs.137 (3) Rs.140 (4) None of the above

Q12. The minimum cost of transportation from refinery BE to district AAA is
(1) Rs.1257 (2) Rs.1161 (3) Rs.1231 (4) None of the above

DIRECTIONS Questions 13 to 16 (2002): Read the data given below and answer the questions that follow.

In a country, the following signals are applicable

3 Red Lights	Stop
2 Red Lights	Turn Left
1 Red Light	Turn Right
3 Green Lights	Go @ 100 kmph
2 Green Lights	Go @ 40 kmph
1 Green Light	Go @ 20 kmph

A man headed towards north and follows the given signals as

Starting point	1 Green Light
After half-an-hour, 1st Signal	2 Red and 2 Green Lights
After 15 minutes, 2nd Signal	1 Red Light
After half-an-hour, 3rd Signal	1 Red and 3 Green Lights
After 24 minutes, 4th Signal	2 Red and 2 Green Lights
After 15 minutes, 5th & Last Signal	3 Red Lights

Q13. What is the total distance covered by the man till the last signal?
(1) 90 km (2) 120 km (3) 110 km (4) 84 km

Q14. What is his net displacement with respect to the starting point?

(1) 40 km towards South West (2) 50 km towards North East
(3) 40 km towards North East (4) 60 km towards South West

Q15. If the first signal after the starting point, is 1 Red and 2 Green lights, then what is the total distance covered by the man till the last signal?
(1) 90 km (2) 50 km (3) 40 km (4) 80 km

Q16. Instead of heading North, if the man was heading South, then by the end of the journey, he was
(1) 50 km towards South, 50 km towards West from his starting point.

(2) 50 km towards North, 50 km towards West from his starting point.
(3) 60 km towards North, 40 km towards West from his starting point.
(4) 40 km towards South, 30 km towards West from his starting point.

Directions for questions 17 to 19: Answer the questions on the basis of the information given below.
The table below provides certain demographic details of 30 respondents who were part of a survey. The demographic characteristics are: gender, number of children, and age of respondents. The first number in each cell is the number of respondents in that group. The minimum and maximum age of respondents in each group is given in brackets. For example, there are five female respondents with no children and among these five; the youngest is 34 years old, while the oldest is 49.

No. of children	Male	Female	Total
0	1 (38, 38)	5 (34, 49)	6
1	1 (32, 32)	8 (35, 57)	9
2	8 (21, 65)	3 (37, 63)	11
3	2 (32, 33)	2 (27, 40)	4
Total	12	18	30

Q17 The percentage of respondents aged less than 40 years is at least___.
(1) 10% (2) 16.67% (3) 20.0% (4) 30%

Q18 Given the information above, the percentage of respondents older than 35 can be at most___.
(1) 30% (2) 73.33% (3) 76.67% (4) 90%

Q19. The percentage of respondents that fall into the 35 to 40 years age group (both inclusive) is at least___.
(1) 6.67% (2) 10% (3) 13.33% (4) 26.67

DIRECTIONS for Questions 20 to 23 (2004): Answer the questions on the basis of the information given below.

A study was conducted to ascertain the relative importance that employees in five different countries assigned to five different traits in their Chief Executive Officers. The traits were compassion (C), decisiveness (D), negotiation skills (N), public visibility (P), and vision (V). The level of dissimilarity between two countries is the maximum difference in the ranks allotted by the two countries to any of the five traits. The following table indicates the rank order of the five traits for each country.

Rank	Country
	India	China	Japan	Malaysia	Thailand
1	C	N	D	V	V
2	P	C	N	D	C
3	N	P	C	P	N
4	V	D	V	C	P
5	D	V	P	N	D

Q20 Three of the following four pairs of countries have identical levels of dissimilarity. Which pair is the odd one out?
(1) Malaysia & China   (2) China & Thailand
(3) Thailand & Japan   (4) Japan & Malaysia

Q21. Which amongst the following countries is most dissimilar to India?
(1) China   (2) Japan
(3) Malaysia   (4) Thailand

Q22. Which of the following countries is least dissimilar to India?
(1) China   (2) Japan
(3) Malaysia   (4) Thailand

Q23. Which of the following pairs of countries are most dissimilar?
(1) China & Japan   (2) India & China
(3) Malaysia & Japan   (4) Thailand & Japan

DIRECTIONS for Questions 24 to 27 (2004): Answer the questions on the basis of the information given below.

Prof. Singh has been tracking the number of visitors to his homepage. His service provider has provided him with the following data on the country of origin of the visitors and the university they belong to:

Number of visitors	Day 1	Day 2	Day 3
Country			
Canada	2	0	0
Netherlands	1	1	0
India	1	2	0
UK	2	0	2
USA	1	0	1

Number of visitors	Day 1	Day 2	Day 3
UNIVERSITY			
University 1	1	0	0
University 2	2	0	0
University 3	0	1	0
University 4	0	0	2
University 5	1	0	0
University 6	1	0	1
University 7	2	0	0
University 8	0	2	0

Q24. University 1 can belong to .
(1) UK   (2) Canada
(3) Netherlands   (4) USA

Q25. To which country does University 5 belong?

(1) India or Netherlands but not USA   (2) India or USA but not Netherlands
(3) Netherlands or USA but not India   (4) India or USA but not UK

Q26 . Visitors from how many universities from UK visited Prof. Singh's homepage in the three days?
(1) 1   (2) 2
(3) 3   (4) 4

Q27. Which among the listed countries can possibly host three of the eight listed universities?
(1) None   (2) Only UK
(3) Only India   (4) Both India and UK

Directions for Questions 28 to 31(2007): Answer the following questions based on the information given below.

The following table shows the break-up of actual costs incurred by a company in last five years (year 2002 to year 2006) to produce a particular product. The production capacity of the company is 2000 units. The selling price for the year 2006 was Rs. 125 per unit. Some costs change almost in direct proportion to the change in volume of production, while others do not follow any obvious pattern of change with respect to the volume of production and hence are considered fixed. Using the information provided for the year 2006 as the basis for projecting the figures for the year 2007, answer the following questions.

	Year 2002	Year 2003	Year 2004	Year 2005	Year 2006
Volume of production	1000	900	1100	1200	1200
Costs (Rs.)					
Material	50,000	45,100	55,200	59,900	60,000
Labour	20,000	18,000	22,100	24,150	24,000
Consumables	2,000	2,200	1,800	1,600	1,400
Rent of building	1,000	1,000	1,100	1,100	1,200
Rates and taxes	400	400	400	400	400
Repair and maintenance expenses	800	820	780	790	800
Operating cost of machines	30,000	27,000	33,500	36,020	36,000
Selling and marketing expenses	5,750	5,800	5,800	5,750	5,800

Q28. What is the approximate cost per unit in rupees, if the company produces and sells 1400 units in the year 2007?
(1) 104
(2) 107
(3) 110
(4) 115
(5) 116

Q29. What is the minimum number of units that the company needs to produce and sell to avoid any loss?
(1) 313
(2) 350
(3) 384
(4) 747
(5) 928

Q30. Given that the company cannot sell more than 1700 units, and it will have to reduce the price by Rs.5 for all units, if it wants to sell more than 1400 units, what is the maximum profit, in rupees, that the company can earn?
(1) 25,400
(2) 24,400
(3) 31,400
(4) 32,900
(5) 32,000

Q31. If the company reduces the price by 5%, it can produce and sell as many units as it
desires. How many units the company should produce to maximize its profit?
(1) 1400
(2) 1600
(3) 1800
(4) 1900
(5) 2000

Directions for Questions 32 to35(2007): Answer the following questions based on the information given below.
The Table below shows the comparative costs, in US Dollars, of major surgeries in USA and a select few Asian countries.

Procedure	Comparative Costs in USA and some Asian Countries (in US Dollars)				
	USA	India	Thailand	Singapore	Malaysia
Heart Bypass	130000	10000	11000	18500	9000
Heart Valve Replacement	160000	9000	10000	12500	9000
Angioplasty	57000	11000	13000	13000	11000
Hip Replacement	43000	9000	12000	12000	10000
Hysterectomy	20000	3000	4500	6000	3000
Knee Replacement	40000	8500	10000	13000	8000
Spinal Fusion	62000	5500	7000	9000	6000

The equivalent of one US Dollar in the local currencies is given below.

	1 US Dollar Equivalent	
India	40.928	Rupees
Malaysia	3.51	Ringits
Thailand	32.89	Bahts
Singapore	1.53	$ Dollars

A consulting firm found that the quality of the health services were not the same in all the countries above. A poor quality of a surgery may have significant repercussions in future, resulting in more cost in correcting mistakes. The cost of poor quality of surgery is given in the table below.

Procedure	Comparative Costs in USA and some Asian Countries (in US Dollars)				
	USA	India	Thailand	Singapore	Malaysia
Heart Bypass	0	3	3	2	4
Heart Valve Replacement	0	5	4	5	5
Angioplasty	0	5	5	4	6
Hip Replacement	0	7	5	5	8
Hysterectomy	0	5	6	5	4
Knee Replacement	0	9	6	4	4
Spinal Fusion	0	5	6	5	6

Q32. The rupee value increases to Rs.35 for a US Dollar, and all other things including
quality, remain the same. What is the approximate difference in cost, in US Dollars,
between Singapore and India for a Spinal Fusion, taking this change into account?
(1) 700

(2) 2500
(3) 4500
(4) 8000
(5) No difference

Q33. Approximately, what difference in amount in Bahts will it make to a Thai citizen if she were to get a hysterectomy done in India instead of in her native country, taking into account the cost of poor quality? It costs 7500 Bahts for one-way travel between Thailand and India.
(1) 23500
(2) 40500
(3) 57500
(4) 67500
(5) 75000

Q34. A US citizen is hurt in an accident and requires an angioplasty, hip replacement and
a knee replacement. Cost of foreign travel and stay is not a consideration since the
government will take care of it. Which country will result in the cheapest package,
taking cost of poor quality into account?
(1) India
(2) Thailand
(3) Malaysia
(4) Singapore
(5) USA

Q35. Taking the cost of poor quality into account, which country/countries will be the most expensive for knee replacement?
(1) India
(2) Thailand
(3) Malaysia
(4) Singapore
(5) India and Singapore

Directions for Questions36 to 39: Answer the following questions based on the information given below.
A health-drink company's R&D department is trying to make various diet formulations, which can be used for certain specific purposes. It is considering a choice of 5 alternative ingredients (O, P, Q, R, and S), which can be used in different proportions in the formulations. The table below gives the composition of these ingredients. The cost per unit of each of these ingredients is O: 150, P: 50, Q: 200, R: 500, S: 100.

Ingredient	Composition			
	Carbohydrate %	Protein %	Fat %	Minerals %
O	50	30	10	10
P	80	20	0	0
Q	10	30	50	10
R	5	50	40	5
S	45	50	0	5

Q36. The company is planning to launch a balanced diet required for growth needs of adolescent children. This diet must contain at least 30% each of carbohydrate and protein, no more than 25% fat and at least 5% minerals. Which one of the following combinations of equally mixed ingredients is feasible?
(1) O and P
(2) R and S
(3) P and S
(4) Q and R
(5) O and S

Q37. For a recuperating patient, the doctor recommended a diet containing 10% minerals
and at least 30% protein. In how many different ways can we prepare this diet by
mixing at least two ingredients?
(1) One
(2) Two
(3) Three
(4) Four
(5)   None

Q38. Which among the following is the formulation having the lowest cost per unit for a
diet having 10% fat and at least 30% protein? The diet has to be formed by mixing
two ingredients.
(1) P and Q
(2) P and S
(3) P and R
(4) Q and S
(5) R and S

Q39. In what proportion P, Q and S should be mixed to make a diet having at least 60%
carbohydrate at the lowest per unit cost?
(1) 2 : 1 : 3
(2) 4 : 1 : 2
(3) 2 : 1 : 4
(4) 3 : 1: 2
(5) 4 : 1 : 1