



IBPS SO IT Question Paper 2013

Reasoning Ability

Directions (Q. 1-5) In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions.

- (a) If only conclusion I is true
(b) If only conclusion II is true
(c) If either conclusion I or II is true
(d) If neither conclusion I nor II is true
(e) If both the conclusions I and II are true
1. **Statements** $P \geq Q < T, R < Q \geq S, V \geq T$
Conclusions I. $R \geq P$ II. $S > V$
2. **Statements** $P \geq Q < T, R < Q \geq S, V \geq T$
Conclusions I. $S \leq P$ II. $V > R$
3. **Statements** $H < I \leq J, R \geq I > A$
Conclusions I. $H < R$ II. $A > H$
4. **Statements** $R \geq I \leq J, A < I$
Conclusions I. $J > R$ II. $J > A$
5. **Statements** $J = K \geq L \leq M, K < S, J > T$
Conclusions I. $L < S$ II. $M > T$

Directions (Q. 6-10) In each question, two Statements A and B are provided. These may have a cause and effect relationship or may have independent causes.

Give answer

- (a) If the Statement A is the cause and Statement B is its effect

- (b) If the Statement B is the cause and Statement A is its effect
- (c) If both Statements are effects of independent causes
- (d) If both Statements are effects of some common cause
- (e) None of these

6. **Statement A:** Sri Lankan skipper Kumar Sangakkara justified his decision to step down from the captaincy of the ODI and T20 teams by saying, 'I will be 37 by the next World Cup and I can't be sure of my place in the team. It is better that Sri Lanka is now led by a player who will be at the peak of his career during that tournament'.

Statement B: Remarkably, unlike most skippers whose individual performance drops after assuming the leadership role, Kumar Sangakkara has actually batted better as captain in all three formats of the game.

7. **Statement A:** India is ranked 5th most powerful country in the world next to US, China, Russia and Japan in the hierarchy of the top 50 nations, identified on the basis of their GDP, as per national security index.

Statement B: the assessment is based on defense capability, economic strength, effective population, technological capability and energy security of top 50 countries.

8. **Statement A:** The prices of 'silver' have gone up from Rs.27000 per kg to Rs.50000 per kg in almost a year's time.

Statement B: Indian jewelers are receiving a lot of demand for the silver ornaments from American and European clients.

9. **Statement A:** There is an alarming increase in the number of young unemployed MBA's this year in comparison to the last year's figures.

Statement B: Nearly 1.1 lakh applications were received against a recruitment call given by a private bank for only ten vacant posts.

10. **Statement A:** Many people visit the religious places on week days and weekends to pray to Mother Durga in Navratras.

Statement B: Many religious people go on fasting during Navratras to seek the blessings of Mother Durga.

Directions (Q. 11-16) Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and

Give answer (a) if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.

Give answer (b) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.

Give answer (c) if the data either in statement I alone or in statement II alone are sufficient to answer the questions.

Give answer (d) if the data given in both the statements I and II together are not sufficient to answer the question.

Give answer (e) if the data in both the statements I and II together are necessary to answer the question.

11. How is 'sure' written in a code language?

I. 'he is sure' is written as 'ja ha ma' in that code language.

II. 'is she sure' is written as 'kaja ma' in that code language.

12. How is J related to M?

I. M has only one brother and two sisters.

II. J is daughter of T who is wife of M.

13. Town P is towards which direction of town T?

I. Town T is towards South of town K which is towards West of town P.

II. Town R is towards South of town V and towards East of town T.

14. Among P, Q, R, S and T each having different age, who is the youngest among them?

I. Q is younger than only P.

II. S is older than only R.

15. On which day of the week did Sourav visit Delhi?

I. Sourav visited Delhi after Monday but before Thursday but not on an odd day of the week.

II. Sourav visited Delhi before Friday but after Monday.

16. What is R's position from the left end in a row?

- I. M is 10th from the left end in a row.
- II. There are 16 children between M and R.

Directions (Q. 17-22) In each of the questions below are given four statements followed by three conclusions numbered I, II and III. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows from the given statements disregarding commonly known facts.

17. Statements: Some beads are rings.

Some rings are bangles.

All bangles are clothes.

All clothes are boxes.

Conclusions: I. Some boxes are bangles.

II. Some clothes are rings.

III. Some bangles are beads.

- a) None follows
- b) Only I follows
- c) Only II follows
- d) Only III follows
- e) Only I and II follow

18. Statements: All desks are pillars.

All pillars are circles.

Some circles are squares.

Some squares are rectangles.

Conclusions: I. Some rectangles are pillars.

II. Some circles are desks.

III. Some squares are desks.

- a) None follows
- b) Only I follows
- c) Only II follows
- d) Only III follows
- e) Only I and II follow

19. Statements: Some tyres are ropes.

Some ropes are tents.

Some tents are walls.

Some walls are buildings.

Conclusions: I. Some buildings are ropes.

II. Some walls are ropes.

III. Some tents are tyres.

- a) None follows
- b) Only I follows
- c) Only II follows
- d) Only III follows
- e) Only I and II follow

20. Statements: All chairs are fires.

Some fires are winds.

All winds are nets.

Some nets are clocks.

Conclusions: I. Some clocks are winds.

II. Some nets are fires.

III. Some winds are chairs.

- a) None follows
- b) Only I follows
- c) Only II follows
- d) Only III follows
- e) Only II and III follow

21. Statements: All stick are hammers.

No hammer is dress.

Some dresses are doors.

All doors are cots.

Conclusions: I. Some cots are hammers.

II. No cot is hammer.

III. Some dresses are sticks.

- a) Only I follows
- b) Only II follows
- c) Only III follows
- d) Only either I or II follows
- e) Only either I or II and III follow

22. Statements: Some plates are knives.

All knives are chains.

Some chains are wheels.

All wheels are poles.

Conclusions: I. Some poles are chains.

II. Some whels are knives.

III. Some chains are plates.

- a) Only I and II follow
- b) Only I and III follow
- c) Only II and III follow
- d) All I, II and III follow
- e) None of these

Directions (Q. 23-28) Study the following arrangement carefully and answer the questions given below.

F 4 @ H 2 E % M P 5 W 9 @ I Q R 6 U H 3 Z 7 * A T B 8 V # G \$ Y D

23. How many such consonants are there in the above arrangement, each of which is immediately preceded by a number but not immediately followed by a number?

- a) None b) One c) Two
- d) Three e) More than three

24. Which of the following is the 10th to the right of the 19th from the right end of the above arrangement?

- a) M b) T c) #
- d) 2 e) None of these

25. If all the symbols are dropped from the above arrangement, which of the following will be the 14th from the left end?

- a) R b) Q c) U
- d) 3 e) None of these

26. What should come in place of the question mark in the following series based on the above arrangement?

J E M 5 9 1 R U 3 ?

- a) 7 A B b) 7 Q T c) * 7 8
- d) A B V e) None of these

27. How many such symbols are there in the above arrangement, each of which is immediately preceded by a number and immediately followed by a letter?

- a) None b) One c) Two
d) Three e) More than three

28. Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Which is the one that does not belong to that group?

- a) © 2 4 b) P W M c) R 1 6
d) R U Q e) V G 8

Directions (Q. 29-34) In the following questions, the symbols !, *, %, @ and © are used with the following meaning as illustrated below.

'P * Q' means 'P is not greater than Q'.

'P @ Q' means 'P is neither greater than nor equal to Q'. 'P © Q' means 'P is not smaller than Q'.

'P % Q' means 'P is neither smaller than nor greater than Q'. 'P ! Q' means 'P is neither smaller than nor equal to Q'. Now in each of the following questions assuming the given statements to be true, find which of the three conclusions I, II and III given below them is/are definitely true and give your answer accordingly.

29. Statements: R © K, K ! M, M * J

Conclusions: I. J ! K

II. M @ R

III. M % R

- a) None is true
b) Only I is true
c) Only II is true
d) Only either II or III is true
e) Only III is true

30. Statements: W © K, K ! R, R % N

Conclusions: I. N @ K

II. R @ W

III. W ! N

- a) Only I and II are true
- b) Only either II or III true
- c) Only II and III are true
- d) Only I and III are true
- e) All I, II and III are true

31. Statements: D @ K, K % F, F © B

Conclusions: I. F ! D

II. B @ K

III. B % K

- a) Only I is true
- b) Only II is true
- c) Only III is true
- d) Only either II or III is true
- e) Only either II or III and I are true

32. Statements: R ! B, B © N, N @ T

Conclusions: I. N @ R

II. T ! B

III. T ! R

- a) None is true
- b) Only I is true

- c) Only II is true
- d) Only III is true
- e) Only I and II are true

33. Statements: H*W, W@N, N%R

Conclusions: I. R ! W

II. N ! W

III. H @ R

- a) Only I and II are true
- b) Only II and III are true
- c) Only I and III are true
- d) All I, II and III are true
- e) None of these

34. Statements: Z % M, M * F, F ! D

Conclusions: I. F % Z

II. F ! Z

III. D @ Z

- a) Only I is true
- b) Only either I or II is true
- c) Only II is true
- d) Only III is true
- e) None of these

Directions (Q. 35-40) In each question below is given a group of letters followed by four combinations of digits/symbols numbered (a), (b), (c) and (d). You have to find out which of the four combinations correctly represents the group of letters based on the following coding system and the conditions that

follows and mark the number of that combination as your answer. If none of the combinations correctly represents the group of letter, marks (e) i.e., 'None of these' as your answer

LETTER	R	E	A	U	M	D	F	P	Q	I	O	H	N	Q	Z	B
DIGIT/ SYMBOL CODE	7	#	\$	6	%	8	5	*	4	9	@	©	3	!	1	2

Conditions:

- (i) If the 1st letter is a consonant and the third letter is a vowel, their codes are to be interchanged.
- (ii) If the 1st letter is a vowel and the 4th letter is a consonant, both are to be coded as the code for the vowel.
- (iii) If the 2nd and the 3rd letters are consonants, both are to be coded as the code for the 3rd letter.

35. OREDHM

- a) @7#8©% b) #7#8©% c) @78#©%
- d) @7#@©% e) None of these

36. NUBAQE

- a) 263\$4# b) 326\$4# c) 362\$4#
- d) 362\$3# e) None of these

37. PQIMHZ

- a) *49%©1 b) %49*©1 c) *49*©1
- d) 949%©1 e) None of these

38. FWZERA

m

- a) 5!1#7\$ b) 5!!#7\$ c) 5!17#\$
- d) 511#7\$ e) None of these

39. HUBDIM

- a) ©6289% b) ©2689% c) ©6289©
- d) ©62©9% e) None of these

40. EMIRDP

- a) #%978* b) #9#8* c) 7%9#8*
- d) #9%78* e) None of these

Directions (Q. 41-45) Study the following information carefully to answer the questions below. An electronic device, when fed with the numbers, rearranges them in a particular order following certain rules. The following is step by step process of rearrangements for the given input of numbers.

Input 75 9 312 55 16 61

Step I 312 9 75 55 16 61

Step II 312 75 9 55 16 61

Step III 312 75 61 55 16 9

For the given input Step III is the last step

41. Input 88 172 15 105 412 25, find Step III of this input

- a) 172 412 15 105 88 25
- b) 412 172 15 105 88 25
- c) 412 172 105 88 15 25
- d) Can't be determined
- e) None of these

42. If Step III of an input is as follows

525 175 118 107 112 99 100, then find the input

- a) 525 118 107 175 112 99 100
- b) 118 525 107 112 175 99 100

- c) 99 100 175 112 107 525 118
- d) Can't be determined
- e) None of these

43. Input 177 390 85 188 522 765

What will be the last step for this input?

- a) IV
- b) V
- c) VII
- d) VI
- e) None of these

44. Step IV of an input is 832 722 701 645 85 517 615 Find Step II for that input

- a) 832 722 645 701 85 517 615
- b) 832 722 701 85 645 517 615
- c) 832 722 615 517 645 85 701
- d) 832 722 615 85 645 701 517
- e) Can't be determined

45. Input 87 98 77 115 67 220 135 Find the last output for this input

- a) 220 13511598877767
- b) 220 135 115 98 77 87 67
- c) 220 135 115 77 98 87 67
- d) Can't be determined
- e) None of these

Directions (Q. 46-50) Read the following information carefully and answer the following questions.

Six friends Abhishek, Deepak, Mridul, Pritam, Ranjan and Salil married within a year in the months of February, April, July, September, November and December and in the cities of Ahmedabad, Bengaluru, Chennai, Delhi, Mumbai and Kolkata but not necessarily following the above order. The following are some facts about their weddings.

- I. Mridul's wedding took place in Chennai, however he was not married to Geetika or Veena.
 - II. Abhishek's wedding took place in Ahmedabad and Ranjan's in Delhi, however neither of them was married to Jasmine or Brinda.
 - III. The wedding in Kolkata took place in February.
 - IV. Hema's wedding took place in April but not in Ahmedabad.
 - V. Geetika and Ipsita got married in February and November and in Chennai and Kolkata but not following the above order.
 - VI. Pritam visited Bengaluru and Kolkata only after his marriage in December.
 - VII. Salil was married to Jasmine in September.
46. Hema's husband is
- a) Abhishek
 - b) Deepak
 - c) Ranjan
 - d) Pritam
 - e) None of these
47. Deepak's wedding took place in
- a) Bengaluru
 - b) Mumbai
 - c) Kolkata
 - d) Delhi

e) None of these

48. In Mumbai, the wedding of one of the friends took place in the month of

a) April

b) September

c) November

d) December

e) None of these

49. Salil's wedding was held in

a) Bengaluru

b) Chennai

c) Kolkata

d) Delhi

e) None of these

50. Ipita's wedding took place in

a) Ahmedabad

b) Bangalore

c) Mumbai

d) Chennai

e) None of these

Quantitative Aptitude

51. Sekar started a business investing Rs.25,000 in 1999. In 2000, he invested an additional amount of Rs.10,000 and Rajeev joined him with an amount of Rs.35,000. In 2001, Sekar invested another additional amount of Rs.10,000 and Jatin joined them with an amount of Rs.35,000. What will be

Rajeev's share in the profit of Rs.1,50,000 earned at the end of 3 years from the start of the business in 1999?

- a) Rs.45,000 b) Rs.50,000 c) Rs.70,000
d) Rs.75,000 e) None of these

52. A number plate of a vehicle has always a fixed code UP-32 for Lucknow city followed by the number of particular vehicle which is in two parts. First part is occupied by 2 English alphabets and second part is occupied by 4 digit numbers (0001, 0002, 9999). If the latest registration number of vehicle [UP-32-SK-0123] find the number of vehicles registered before this vehicle number in Lucknow.

- a) 2449744 b) 4779644 c) 4669235
d) 9235888222 e) None of these

53. Pooja, Shipra and Monika are three sisters. Pooja and Shipra are twins. The ratio of sum of the ages of Pooja and Shipra is same as that of Monika alone. Three years earlier the ratio of age of Pooja and Monika was 2 : 7. What will be the age of Shipra 3 years hence?

- a) 21 years b) 16 years c) 8 years
d) 12 years e) None of these

54. Titan sells a wrist watch to a wholesaler making a profit of 10%. The wholesaler, in turn, sells it to the retailer making a profit of 10%. A customer purchases it by paying Rs.990. Thus, the profit of retailer is %. What is the cost incurred by the Titan to produce it?

- a) 768 b) 750 c) 800
d) 820 e) None of these

55. If a_1, a_2, a_3, \dots is an A.P. such that

$$a_1 + a_5 + a_{10} + a_{15} + a_{20} + a_{24} = 225$$

Then $a_1 + a_2 + a_3 + \dots + a_{23} + a_{24}$ is equal to :

- a) 999 b) 900 c) 1225
d) Data inadequate e) None of these

56. Vinay and Versha run a race with their speeds in the ratio of 5 : 3. They prefer to run on a circular track of circumference 1.5 km. What is the distance covered by Vinay when he passes Versha for the seventh time?

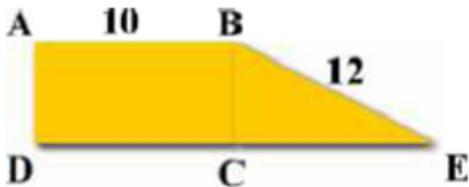
57. Karan can do a work in 10 days while Sohan can do the same work in 20 days. They started work together. After 3 days Karan left the work and Sohan completed it. For how many days Sohan worked alone more than the number of days required when both worked together?

a) $\frac{1}{3}$ b) $\frac{1}{4}$ c) $\frac{3}{5}$ d) $\frac{2}{3}$ e) none of these

58. In the figure below, ABCD is rectangle whose perimeter is 30. The length of BE is 12. Find to the nearest degree, the measure of angle E?

a) 25 b) 32 c) 38

d) 41 e) None of these

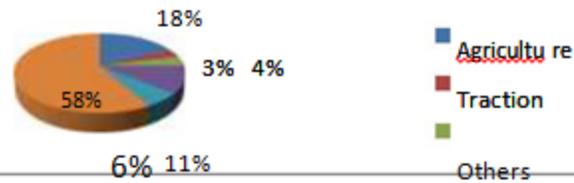


59. If a boat goes 7 km upstream in 42 minutes and the speed of the stream is 3 kmph, then the speed of the boat in still water is :

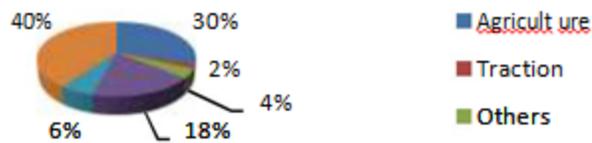
a) 4.2 km/hr b) 9 km/hr c) 13 km/hr d) 21 km/hr e) None of these

Directions (Q. 60-64) Refers to the following pie charts and solve the questions based on it.

1980 - 1981 (Electricity Consumption by Sector)



1993 - 1994 (Electricity consumption by Sector)



60. By what percentage has the consumption of electricity increased in 1993 – 1981?

a) 66% b) 33% c) 133%

d) Can't be Determined

e) None of The Above

61. The electricity consumption of how many sectors has definitely increased over the given period?

a) 2

b) 3

c) 4

d) Can't be Determined

e) None of The Above

62. If the total electricity consumption in 1993 – 94 is 1.2 times of the total electricity consumption in 1980 – 81, then how many sectors have definitely increased by more than 50 during the same period

a) 1

- b) 2
- c) 3
- d) 4
- e) None of The Above

63. If the total electricity consumption in 1993 – 1994 is 1.5 times for the total electricity consumption in 1980 – 81, then what is the percentage increase in the electricity consumption of the agricultural sector in the given period?

- a) 50%
- b) 100%
- c) 150%
- d) 300%
- e) None of The Above

64. What is the minimum number of sectors required to be added up in order to be more than 50% of the consumption for the period in 1993 – 1994?

- a) 1
- b) 2
- c) 3
- d) 4
- e) None of The Above

Directions (Q. 65-69) Refer to the following table and pie charts solve the following questions based on it.

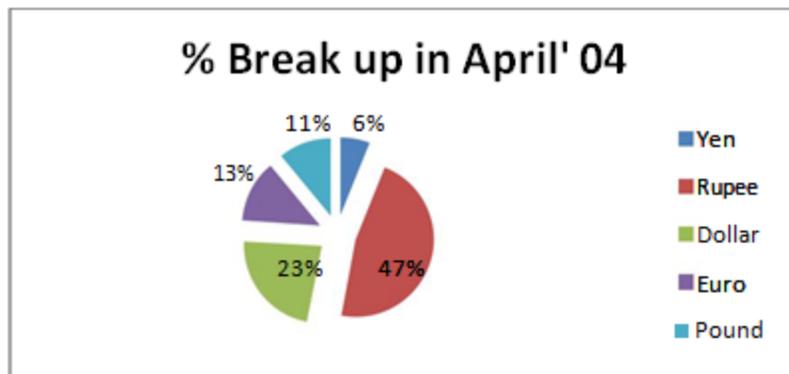
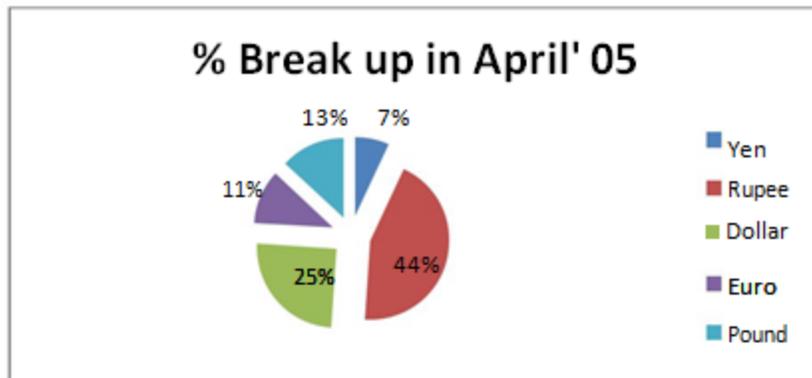
The table given below show the currency exchange rates in April 2005 and April 2004 respectively. For any currency row, the value corresponding to each column shows that currency's exchange rate with the currency column. For example, in April 2005, one dollar was equivalent to Rs. 43.750Chart 3 and Chart 4 show the percentage break up of rupee equivalent of currency reserves of a company in April 2005 and April 2004 respectively. The rupee equivalent reserves of a currency are the currency reserves calculated

in rupee terms based on the prevalent exchange rate between the rupee and that currency. For example, reserves of 1000 euros in April 2004 would constitute rupee equivalent reserves of Rs. 53000. The rupee equivalent of currency reserves for the company was Rs. 5 crores in April 2004 and grew by 40% in the next one year.

Table I

Currency	rupee	Dollar	euro	Pound	yen
Rupee	-----	0.023	0.018	0.012	0.024
Dollar	43.750	-----	0.770	0.535	1.065
Euro	56.790	1.298	-----	0.695	1.382
pound	81.750	1.869	1.440	-----	1.990
yen	41.090	0.939	0.724	0.503	-----

Currency	rupee	dollar	euro	pound	Yen
Rupee	-----	0.020	0.019	0.013	0.029
Dollar	50.000	-----	0.880	0.612	1.217
Euro	53.000	1.211	-----	0.648	1.290
pound	75.000	1.714	1.321	-----	1.825
	35.000	0.800	0.616	0.428	-----



65. The dollar currency reserves for the company (in \$ million) in April 2004 was closest to:

- a) 11.5
- b) 4.0
- c) 2.3
- d) 0.25

None of The Above

66. The rupee equivalent (in rupees million) for the Yen reserves for the company in April 2005 was closest to:

- a) 49 b) 1.3 c) 5
- d) 0.12
- e) None of The Above

67. The ratio of money in dollar reserves to the money in euro reserves for the company in April 2004 was:

- a) 7:4
- b) 3:5
- c) 9:4
- d) Can't Be Determined
- e) None of The Above

68. The money in pound reserves in April 2005 was how many times the money in Yen reserves in April 2004?

- a) 1.65
- b) 1.82
- c) 3
- d) Can't be Determined
- e) None of The Above

69. The money in pound reserves in April 2005, by what percentage did the rupee reserves grow?

- a) 22%
- b) 31%
- c) 49%
- d) Can't Be Determined
- e) None of The Above

70. On what dates of April 2001 did Wednesday fall?

- a) 1st, 2th, 15th, 22nd, 29th
- b) 2nd, 9th, 16th, 23rd, 30th
- c) 3rd, 10th, 17th, 24th
- d) 4th, 11th, 18th, 25th

e) None of these

71. A watch which gains 5 seconds in 3 minutes was set right at 7 a.m. In the afternoon of the same day, when the watch indicated quarter past 4 o'clock, the true time is :

a) 7/12 min.past 3 b) 4 p.m. c) 7/11 min.past 3 d) 59 min.past 4 e) none of these

72. In what proportion must wheat at price 4.10 per kg must be mixed with wheat at price 4.60 per kg, so that the mixture be worth Rs.4.30 a kg?

a) 3 : 2 b) 2 : 3 c) 3 : 4

d) 4 : 3 e) None of these

73. Pipes A and B can fill a tank in 5 and 6 hours respectively. Pipe C can empty it in 12 hours. If all the three pipes are opened together, then the tank will be filled in

a) $1 \times (13/17)$ hours b) $2 \times (8/11)$ hours c) $3 \times (9/17)$ hours

d) $4 \times (1/2)$ hours e) None of these

74. An amount of Rs.1,00,000 is invested in two types of shares. The first yields an interest of 9% p.a. and the second, 11% p.a. If the total interest at the end of one year is %, then the amount invested in each share was :

a) Rs.52,500, Rs.47,500

b) Rs.62,500, Rs.37,500

c) Rs.72,500, Rs.27,500

d) Rs.82,500, Rs.17,500

e) None of these

75. Sameer spends 24% of his monthly income on food and 15% on the education of his children. Of the remaining salary, he spends 25% on entertainment and 20% on conveyance. He is now left with Rs.10,736. What is the monthly salary of Sameer?

a) Rs.27,600 b) Rs.28,000 c) Rs.31,200

d) Rs.32,000 e) None of these

76. A rectangular lawn 60 m × 40 m has two road each 5 m wide running in the middle of it, one parallel to length and the other parallel to breadth. The cost of graveling the roads at 80 paise per sq. m is :

- a) Rs.380 b) Rs.385 c) Rs.400
d) Data Inadequate e) None of these

Give answer

- (A) if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question
- (B) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question
- (C) if the data either in statement I alone or in statement II alone are sufficient to answer the question
- (D) if the data given in both statements I and II together are not sufficient to answer the question and
- (E) if the data in both statements I and II together are necessary to answer the question

77. Can Ritesh retire from office X in January 2006, with full pension benefits?

- I. Ritesh will complete 30 years of service in office X in April 2000 and desires to retire.
- II. As per office X rules, an employee has to complete minimum 30 years of service and attain age of 60. Ritesh has 3 years to complete age of 60.

Directions : (Q. 78 -82): In each of the following number series, a wrong number is given, find out that number.

78. 3 9 23 99 479 2881 20159

- a) 9 b) 23 c) 99
d) 479 e) 2881

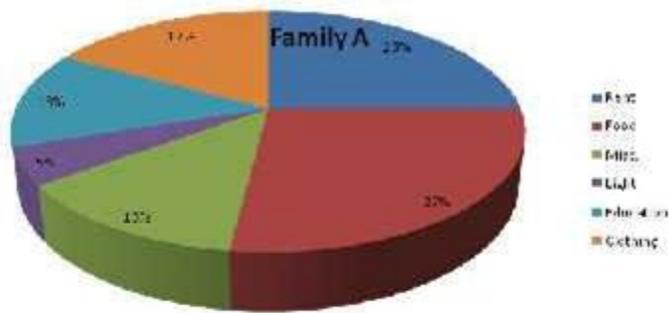
79. 1 3 6 11 20 39 70

- d) 24 kmph e) None of these

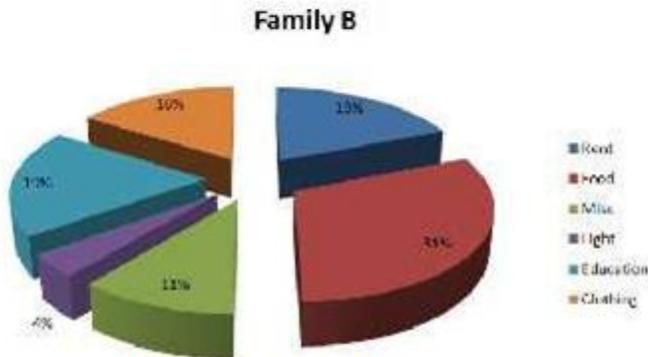
86. A can run 1 km in 2 m in 20 second and B can run the same distance i n 3 min. What is the distance travelled by B in the same time as A travels, when they start simultaneously inn the race of 4.5 km/

- a) 5 km b) 6 km c) 3.5 km
d) 5.6 km e) None of these

Directions (Q. 87-91): Refer to the following pie charts and solve the questio ns based on it.



Total Expenses = Rs. 48,000



Total Expenses = Rs. 72,000

87. Both the families decid e to double the total expenditure keeping the pattern of spending the same as given above. W hat will be the new ratio of expenditure on foo d between family A and family

- a) 27 : 31
b) 31 : 27
c) 2 : 3

d) 3 : 2

e) None of The Above

88. If the total expenses of family B increases three-fold, keeping the expenses on education the same as given above, what will be the expense on education?

a) 6.33%

b) 57%

c) 19%

d) 18%

e) None of The Above

89. What will be the expenses on light by family A, as a percentage of expense on light by family B?

a) 120%

b) 83.33%

c) 62.5%

d) 66.66%

e) None of The Above

90. If family A and family B decide to combine their expenses, then which one of the following heads will be responsible for the highest expenses?

a) Rent

b) Miscellaneous

c) Food

d) Education

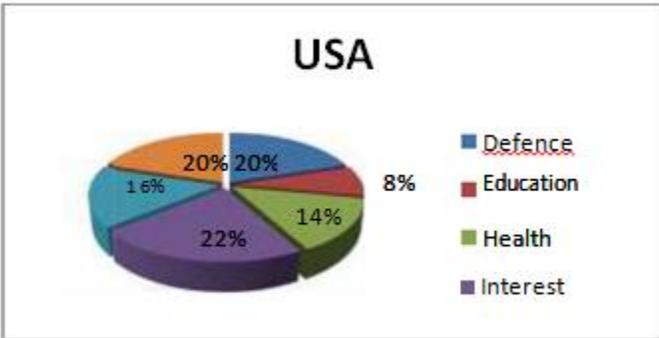
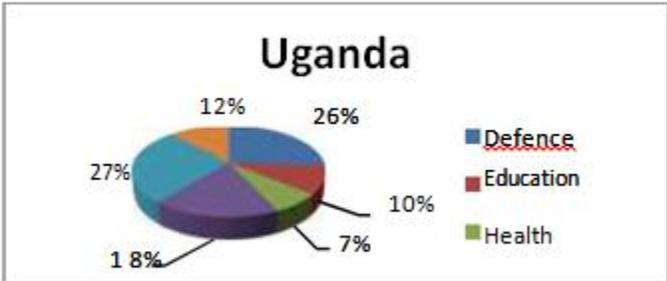
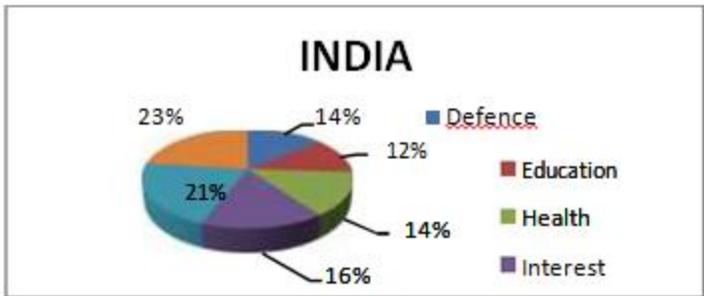
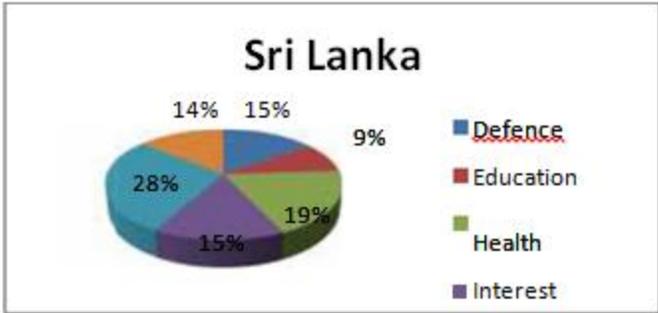
e) None of The Above

91. In the above question, how many heads will have a lower percentage share in the combined total expenses of both the families than the percentage share of family B under the same head?

- a) 1
- b) 2
- c) 3
- d) 4
- e) None of The Above

Directions (Q. 92-96): Refer to the following pie charts and solve the questions based on it:

The following pie charts represent the budget expenditure of certain countries on various sectors for the year in 2007:



92. A country is said to be progressive if its education, health and infrastructure expenditure are in the top four expenditure re sectors. How many of the four countries are progressive?

a) 0 b) 1 c) 2 d) 3

e) None of these

93. A country is said to be developing if its combined expenditure on education, health and infrastructure is at least 50% of the total expenditure. How many of the four countries are developing nations?

a) 0 b) 1 c) 2 d) 3

e) None of The Above

94. If a country is under military rule, it will spend maximum on defence and minimum on either health or education. How many of the above countries are under military rule?

a) 0 b) 1 c) 2

d) Can't be Determined

e) None of The Above

95. Which of the following sectors will have same ranking in the countries budget expenditures?

a) Non – Planned

b) Education

c) Health

d) Can't be Determined

e) None of The Above

96. If the total budgetary expenditures of all the four countries are combined, which sector will account for the maximum expenditure?

a) None Planned

b) Interest

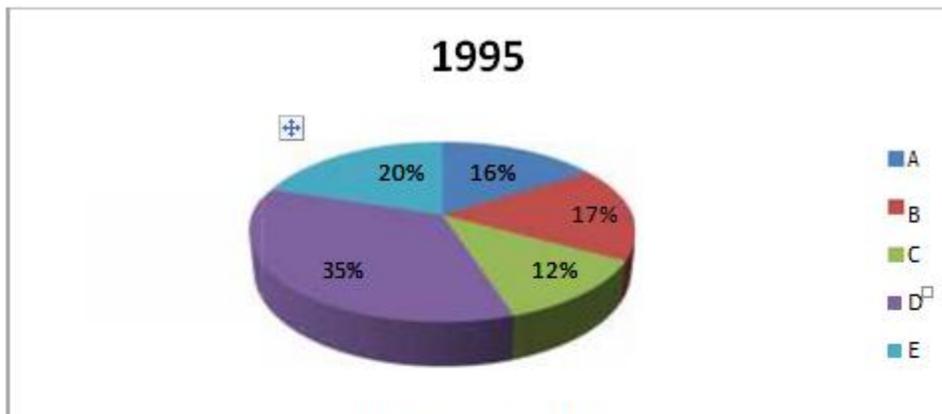
c) Defense

d) Can't be Determined

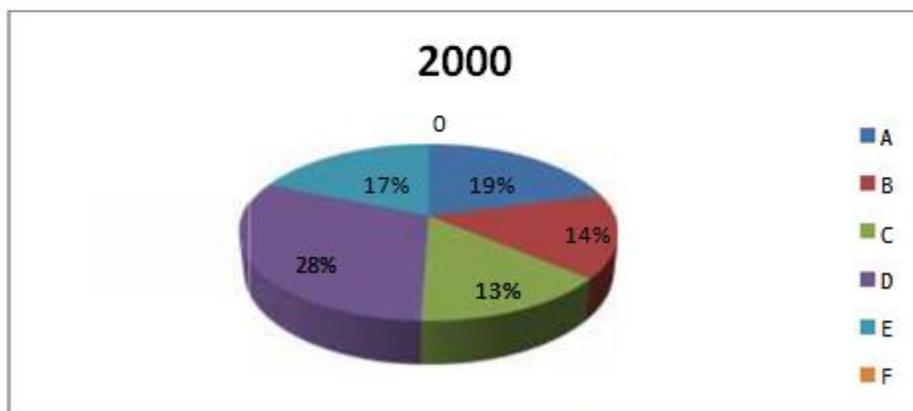
e) None of The Above

Directions (Q. 97-100): Refer to the following pie charts and solve the questions based on it.

The pie chart given below represent the market share of different players in the electronics market in the year 1995 and 2000. A new player F has entered the market in the given period.



Market Size = \$ 2.3 billion



Market Size = \$ 3.7 billion

97. What is the percentage increase in the sales of A in the year 2000 over 1995?

- a) 90%
- b) 60%
- c) 80%
- d) 50%

- e) None of The Above
98. Find the CAGR with which the market has grown for the period 1995 – 2000?
- a) 18%
- b) 10%
- c) 5% m
- d) 12%
- e) None of The Above
99. If the new entrant F has grown at the expense of B, C, and E then what would be the change in the net value of sales of E in the year 2000, had F not entered the market?
- a) \$ 111million
- b) \$ 340 million
- c) \$ 247 million
- d) Can't be Determined
- e) None of The Above
100. What is the increase in sales (in \$ million) of A, B and C put together, over the 5 years period?
- a) 103
- b) 1202
- c) 668
- d) 854
- e) None of The Above

English Language

Directions (Q. 101-105) Read the following passage carefully and answer the questions given below it. Certain words have been printed in bold to help you locate them while answering some of the questions.

Goldman Sachs predicted that crude oil price would hit \$200 and just as it appeared that alternative renewable energy had a chance of becoming an economically viable option, the international price of oil fell by over 70%. After hitting the all time high of \$147 a barrel, a month ago, crude fell to less than \$40 a barrel. What explains this sharp decline in the international price of oil? There has not been any major new discovery of a hitherto unknown source of oil or gas. The short answer is that the demand does not have to fall by a very sizeable quantity for the price of crude to respond as it did. In the short run, the price elasticity of demand for crude oil is very low. Conversely, in the short run, even a relatively big change in the price of oil does not immediately lower consumption. It takes months, or years, of high oil price to inculcate habits of energy conservation. World crude oil price had remained at over \$60 a barrel for most of 2005-2007 without making any major dent in demand.

The long answer is more complex. The economic slowdown in the USA, Europe and Asia along with dollar depreciation and commodity speculation have all had some role in the downward descent in the international price of oil. In recent years, the supply of oil has been rising but not enough to catch up with the rising demand, resulting in an almost vertical escalation in its price. The number of crude oil futures and options contracts have also increased manifold which has led to significant speculation in the oil market. In comparison, the role of the Organization of Petroleum Exporting Countries (OPEC) in fixing crude price has considerably weakened. OPEC is often accused of operating as a cartel restricting output thus keeping prices artificially high. It did succeed in setting the price of crude during the 1970s and the first half of the 80s. But, with increased futures trading and contracts, the control of crude pricing has moved from OPEC to banks and markets that deal with futures trading and contracts. It is true that most oil exporting regions of the World have remained politically unstable fuelling speculation over the price of crude. But there is little evidence that the geopolitical uncertainties in West Asia have improved to weaken the price of oil. Threatened by the downward slide of oil price, OPEC has, in fact, announced its decision to curtail output.

However most oil importers will have a sigh of relief as they find their oil import bills decline except for those who bought options to import oil at prices higher than market prices. Exporting nations, on the other hand, will see their economic prosperity slip. Relatively low price of crude is also bad news for investments in alternative renewable energy that cannot compete with cheaper and non-renewable sources of energy.

101. What does the phrase “the price elasticity of demand for crude oil is very low” imply?

- a) when the price rises the demand for crude oil falls immediately
- b) A small change in demand will result in a sharp change in the price of crude
- c) Within a short span of time the price of crude oil has fluctuated sharply
- d) Speculation in oil does not have much of an impact on its price

e) None of these

102. Which of the following factors is responsible for rise in speculation in crude oil markets?

(A) OPEC has not been able to restrict the oil output and control prices.

(B) The supply of oil has been rising to match demand.

(C) Existence of large number of oil futures and oil contracts.

a) Only A b) Both A and B c) Only C

d) All A, B and C e) None of these

103. Why oil importing countries relieved?

a) Price of crude reached \$147 not \$200 as was predicted

b) Discovery of oil reserves within their own territories

c) Demand for crude has fallen sharply

d) There is no need for them to invest huge amounts of money in alternative sources of energy

e) None of these

104. Which of the following not true in the context of the passage?

(A) OPEC was established in 1970 to protect the interests of oil importing countries.

(B) When demand for oil exceeds supply there is a sharp rise in price.

(C) Today futures trading markets set the oil prices to a large extent.

a) Only A b) Only C c) Both A and C

d) Only B e) None of these

105. Which of the following is the function of OPEC?

a) Controlling speculation in oil

b) Ensuring profits are equally distributed to all its members

c) Monitoring inflation in oil prices and taking necessary steps to lower it

d) Guaranteeing political instability in oil exporting countries does not impact output

e) Determining prices of crude oil

Directions (Q. 106-110) Which of the phrases (1), (2), (3) and (4) given below each sentence should replace the phrase printed in bold in the sentence to make it grammatically correct? If the sentence is correct as it is given and no correction is required, mark (5) as the answer.

106. The equipment is in such poor condition that we have no alternative to buy new ones.

- a) many alternative like
- b) any alternative except
- c) no other alternative
- d) no alternative but
- e) No correction required

107. Since the deadline has been changed from next week to this Thursday you should give this work priority.

- a) be given this work priority
- b) not give priority this work
- c) prioritized this work
- d) priority this work
- e) No correction required

108. After the success of our project we have been receiving more requests than we do not have the resources to handle them.

- a) many requests but
- b) most of the requests
- c) more requests that
- d) too many request
- e) No correction required

109. We have hired an advertising agency to prepare a campaign to encourage people votes.

- a) people from voting
- b) voting for people
- c) people to vote
- d) votes by people
- e) No correction required

110. During the training programme the new recruits will be briefed about how their role in the new organization.

- a) what their roles
- b) about their role
- c) for its roles
- d) which are their role
- e) No correction required

Directions (Q. 111-115) In each question below, a sentence with four words printed in bold type is given. These words are numbered as (1), (2), (3) and (4). One of these four words printed in bold may be either wrongly spelt or inappropriate in the context of the sentence. Find out the word which is wrongly spelt or inappropriate, if any. The number of that word is your answer.

If all the words printed in bold are correctly spelt and also appropriate in the context of the sentence, mark (5) i.e. 'All correct' as your answer.

111. We shall have to await (1) / and see if these measures (2) / are sufficient (3) / to address the problem. (4) All correct (5)

112. The document (1) / he gave me was long and complicated (2) / and I struggled (3) to understand it. (4) All correct (5)

113. The company has decided (1) / to allot (2) / a substantial portion (3) / of its profits to research and development. (4) All correct (5)

114. It remains (1) / to be seen whether (2) / these reforms (3) / will be acceptable by the Board. (4) All correct (5)

115. They are negotiating (1) / to try and reach (2) / an agreement which will be beneficial (3)

/ everyone concerned. (4) All correct (5)

Directions (Q. 116-120) Rearrange the following five sentences (A), (B), (C), (D) and (E) in the proper sequence to form a meaningful paragraph, then answer the questions given below them

(A) For instance, if we measure the room temperature continuously and plot its graph with time on X-axis and temperature on the Y-axis, we get a continuous waveform, which is an analog signal. Analog is always continuous.

(B) The absence or presence of something can be used to plot a digital signal.

(C) An analog signal is a continuously varying signal, similar to a sinusoidal waveform.

(D) Any signal can be classified into one of the two types: analog and digital.

(E) In contrast, a digital signal takes the form of pulses, where we have something or nothing.

116. Which of the following should be the 1st sentence after rearrangement?

a) A b) B c) C

d) D e) E

117. Which of the following should be the 3rd sentence after rearrangement?

a) A b) B c) C

d) D e) E

118. Which of the following should be the 2nd sentence after rearrangement?

a) A b) B c) C

d) D e) E

119. Which of the following should be the 4th sentence after rearrangement?

a) A b) B c) C

d) D e) E

120. Which of the following should be the 5th sentence after rearrangement?

a) A b) B c) C

d) D e) E

Directions (Q. 121-125) In each of the following sentences there are two blanks. Below each sentence there are five pairs of words denoted by numbers (1), (2), (3), (4) and (5). Find out which pair of words can be filled up in the blanks in the sentence in the same sequence to make the sentence grammatically correct and meaningfully complete.

121. To avoid ____ there is a need for ____ planning of the project.

- a) cancellation, broad
- b) problem, deliberate
- c) pitfalls, systematic
- d) inconvenience, convenient
- e) losses, temporary

122. A good management will decide not only the ____ for equipment but also its ____ for deciding priorities.

- a) need, urgency
- b) usefulness, utility
- c) cost, value
- d) requirement, necessities
- e) technology, methodology

123. ____ appears to be a small error in the beginning may turn out to be a ____ in the long run.

- a) It, disaster
- b) What, blunder
- c) That, debacle
- d) It, slip
- e) What, incident

124. Being very ____ in nature, he always uses his ____ skills.

- a) adamant, soft

- b) polite, basic
- c) humble, experimental
- d) pushy, persuasive
- e) mild, aggressive

125. Demand and supply do not ____ the same relationship as the one that ____ between height and weight.

- a) possess, has
- b) incur, is
- c) defend, volunteers
- d) bear, borne
- e) have, exists

Professional Knowledge

126. A variable that holds the memory address of another object is called a

- a) integer
- b) pointer
- c) constant
- d) memory variable
- e) None of these

127. C contains two special pointer operators

- a) * and &
- b) * and &&
- c) & and &&
- d) % and &
- e) None of these

128. Main() is an example of

- a) library function
- b) user-defined function
- c) header
- d) statement
- e) None of these

129. The header file 'setjmp.h' can be used for

- a) providing links to assembly-language for calls
- b) providing diagnostic and debugging assistance
- c) providing support for string handling functions
- d) providing character type identification (Boolean) and translation
- e) None of these

130. Which of the following statements is not true for structure in C?

- a) A structure is a method for packing data of different types
- b) A structure is a convenient tool for handling a group of logically related data items
- c) A structure helps to organize data in a more complex way
- d) A structure is a powerful concept and can be used in program design
- e) None of these

131. For accessing a structure element using a pointer, you must use

- a) the dot operator '.'
- b) the pointer operator '&'
- c) the pointer operator '*'
- d) the arrow operator '->'
- e) None of these

132. The feature that allows you to define new data types that are equivalent to existing data types is

- a) pointer
- b) typedef
- c) structure
- d) union
- e) None of these

133. The number of structures that can be declared in a single statement is ____

- a) One
- b) Two
- c) Three
- d) Unlimited
- e) None of these

134. Hiding individual components of an entry is ____

- a) Polymorphism
- b) Encapsulation
- c) Scaling
- d) Not recommended in C++
- e) None of these

135. A fundamental type such as int or double is a ____

- a) Programmer-defined type
- b) Complex type
- c) Non-scalar type

- d) Scalar type
- e) None of these

136. When variables refer to attributes of an entity (such as name, address, and phone number of a person), those attributes form a _____

- a) File
- b) Record
- c) Field
- d) Program
- e) None of these

137. A variable declared in a function is called a(n) _____ variable

- a) Area
- b) Global
- c) Local
- d) Reference
- e) None of these

138. _____ variables are declared outside of any statement block

- a) Area
- b) Global
- c) Local
- d) Reference.
- e) None of these

139. _____ variables remain in memory until the program ends

- a) Area
- b) Global

- c) Local
- d) Reference
- e) None of these

140. The ideal solution is to have a system coordinator who will interface with the engineering and manufacturing managers, as well as the

- a) president
- b) finance manager
- c) marketing manager
- d) MIS manager
- e) None of these

141. There are several procedures you can implement to provide maximum security. The most important of these is

- a) do not leave training manuals unsecured
- b) run regular simulated tests using TARP (Testing of Applications Recovery Planes)
- c) do not allow unbounded service people to work on your equipment
- d) verify the reputation of the people installing your system
- e) None of these

142. CAD/CAM is the inter-relationship between

- a) marketing and design
- b) manufacturing and marketing
- c) engineering and marketing
- d) engineering and manufacturing
- e) None of these

143. What two disciplines are usually tied by a common data base?

- a) Documentation and geometric modeling
- b) Computer-aided design and computer-aided manufacturing
- c) Drafting and documentation
- d) Testing and analysis
- e) None of these

144. CAE and CAM are linked through

- a) a common data base and communications system
- b) NC tape programming and automated design
- c) assembly automation and tool production
- d) parts production and testing
- e) None of these

145. CAD/CAM is hardware oriented, but ____ gives it life

- a) Numerical control
- b) Documentation
- c) Software
- d) Communications
- e) None of these

146. What key hardware item ties a CAD/CAM system together?

- a) Keyboard.
- b) Graphics workstation
- c) Digitizer
- d) Plotter
- e) None of these

147. In C++, class definitions are most often ____

- a) Stored in each program that uses them
- b) Stored in a header file that is included in the programs that use them
- c) Stored in a folder that you paste into every new project
- d) Retyped for every new project
- e) None of these

148. Header files often have the file extension _____

- a) .H
- b) .HE
- c) .HEA
- d) .HEAD
- e) None of these

149. Many programmers separate a class into two files _____

- a) One for the declarations and one for the implementations
- b) One for the void functions and one for the other functions
- c) One for the public data and one for the private data
- d) One for the primary functions and one for the auxiliary functions
- e) None of these

150. C++ allows you to define the same functions more than once in the same program

- a) If the definitions are identical
- b) If the definitions are included in two separate #include files
- c) If the definitions are located in a single #include file that is included more than once
- d) C++ does not allow you to define the same functions more than once in the same program
- e) None of these

151. The operator that releases previously allocated memory is _____

- a) Release
- b) Return
- c) Delete
- d) Destroy
- e) None of these

152. If you create a class named SaleItem and each instantiation of the class requires 50 bytes, which of the following allocates enough memory for one SaleItem object, assuming that ptr is properly defined?

- a) ptr = new SaleItem;
- b) ptr = new 50;
- c) either (a) or (b)
- d) neither (a) nor (b)
- e) None of these

153. Procedural cohesion is similar to sequential cohesion, except that with procedural cohesion _____

- a) The tasks are not done in order
- b) The tasks are simpler
- c) The tasks share data
- d) The tasks do not share data
- e) None of these

154. You are considering physical image copies as a backup solution. Which factor is likely to have a high impact on your strategy?

- a) You will have to perform incremental backups

- b) The database must be in ARCHIVELOG mode
- c) A clone of the database must be available on another node
- d) Available storage space required for physical image copies must be sufficient
- e) None of these

155. Before executing a backup script, you need to copy a file using operating system commands. You are logged in to Recovery Manager. Which command should you use to execute the copy command from the Recovery Manager prompt?

- a) run
- b) start
- c) create
- d) execute
- e) replace

156. The SALES_STAT table was dropped two days ago. You decide to perform tablespace point-in-time recovery without Recovery Manager. Which task does this option include?

- a) Create and recover a clone database and export the primary database into this new database
- b) Create, recover, and export the table from the clone database and import into the primary database
- c) Recover only the files for the tablespaces that contain the SALES_STAT table and active rollback segments.
- d) Recover only the files for the tablespace that contains the SALES_STAT table.
- e) None of these

157. Which of the following commands will generate a script to recreate the control file?

- a) ALTER DATABASE BACKUP CONTROLFILE;
- b) ALTER SYSTEM BACKUP CONTROLFILE TO TRACE;
- c) ALTER DATABASE BACKUP CONTROLFILE TO TRACE;
- d) ALTER SYSTEM BACKUP CONTROLFILE TO 'CONTROL11.BKP';

e) None of these

158. Recovering a database in ARCHIVELOG mode requires access to all archived log files created since the last backup. If a recovery operation required archived log files with sequence number 122 through 134 and sequence number 125 is missing, what would be the result?

a) The database would not be recovered in this operation

b) The database would only be recovered through archive log file sequence number 124 in this operation

c) The database would be restored through archive log file sequence 134. However, committed transactions would be lost.

d) A copy of archive log file sequence number 124 would be made and modified to be sequence number 125 to allow for a full restoration.

e) None of these

159. For which reason would you have to consider performing an incomplete recovery?

a) A background process has terminated

b) Two of the three mirrored control files are damaged

c) A data file has been lost while running the database in ARCHIVELOG mode

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d) Redo log files were not mirrored and you lost a redo log file before it was archived

e) None of these

160. After setting the proper init.ora parameters so that an archive log file is copied to two different locations you decide to specify that both copies must be created successfully for the archive process to be successful. Which init.ora parameter should you specify?

a) LOG_ARCHIVEDEST SUCCEED

b) ARCHIVE LOG DEST SUCCEED

c) LOG_ARCHIVE_MIN_SUCCEED_DEST

d) ARCHIVE_LOG_DEST_MIN_SUCCEED

e) None of these

161. The system administrator wants to make sure that users have access only to certain programs on their systems. Which actions accomplish this?

- a) Create a mandatory user profile and lock all the program groups
- b) Create a mandatory user profile that disables the Run command, assign this profile to all users and remove File Manager from the Main group
- c) Create a mandatory user profile and ensure that the Deny All option is set on all of the files that the user should not be able to access
- d) Delete WINFILE.EXE from the WINNT directory create a mandatory user profile that disables the File menu in Program Manager, and assign the profile to all users
- e) None of these

162. Which of the following statements about a local group account created by User Manager for Domains is true?

- a) The account can be added to global groups
- b) The account cannot be used in trusting domains
- c) The account is added to the Domain Users group automatically
- d) The account must be added to a local group to use domain resources
- e) None of these

163. You are the domain administrator. Do you assign Sarah the job of managing user accounts and add her to the Account Operators group. Do you need to keep track of any additions or modifications that Sarah makes to groups or users?

- a) Use Performance Monitor to log user and group activity
- b) Use Regedt 32.exe to set user management auditing for Sarah
- c) Use Event Viewer to set the Audit policy
- d) Use User Manager for Domains to set the Audit policy
- e) None of these

164. Drive C on Janet's computer is formatted as a FAT partition. A file on this drive is repeatedly deleted. Janet wants to find out who is deleting this file. How must you do this?

- a) From Windows NT Explorer, enable File Auditing
- b) From Event Viewer, set the filter on the security log to view deleted files
- c) From User Manager, set the Audit policy to audit other user's attempts to access her files
- d) Janet cannot do this. Auditing is not available on a FAT partition
- e) None of these

165. Several college interns are working at your company for the summer. You want to increase security by monitoring all user logons. How must you do this?

- a) Use Performance Monitor to create a log of all logon attempts
- b) Use User Manager for Domains to set an Audit policy for all logon attempts
- c) Use the Services option in Control Panel to start the Alerter service to audit logon attempts
- d) Use server Manager to set an Audit policy for all logon attempts to be on the user's
- e) assigned computer only
- f) None of these

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166. You want to keep an individual from logging on to a Windows NT Server computer by using the default Administrator account. How should you do this?

- a) Delete the Administrator account
- b) Lock out the Administrator account
- c) Rename the Administrator account
- d) Disable the Administrator account
- e) None of these

167. You create home directories for users Jan and Kim on a Windows NT Server computer. Jan works on a Windows NT Workstation computer. Kim works on a Microsoft Windows for Workgroups computer. After they log on, Jan can access her home directory, but Kim cannot access her home directory. What should you do?

- a) Start the Replication service on Kim's Windows for Workgroups computer

- b) Relocate Kim's home directory to her Windows for Workgroups computer
- c) Map a drive on Kim's Windows for Workgroups computer to her home directory on the server
- d) You cannot do this. Home directories can be accessed only by Windows NT computers
- e) None of these

168. Extranets provide access to a company's operational databases and legacy systems by its customers and suppliers. Select one answer.

- a) calendaring and scheduling
- b) business value of intranets
- c) business value of extranets
- d) applications of extranets
- e) None of these

169. Extranets can facilitate and strengthen the collaboration and relationships between a company and its business partners. Select one answer.

- a) calendaring and scheduling
- b) business value of intranets
- c) business value of extranets
- d) applications of extranets
- e) None of these

170. Intranets have demonstrated impressive returns, quick payback, and other strategic benefits, Select one answer.

- a) calendaring and scheduling
- b) business value of intranets
- c) business value of extranets
- d) applications of extranets
- e) None of these

171. The register are essential to instruction execution:

- a) Program counter
- b) Instruction register
- c) Memory address
- d) Memory buffer register
- e) All of The Above

172. Micro Instructions are stored in the:

- a) Internal Storage
- b) External Storage
- c) Cache
- d) Control Memory
- e) All of The Above

173. Control unit operation is performed:

- a) Hardwired control only
- b) Micro program control only
- c) Hardwired or micro program control
- d) All of The Above
- e) None of The Above

174. Hardwired control unit is implemented by:

- a) Software routines
- b) Logic circuits
- c) Stacks
- d) Registers

e) None of The Above

175. Micro Instructions are stored in:

a) Computer memory

b) Primary storage

c) Secondary storage

d) Control memory

e) Cache memory

176. Pipeline processing uses the technique:

a) Sharing the memory

b) Bit slicing

c) Prefetching

d) Parallel Processing

e) All of The Above

177. Intel 80486 Pipelining implements stages:

a) 6

b) 4

c) 5

d) 3

e) None of The Above

178. Terminals are required for:

a) Real time, batch processing & time sharing

b) Real time, time sharing and distributed processing

c) Real time, distributed processing and manager inquiry

d) Real time, time sharing and message switching

e) None of The Above

179. The receive equalizer reduces delay distortions using a:

a) Tapped delay lines

b) Gearshift

c) Descrambler

d) Difference Engine

e) None of The Above

180. In a synchronous modem, the receive equalizer is known as:.

a) Adaptive equalizer.

b) Impairment equalizer

c) Statistical equalizer

d) Compromise equalizer

e) None of The Above

181. The channel in the data communication model can be:

a) Postal mail services

b) Telephone lines

c) Radio lines

d) Any of The Above

e) None of The Above

182. A data terminal serves as a(n):

a) Effector

b) Sensor

- c) Both (a) and (b)
- d) Neither (a) nor (b)
- e) None of The Above

183. Which of the following transmission systems provides the highest data rate to in individual device:

- a) Computer Bus
- b) Telephone Lines
- c) Voice and Mode
- d) Leased Lines
- e) None of The Above

184. A protocol is a set of rules governing a time sequence of events that must take place

- a) Between peers
- b) Between modems
- c) Between an interface
- d) Across an interface
- e) None of The Above

185. When did IBM released the first version of its disk operating system DOS version 1.0?

- a) 1981
- b) 1982
- c) 1983
- d) 1984
- e) None of The Above

186. IBM released its first PN in 1981, can you name the operating system which was most popular at that time?

- a) MS DOS

- b) PC DOS
- c) OS /360
- d) CPM
- e) None of The Above

187. The mathematics software allows the users to directly write and solve problem in arithmetic, trigonometry, algebra etc. Can you name the person who created this software?

- a) Thomas Abraham
- b) Steve Jobs
- c) Yuri Manin
- d) Stephen Wolfram
- e) None of The Above

188. The higher version of the operating systems are so written that programs designed for earlier versions can still be run. What is it called?

- a) Upgradability
- b) Upward Mobility
- c) University
- d) Upward compatibility
- e) None of The Above

189. What is the name of the arrangement whereby several central processing units share one memory?

- a) Multitasking
- b) Multiprogramming
- c) Multiprocessing
- d) Concurrent Programming
- e) None of The Above

190. A graphical – menu – driven operating system allows you to pick up from the screen. What is the name given to the images which are used in such image oriented menus?

- a) Figure
- b) Symbol
- c) Icon
- d) Model
- e) None of The Above

191. With reference to Windows, a DLL is:

- a) Distribution level library
- b) Dynamic link library
- c) Dedicated link library
- d) Distributed library LAN
- e) None of The Above

192. Moving process from main memory to disk is called:

- a) Scheduling
- b) Caching
- c) Swapping
- d) Spooling
- e) None of The Above

193. Producer consumer problem can be solved using:

- a) Semaphores
- b) Event counters
- c) Monitors
- d) All of The Above

e) None of The Above

194. Operating system is:

a) A collection of hardware components

b) A collection of input/output devices

c) A collection of software routines

d) All of the above

e) None of the above

195. Which of the following is a type of systems software used on micro computer?

a) MS- DOS

b) PC – DOS

c) UNIX

d) All of the Above

e) None of The Above

196. What is the name of the operating system for the laptop computer called Maclite?

a) Windows

b) DOS

c) MS – DOS

d) OZ

e) None of The Above

197. What is the operating system used by Macintosh computers?

a) System 7.0

b) AU/X

c) UNIX

d) Either (a) or (b)

e) None of The Above

198. Who developed the Operating system/2 (OS/2) for running IBM's new PS/2 family of microcomputers?

a) IBM

b) Microsoft Inc.

c) Bell Laboratories

d) Digital Research Corporation

e) None of The Above

199. Most of the microcomputers operating system like Apple DOS, MS DOS and PC DOS etc are called disk operating system because:

a) They are memory resident

b) They are initially stored on disk

c) They are available on magnetic tapes

d) They are partly in primary memory and partly on disk

e) None of The Above

200. IBM related its first PC in 1981. Can you name the operating system which was most popular at that time?

a) MS – DOS

b) PC – DOS

c) OS/360

d) CP/M

e) None of The Above