2008
Reasoning
(Held on 12 October, 2008)

Directions—(Q. 1–5) These questions are based on the following letter/number/symbol arrangement. Study it carefully to answer the questions.

A 8 B 6 # 7 H U % 3 $ F V R 2 I @ ↑ 4 1 W E 9 © L 5

1. Which of the following is seventh to the right of fifteenth from the right end ?
   (A) 4
   (B) ↑
   (C) 1
   (D) W
   (E) None of these

2. If all the symbols are dropped from the above arrangement which of the following will be eighth from the left end ?
   (A) F
   (B) $
   (C) U
   (D) 3
   (E) None of these

3. How many such symbols are there in the above arrangement, each of which is immediately followed by a consonant and also immediately preceded by a number ?
   (A) None
   (B) One
   (C) Two
   (D) Three
   (E) More than three

4. How many such numbers are there in the above arrangement each of which is immediately followed by a vowel but not immediately preceded by a number ?
   (A) None
   (B) One
   (C) Two
   (D) Three
   (E) More than three

5. Four of the following five are alike in a certain way on the basis of their positions in the above arrangement and so form a group. Which is the one that does not belong to the group ?
   (A) B7#
   (B) I4↑
   (C) F2R
   (D) 95L
   (E) W©E

6. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to the group ?
   (A) Iron
   (B) Copper
   (C) Zinc
   (D) Aluminium
   (E) Brass

7. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to the group ?
   (A) 31
   (B) 39
   (C) 47
   (D) 41
   (E) 43

8. In a certain code ROSE is written as #43$ and FIRST is written as 5★#37. How is STORE written in that code ?
   (A) 473$#
   (B) 473#$
   (C) 374#$
   (D) 347#$
   (E) None of these

9. How many meaningful English words can be made from the letters ADER, using each letter only once in each word ?
   (A) None
   (B) One
   (C) Two
   (D) Three
   (E) Four

10. How many such pairs of letters are there in the word DISTINGUISH, each of which have as many letters between them in the word as they have between them in the English alphabet ?
   (A) None
   (B) One
   (C) Two
   (D) Three
   (E) More than three

Directions—(Q. 11–15) In each question below are four statements followed by four conclusions numbered I, II, III and IV. You have

to take the four given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the four given statements disregarding commonly known facts. Then decide which of the answers (A), (B), (C), (D) and (E) is the correct answer and indicate your correct alternative.

11. **Statements :**

All stones are pearls.
Some pearls are shells.
Some shells are boxes.
No box is container.

Conclusions :

I. Some stones are shells.
II. No pearl is container.
III. No shell is container.
IV. Some pearls are containers.

(A) Only II follows
(B) Only II and III follow
(C) Only either II or IV follows
(D) Only III follows
(E) None follows

12. **Statements :**

Some rings are chains.
All chains are bangles.
All bracelets are bangles.
Some bangles are pendants.

Conclusions :

I. Some rings are bangles.
II. Some chains are pendants.
III. Some bracelets are rings.
IV. No pendant is ring.

(A) None follows
(B) Only I follows
(C) Only II and III follow
(D) Only IV follows
(E) None of these

13. **Statements :**

Some schools are colleges.
Some colleges are hostels.
No hostel is office.
All offices are institutes.

Conclusions :

I. No hostel is institute.
II. Some hostels are schools.
III. Some hostels are institutes.
IV. Some offices are colleges.

(A) Only I follows
(B) Only II and III follow
(C) Only IV follows
(D) Only either I or III follows
(E) None of these

14. **Statements :**

Some pins are needles.
Some threads are needles.
All needles are nails.
All nails are hammers.

Conclusions :

I. Some pins are hammers.
II. Some threads are nails.
III. Some pins are threads.
IV. No pin is thread.

(A) Only I, II and either III or IV follow
(B) Only III and IV follow
(C) Only I and II follow
(D) All follow
(E) None of these

15. **Statements :**

Some chairs are rooms.
No room is sofa.
All sofas are tables.
Some tables are desks.

Conclusions :

I. Some sofas are desks.
II. No room is table.
III. Some chairs are tables.
IV. No desk is room.

(A) None follows
(B) Only I follows
(C) Only either II or III follows
(D) Only III and IV follow
(E) All follow

Directions—(Q. 16–20) Study the following information carefully to answer these questions.

A, B, C, D, E, F, G and H are sitting around a circle facing the centre. F is third to the right of C and second to the left of H. D is not an immediate neighbour of C or H. E is to the immediate right of A, who is second to the right of G.

16. Who is second to the left of C ?
   (A) A   (B) B
   (C) E   (D) D
   (E) None of these

17. Who is to the immediate right of C ?
   (A) E   (B) B
   (C) D   (D) B or D
   (E) None of these

18. Which of the following pairs of persons has first person sitting to the right of the second person ?
   (A) CB   (B) AE
   (C) FG   (D) HA
   (E) DB

19. Who sits between G & D ?
   (A) H   (B) D
   (C) F   (D) E
   (E) None of these

20. Which of the following is the correct position of B with respect to H ?
   I.   Second to the right
   II. Fourth to the right
   III. Fourth to the left
   IV. Second to the left

   (A) Only I   (B) Only II
   (C) Only III   (D) Both II and III
   (E) None of these

Directions—(Q. 21–25) Each of the questions below consists of a question and two statements numbered I and II are 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 the answers :

   (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 in Statement I alone or in Statement II alone are sufficient to answer the question.

   (D) If the data in both the Statements I and II are not sufficient to answer the question.

   (E) If the data in both the Statements I and II together are necessary to answer the question.

21. Who reached the station first among L, M, J, T & R if no two persons reached together ?
   I. M reached only after J & T.
   II. L reached before R.

22. Tower 'P' is in which direction with respect to tower 'Q' ?
   I. P is to the West of H, which is to the South of Q.
   II. F is to the West of Q and to the North of P.

23. What is Suneeta's rank from top in the class ?
   I. In the class of 42 children Suneeta is 29th from the bottom.
   II. Suneeta is ten ranks below Samir.

24. What is the code for 'walks' in the code language ?
   I. In the code language 'she walks fast' is written as 'he ka to'.
   II. In the code language 'she learns fast' is written as 'jo ka he'.

25. How is K related to N ?
   I. N is brother of M who is daughter of K.
   II. F is husband of K.

Directions—(Q. 26–30) In these questions a group of digits is given followed by four combinations of letters and symbols numbered (A), (B), (C) and (D).

Digits are to be coded as per the scheme and conditions given below. You have to find out which of the four combinations correctly represents the group of digits. Serial number of that combination is your answer. If none of the combinations is correct, your answer is (E) *i.e.*, 'None of these'.

Digit : 5 1 2 8 6 3 9 0 4 7
Letter/Symbol Code :

H $ T A U % # F R @

Conditions :

(i) If first digit is odd and the last digit is even their codes are to be interchanged.

(ii) If the first as well as the last digit is even both are to be coded as ★.

(iii) If the first digit is even and the last digit is odd both are to be coded as the code for last digit.

26. 471536

    (A) ★@$H%★   (B) R@$H%U

    (C) U@$H%U   (D) R@$H%R

    (E) None of these

27. 697845

    (A) U#@ARU   (B) U#@ARH

    (C) H#@ARH   (D) H#@ARU

    (E) None of these

28. 590247

    (A) @#FTRH   (B) H#FTR@

    (C) H#FTRH   (D) @#FTR@

    (E) None of these

29. 348096

    (A) %RAF#U   (B) %RAF#%

    (C) URAF#U   (D) ★RAF#★

    (E) None of these

30. 374862

    (A) %@RAUT   (B) %@RAU%

    (C) ★@RAU★   (D) T@RAU%

    (E) None of these

Directions—(Q. 31–35) In these questions, symbols @, #, $, ★ and % are used with different meaning as follows :

'A @ B' means 'A is not smaller than B'.

'A # B' means 'A is neither smaller than nor equal to B'.

'A $ B' means 'A is neither greater than nor smaller than B'.

'A ★ B' means 'A is not greater than B'.

'A % B' means 'A is neither greater than nor equal to B'.

In each of the following questions assuming the given statements to be true, find out which of the two conclusions I and II given below them is/are **definitely true**. Give answers :

(A) If only conclusion I is true.

(B) If only conclusion II is true.

(C) If either conclusion I or conclusion II is true.

(D) If neither conclusion I nor conclusion II is true.

(E) If both conclusions I and II are true.

31. **Statements :** N @ W, W # H, H % T

    Conclusions : I. H % N

                    II. T # W

32. **Statements :** F # R, H % R, L ★ R

    Conclusions : I. F # L

                    II. R @ L

33. **Statements :** J @ K, K % M, M # T

    Conclusions : I. K % T

                    II. K @ T

34. **Statements :** V ★ W, W $ H, H @ I

    Conclusions : I. V ★ I

                    II. I ★ W

35. **Statements :** L ★ P, P % V, V # D

    Conclusions : I. L ★ V

                    II. L $ D

Directions—(Q. 36–40) These questions are based on the following information. Study it carefully and answer the questions.

Seven members L, H, K, T, F, J & R represent different countries in Olympics *viz.* USA, China, Korea, France, Russia, Australia and Japan; each one competes for a different sprot *viz.* Volleyball, Archery, Rifle Shooting, Tennis, Boxing, Athletics and Football. The order of persons, countries and the games is not necessarily the same.

K represents China for Archery. T represents USA but not for Volleyball or Rifle Shooting. The one who represents Japan competes for Boxing. F competes Volleyball but not for Korea. L represents Australia for Athletics. The one who represents Russia competes for Tennis. J does not represent Korea or Japan. R competes for Rifle Shooting.

36. The one who competes for Rifle-shooting, represents which country ?
   (A) France
   (B) Korea
   (C) Japan
   (D) USA
   (E) None of these

37. Which of the following combinations is correct ?
   (A) J – Tennis – France
   (B) R – Tennis – Russia
   (C) R – Tennis – France
   (D) J – Tennis – Russia
   (E) None of these

38. Who represents Japan ?
   (A) F   (B) R
   (C) J   (D) H
   (E) None of these

39. For which game does T compete?
   (A) Boxing
   (B) Football
   (C) Tennis
   (D) Cannot be determined
   (E) None of these

40. F represents which country ?
   (A) France   (B) Russia
   (C) Japan   (D) Korea
   (E) None of these

Directions—(Q. 41–45) In each of the following questions, a related pair of figures is followed by five numbered pairs of figures. Select the pair that has a relationship **similar** to that in the unnumbered pair. The best answer is to be selected from a group of fairly close choices.
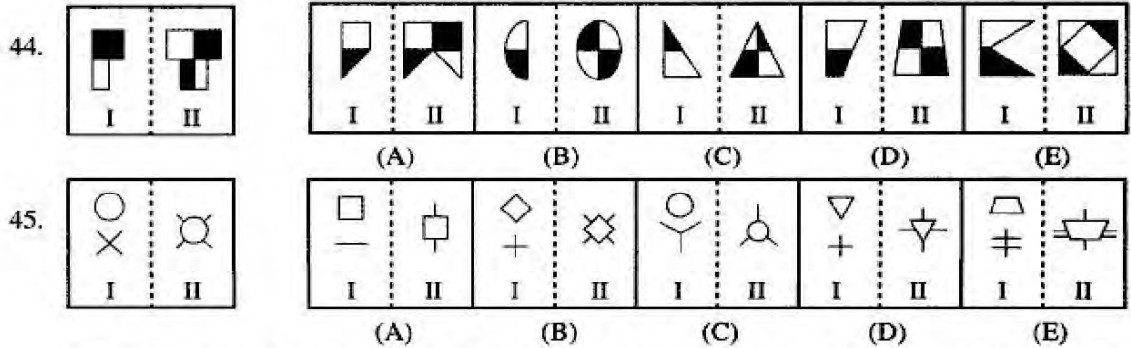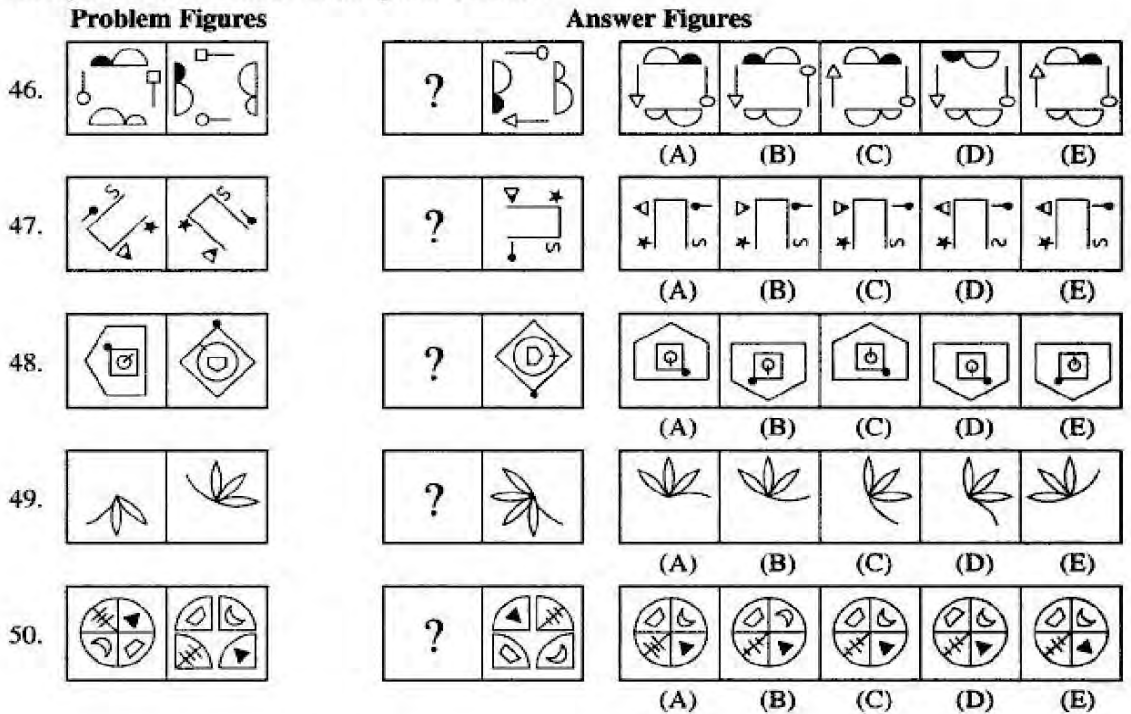
Study the following question—
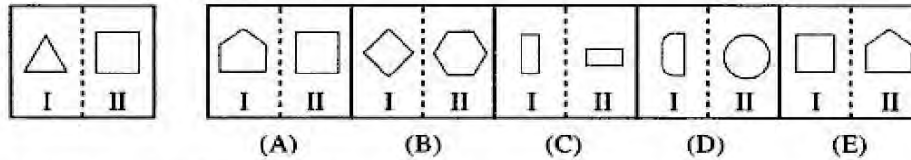
In this question element II of unnumbered figure is related to the element I of the figure in a certain way. Element II has one side more than the element I. The pair in the figure No. (E) has the same relationship. Therefore, (E) is the answer.

Now solve the following questions—

41.

42.

43.

44.

(A)	(B)	(C)	(D)	(E)
I : II	I : II	I : II	I : II	I : II

45.

(A)	(B)	(C)	(D)	(E)
I : II	I : II	I : II	I : II	I : II

Directions—(Q. 46–50) The first figure in the first unit of the problem figures bears a certain relationship to the second figure. Similarly one of the figures in the answer figures bears the **same relationship** to the second figure in the second unit of the problem figures. You are therefore to locate the figure which would fit in the question-mark ?

Problem Figures   **Answer Figures**

46.

(A)	(B)	(C)	(D)	(E)

47.

(A)	(B)	(C)	(D)	(E)

48.

(A)	(B)	(C)	(D)	(E)

49.

(A)	(B)	(C)	(D)	(E)

50.

(A)	(B)	(C)	(D)	(E)

Answers with Hints

1. (A) 15th element from the right end is 'F' and 7th element to the right of 'F' is '4'.

2. (D) After dropping all the symbols from the above arrangement—

   A 8 B 6 7 H U ③ F V R 2 I 4 I W E 9 L 5

   In it 8th element from the left end is '3'.

3. (C) 3 $ F and 9 © L

4. (B) R 2 I

5. (E)

   B 7 #, I 4 †, F 2 R 9 5 L, W © E
   (−1 ... +3)
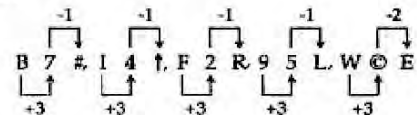
6. (E) All the rest are metals.

7. **(B)** All the rest are prime numbers.

8. **(C)** As,

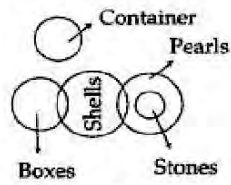|	and
R → #	F → 5
O → 4	I → ★
S → 3	R → #
E → $	S → 3
	T → 7

Hence,

S → 3
T → 7
O → 4
R → #
E → $

9. **(E)** Words formed are : READ, EARD, DEAR and DARE.

10. **(E)**

S–T, I–G, G–I and U–S.

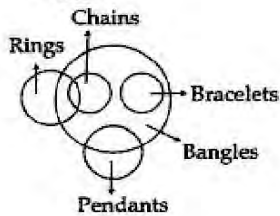11. **(C)**

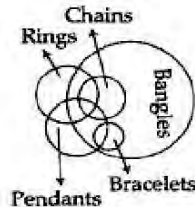12. **(B)**

13. **(D)**

14. **(A)**

15. **(A)**
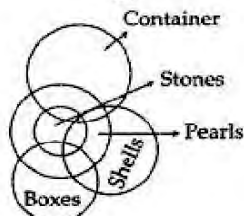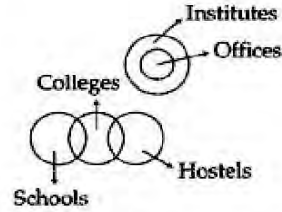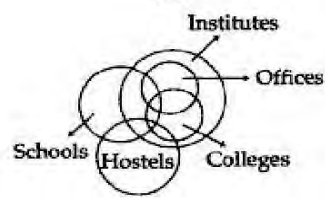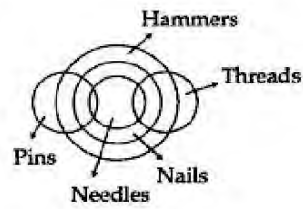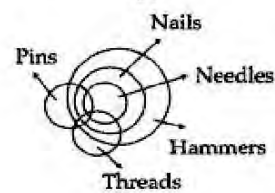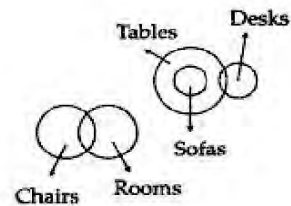
For solution from question 16 to 20 :

16. (A)   17. (B)   18. (E)   19. (C)   20. (D)

21. (D) From I,
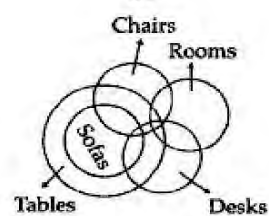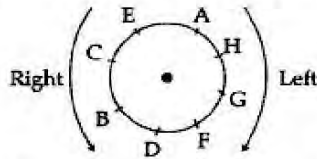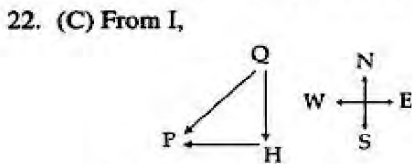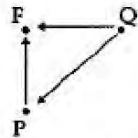$$J \& T > M > L \& R$$
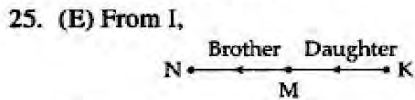From II, $L > R$
∴ From I and II,
$$J \& T > M > L > R$$

22. (C) From I,

∴ P is in South-West of Q.
From II,

∴ P is in South-West of Q.

23. (A) From I, : + 28
∴ Suneeta's rank from top is = 42 – 28
$$= 14th$$

24. (E) From I,
        she walks fast → he ka to
From II,
        she learns fast → jo ka he
∴ From I and II together,
        'walks' → 'to'

25. (E) From I,

From II,

∴ K may be father or mother of N.
∴ From I and II together K is the mother of N.

26. (A)   27. (C)   28. (B)   29. (E)   30. (D)

31. (A)   N @ W ⇒ N ≥ W
           W # H ⇒ W > H
    and   H % T ⇒ H < T
    ∴   N ≥ W > H < T
    I.   H % N ⇒ H < N   (True)
    II.   T # W ⇒ T > W   (False)

32. (A)   F # R ⇒ F > R
           H % R ⇒ H < R
    and   L ★ H ⇒ L ≤ H
    ∴   F > R > H ≥ L
    I.   F # L ⇒ F > L   (True)
    II.   R @ L ⇒ R ≥ L   (False)

33. (D)   J @ K ⇒ J ≥ K
           K % M ⇒ K < M
    and   M # T ⇒ M > T
    ∴   J ≥ K < M > T
    I.   K % T ⇒ K < T   (False)
    II.   K @ T ⇒ K ≥ T   (False)

34. (B)   V ★ W ⇒ V ≤ W
           W $ H ⇒ W = H
    and   H @ I ⇒ H ≥ I
    ∴   V ≤ W = H ≥ I
    I.   V ★ I ⇒ V ≤ I   (False)
    II.   I ★ W ⇒ I ≤ W   (True)

35. (D)   L ★ P ⇒ L ≤ P
           P % V ⇒ P < V
    and   V # D ⇒ V > D
    ∴ L ≤ P < V > D
    I.   L ★ V ⇒ L ≤ V   (False)
    II.   L $ D ⇒ L = D   (False)

For solution from question 36 to 40 :

| L	Australia	Athletics
H	Japan	Boxing
K	China	Archery
T	USA	Football
F	France	Volleyball
J	Russia	Tennis
R	Korea	Rifle shooting

36. (B)   37. (D)   38. (D)   39. (B)   40. (A)

41. (E) In element II from element I of the figure, one shaded leaf increases in clockwise direction one leaf ahead of upperside half shaded leaf in the number of shaded leaves and the

half shaded leaf becomes shaded from the side of middle. The pair in the figure (E) has the same relationship.

42. (B) In element II from element I of the figure the design of upper left corner comes at lower right corner after rotating 90° clockwise and reversing vertical. The second lower side design from upper left corner comes at upper left corner after reversing vertical. The third design from upper left corner forms new and the lower right design comes at the second lower side design place after rotating 90° anticlockwise. The pair in the figure (B) has the same relationship.

43. (A) In element II from element I of the figure the designs arrange after reversing as follows at upper, middle and lower—
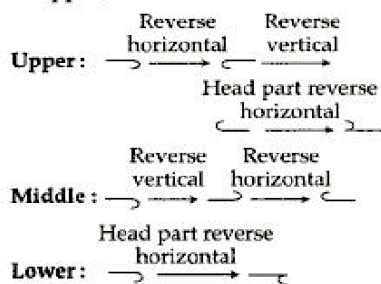

The same relationship obtained in the pair of figure (A).

44. (C) In element II from element I of the figure, one part of same design meets at the left side of the same design and the shaded part comes at the opposite part of the design. The similar relationship represented by in the pair of figure (C).

45. (D) In element II from element I of the figure the both designs of upper and lower side come on the each other and the lower side design does not form at the middle of upperside design. The similar relationship represented by in the pair of figure (D).

46. (A) In first figure from second the designs shift after reversing as follows :
(i) The design of right side shifts one arm clockwise after rotating 90° clockwise and reversing horizontal.
(ii) The design of left side shifts one arm clockwise after rotating 90° anticlockwise.
(iii) The design of upperside shifts one arm clockwise after rotating 90° clockwise.
(iv) The design of lowerside shifts one arm clockwise after rotating 90° anticlockwise.

47. (E) In first figure from second the main design rotates 90° anticlockwise and the designs on it form after shifting as follows :
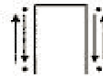
The half shaded triangle forms after reversing.

48. (D) In first figure from second the outside design '◇' froms at middle after rotating 45° anticlockwise. The middle design 'O' forms at inside after rotating 90° clockwisde. The inside design 'O' forms at utside after rotating 90° clockwise.

49. (B) In first figure from second the group of leaves rotate 90° clockwise and the half new leaf forms ahead opposite of last half leaf and one and half leaf missed from backside with this also.

50. (C) In first figure from second a circle constructed by the given four different parts. The design part of lower right comes at upper right, the part of upper right comes at lower left, the part of lower left comes at upper left and the part of upper left comes at lower right.

Quantitative Aptitude

Directions—(Q. 1–5) What **approximate** value should come in place of question-mark (?) in the following questions ?

(You are not expected to calculate the exact value.)

1. $(56)^2 \times 2{\cdot}5385 = ?$
(A) 4740
(B) 5570
(C) 6600
(D) 7960
(E) 8880

2. $(755\% \text{ of } 523) \div 777 = ?$
(A) 5
(B) 12
(C) 19
(D) 26
(E) 29

3. $783 \cdot 559 + 49 \cdot 0937 \times 31 \cdot 679 - 58 \cdot 591 = ?$
   (A) 26600   (B) 5000
   (C) 12800   (D) 2550
   (E) 2280

4. $(4438 - 2874 - 559) \div (269 - 106 - 83) = ?$
   (A) 55   (B) 13
   (C) 47   (D) 29
   (E) 31

5. $(12 \cdot 51)^4 = ?$
   (A) 22300   (B) 23400
   (C) 24500   (D) 25600
   (E) 26700

Directions—(Q. 6–10) What should come in place of question mark (?) in the following number series ?

6. 2187 729 243 81 27 9 ?
   (A) 36   (B) 3
   (C) 18   (D) 6
   (E) 12

7. 522 1235 2661 4800 7652 11217 ?
   (A) 15495   (B) 16208
   (C) 14782   (D) 16921
   (E) 14069

8. 51975 9450 2100 600 240 160 ?
   (A) 80   (B) 120
   (C) 320   (D) 240
   (E) 300

9. 4 18 48 100 180 294 ?
   (A) 416   (B) 480
   (C) 512   (D) 384
   (E) 448

10. 6 26 134 666 3334 16666 ?
    (A) 84344   (B) 83443
    (C) 84434   (D) 83334
    (E) 83344

Directions—(Q. 11–20) What should come in place of question mark (?) in the following questions ?

11. $4895 + 364 \times 0 \cdot 75 - 49 = ?$
    (A) 5119   (B) 3895
    (C) 3907   (D) 5210
    (E) None of these

12. $5\frac{1}{4} + 6\frac{2}{3} + 7\frac{1}{6} = ?$
    (A) 19·5   (B) $19\frac{11}{12}$
    (C) $19\frac{1}{12}$ (D) 19
    (E) None of these

13. $[(144)^2 \div 48 \times 18] \div 36 = \sqrt{?}$
    (A) 23328   (B) 36
    (C) 216   (D) 46656
    (E) None of these

14. $(27)^{18} \div (27)^3 = ?$
    (A) $(27)^{54}$ (B) $(27)^{21}$
    (C) $(27)^{15}$ (D) $(27)^6$
    (E) None of these

15. $156 + 16 \times 1 \cdot 5 - 21 = ?$
    (A) 126   (B) 258
    (C) 237   (D) 159
    (E) None of these

16. $434 \cdot 43 + 43 \cdot 34 + 3 \cdot 44 + 4 + 0 \cdot 33 = ?$
    (A) 421·45   (B) 455·54
    (C) 485·54   (D) 447·45
    (E) None of these

17. $24336 \div ? = 78 \times 24$
    (A) 6   (B) 13
    (C) 11   (D) 17
    (E) None of these

18. $(98)^{45} \times (98)^{-35} = ?$
    (A) (98) (B) $(98)^2$
    (C) $(98)^{-5}$ (D) $(98)^{10}$
    (E) None of these

19. $(78 \cdot 95)^2 - (43 \cdot 35)^2 = ?$
    (A) 4353·88   (B) 4305
    (C) 4235·78   (D) 4148
    (E) None of these

20. $(23 \cdot 6\% \text{ of } 1254) - (16 \cdot 6\% \text{ of } 834) = ?$
    (A) 159·5   (B) 157·5
    (C) 155·5   (D) 153·5
    (E) None of these

Directions—(Q. 21–25) In each of these questions, two equations I and II with variables a and b are given. You have to solve both the

equations to find the values of a and b. Mark answer :

(A) If $a < b$

(B) If $a \leq b$

(C) If relationship between a and b cannot be established

(D) If $a > b$

(E) If $a \geq b$

21. I. $16a^2 = 1$

 II. $3b^2 + 7b + 2 = 0$

22. I. $a^2 + 5a + 6 = 0$

 II. $b^2 + 7b + 12 = 0$

23. I. $a^2 + 2a + 1 = 0$

 II. $b^2 = \pm 4$

24. I. $a^2 - 5a + 6 = 0$

 II. $2b^2 - 13b + 21 = 0$

25. I. $2a^2 + a - 1 = 0$

 II. $12b^2 - 17b + 6 = 0$

26. A 200 metre long train crosses a platform of double its length in 36 seconds. What is the speed of the train in kmph ?

(A) 60 (B) 48

(C) 64 (D) 66

(E) None of these

27. Work done by A in one day is half of the work done by B in one day. Work done by B is half of the work done by C in one day. If C alone can complete the work in 7 days, in how many days can A, B and C together complete the work ?

(A) 28 (B) 14

(C) 4 (D) 21

(E) None of these

28. In how many different ways can the letters of the word DAILY be arranged ?

(A) 60 (B) 48

(C) 160 (D) 120

(E) None of these

29. The number obtained by interchanging the digits of a two digit number is less than the original number by 63. If the sum of the digits of the number is 11, what is the original number ?

(A) 29

(B) 92

(C) 74

(D) Cannot be determined

(E) None of these

30. If the numerator of a fraction is increased by 200% and the denominator is increased by 300%, the resultant fraction is $\frac{15}{26}$. What was the original fraction ?

(A) $\frac{8}{11}$ (B) $\frac{10}{11}$

(C) $\frac{9}{13}$ (D) $\frac{10}{13}$

(E) None of these

31. The profit earned after selling an article for Rs. 996 is the same as loss incurred after selling the article for Rs. 894. What is the cost price of the article ?

(A) Rs. 935 (B) Rs. 905

(C) Rs. 945 (D) Rs. 975

(E) None of these

32. The ages of Nishi and Vinnee are in the ratio of 6 ; 5 respectively. After 9 years the ratio of their ages will be 9 : 8. What is the difference in their ages ?

(A) 9 years (B) 7 years

(C) 5 years (D) 3 years

(E) None of these

33. The simple interest accrued on an amount of Rs. 84,000 at the end of three years is Rs. 30,240. What would be the compound interest accrued on the same amount at the same rate in the same period ?

(A) Rs. 30,013·95 (B) Rs. 31,013·95

(C) Rs. 32,013·95 (D) Rs. 33,013·95

(E) Rs. 34,013·95

34. The total of the ages of a class of 75 girls is 1050, the average age of 25 of them is 12 years and that of another 25 is 16 years. Find the average age of the remaining girls.

(A) 12 years (B) 13 years

(C) 14 years (D) 15 years

(E) None of these

35. One-fifth of a number is 81. What will 68% of that number be ?

(A) 195·2 (B) 275·4

(C) 225·6 (D) 165·8

(E) None of these

36. In a class of 40 students and 8 teachers, each student got sweets that are 20% of the total number of students and each teacher got sweets that are 25% of the total number of students. How many sweets were there ?
   (A) 420   (B) 400
   (C) 320   (D) 360
   (E) None of these

37. What is 35% of 45% of $\frac{7}{9}$th of 3600 ?
   (A) 441   (B) 414
   (C) 444   (D) 411
   (E) None of these

38. A committee of 3 members is to be selected out of 3 men and 2 women. What is the probability that the committee has at least one woman ?
   (A) $\frac{1}{10}$ (B) $\frac{9}{20}$
   (C) $\frac{9}{10}$ (D) $\frac{1}{20}$
   (E) None of these

39. By how much is $\frac{5}{12}$th of 516 lesser than $\frac{4}{9}$th of 495 ?
   (A) 22   (B) 15
   (C) 12   (D) 27
   (E) None of these

40. Ms. Deepti Jain invests 11% of her monthly salary, i.e., Rs. 5,236 in Fixed Deposits. Later she invests 19% of her monthly salary on Life Insurance Policies; also she invests another 7% of her monthly salary on Mutual Funds. What is the total annual amount invested by Ms. Deepti Jain ?
   (A) Rs. 2,11,344   (B) Rs. 17,612
   (C) Rs. 1,05,672   (D) Rs. 35,224
   (E) None of these

41. Which number should replace both the question marks in the following equation ?
   $$\frac{?}{432} = \frac{243}{?}$$
   (A) 308   (B) 312
   (C) 324   (D) 316
   (E) None of these

42. Swapana spent Rs. 44,620 on Deepawali Shopping, Rs. 32,764 on buying Laptop and the remaining 32% of the total amount she had as cash with her. What was the total amount ?
   (A) Rs. 36,416
   (B) Rs. 1,13,800
   (C) Rs. 77,384
   (D) Cannot be determined
   (E) None of these

43. Manas decided to donate 12% of his salary. On the day of donation he changed his mind and donated Rs. 2,240 which was two-third of what he had decided earlier. How much is Manas's salary ?
   (A) Rs. 25,000   (B) Rs. 28,000
   (C) Rs. 31,000   (D) Rs. 34,000
   (E) None of these

44. If the fractions $\frac{2}{5}, \frac{3}{8}, \frac{4}{9}, \frac{5}{13}$ and $\frac{6}{11}$ are arranged in ascending order of their values, which one will be the fourth ?
   (A) $\frac{4}{9}$ (B) $\frac{5}{13}$
   (C) $\frac{3}{8}$ (D) $\frac{2}{5}$
   (E) None of these

45. A sum of money is divided among A, B, C and D in the ratio of 2 : 3 : 7 : 11 respectively. If the share of C is Rs. 2,755 more than the share of A, then what is the total amount of money of B and D together ?
   (A) Rs. 4,408   (B) Rs. 5,510
   (C) Rs. 6,612   (D) Rs. 7,714
   (E) None of these

Directions—(Q. 46–50) Each question below is followed by two statements I and II. You are to determine whether the data given in the statement is sufficient for answering the question. You should use the data and your knowledge of Mathematics to choose between the possible answers. Give answer :
   (A) If the statement I alone is sufficient to answer the question, but the statement II alone is not sufficient.
   (B) If the statement II alone is sufficient to answer the question, but the statement I alone is not sufficient.

(C) If both statements I and II together are needed to answer the question.

(D) If either the statement I alone or statement II alone is sufficient to answer the question.

(E) If you cannot get the answer from the statement I and II together, but need even more data.

46. The ages of Anand and Sujeet are in the ratio of 6 : 5 respectively. What is the age of Anand ?

 I. The ages of Anand and Sandeep are in the ratio of 10 : 7.

 II. After 5 years the ratio of Anand's and Sujeet's ages will be 7 : 6.

47. What is the three digit number ?

 I. Three-fifth of that number is less by 90 of that number.

 II. One-fourth of that number is 25% of that number.

48. In how many days 14 men can complete a piece of work ?

 I. If 18 women can complete the same piece of work in 24 days.

 II. If 28 children can complete the same piece of work in 56 days.

49. What is the salary of A, in a group of A, B, C, D and E whose average salary is Rs. 65,780 ?

 I. Total of the salary of B and C is Rs. 88,545.

 II. Total of the salary of D and E is Rs. 59,020.

50. What is the profit earned by selling a Watch for Rs. 15,675 ?

 I. The cost price of 5 such Watches is equal to selling price of 4 such Watches.

 II. 25% profit is earned by selling each Watch.

Answers with Hints

1. (D) $? = (56)^2 \times 2 \cdot 5385$

 $= 3136 \times 2 \cdot 5385$

 $= 7960 \cdot 736$

 $\simeq 7960$ (App.)

2. (A) $? = \left(\frac{755}{100} \text{ of } 523\right) \div 777$

 $= \frac{394865}{77700} = 5 \cdot 08$

 $\simeq 5$ (App.)

3. (E) $? = 783 \cdot 559 + 49 \cdot 0937 \times 31 \cdot 679 - 58 \cdot 591$

 $= 783 \cdot 559 + 1555 \cdot 239 - 58 \cdot 591$

 $= 2280 \cdot 207$

 $\simeq 2280$ (App.)

4. (B) $? = (4438 - 2874 - 559) \div (269 - 106 - 83)$

 $= \frac{1005}{80} = 12 \cdot 56$

 $\simeq 13$ (App.)

5. (C) $? = (12 \cdot 51)^4 = 24492 \cdot 28$

 $\simeq 24500$ (App.)

6. (B)

7. (A)

8. (C)

9. (E)

$$4 \qquad 18 \qquad 48 \qquad 100$$
$$\downarrow \qquad \downarrow \qquad \downarrow \qquad \downarrow$$
$$2 \times 2 \quad 3 \times 6 \quad 4 \times 12 \quad 5 \times 20$$

$$\boxed{448}$$

$$180 \qquad 294 \qquad ?$$
$$\downarrow \qquad \downarrow \qquad \downarrow$$
$$6 \times 30 \quad 7 \times 42 \quad 8 \times 56$$

10. (D)

6
$\times 5 - 4$
26
$\times 5 + 4$
134
$\times 5 - 4$
666
$\times 5 + 4$
3334
$\times 5 - 4$
16666
$\times 5 + 4$
$\boxed{83334}$?

11. (A) ? $= 4895 + 364 \times 0.75 - 49$
$= 4895 + 273 - 49$
$= 5119$

12. (C) ? $= \dfrac{21}{4} + \dfrac{20}{3} + \dfrac{43}{6}$

$= \dfrac{63 + 80 + 86}{12}$

$= \dfrac{229}{12} = 19\dfrac{1}{2}$

13. (D) $\sqrt{?} = [(144)^2 \div 48 \times 18] \div 36$

$= \left[\dfrac{20736}{48} \times 18\right] \div 36$

$= \dfrac{7776}{36}$

$= 216$

∴ $? = (216)^2$

$= 46656$

14. (C) ? $= (27)^{18} \div (27)^3$
$= (27)^{15}$

15. (D) ? $= 156 + 16 \times 1.5 - 21$
$= 156 + 24 - 21$
$= 159$

16. (C) ? $= 434.43 + 43.34 + 3.44 + 4 + 0.33$
$= 485.54$

17. (B) $\because \quad \dfrac{24336}{?} = 78 \times 24$

∴ $? = \dfrac{24336}{78 \times 24} = 13$

18. (D) ? $= (98)^{45} \times (98)^{-35}$
$= (98)^{10}$

19. (A) ? $= (78.95)^2 - (43.35)^2$
$= 6233.1025 - 1879.2225$
$= 4353.88$

20. (B) ? $= \left(\dfrac{23.6}{100} \text{ of } 1254\right) - \left(\dfrac{16.6}{100} \text{ of } 834\right)$
$= 295.944 - 138.444$
$= 157.5$

21. (D) I. $\qquad 16a^2 = 1$
$\Rightarrow \qquad a = \pm\dfrac{1}{4}$
II. $\qquad 3b^2 + 7b + 2 = 0$
$\Rightarrow \quad (b + 2)(3b + 1) = 0$
$\Rightarrow \qquad b = -2 \text{ or} -\dfrac{1}{3}$
∴ $\qquad a > b$

22. (E) I. $a^2 + 5a + 6 = 0$
$\Rightarrow (a + 2)(a + 3) = 0$
$\Rightarrow \qquad a = -2 \text{ or} -3$
II. $\quad b^2 + 7b + 12 = 0$
$\Rightarrow (b + 3)(b + 4) = 0$
$\Rightarrow \qquad b = -3 \text{ or} -4$
∴ $\qquad a \geq b$

23. (C) I. $a^2 + 2a + 1 = 0$
$\Rightarrow \qquad (a + 1)^2 = 0$
$\Rightarrow \qquad a = -1$
II. $\qquad b^2 = \pm 4$
$\Rightarrow \qquad b = \pm 2 \text{ or} \pm 2i$
The relation between a and b cannot be established.

24. (B) I. $\qquad a^2 - 5a + 6 = 0$
$\Rightarrow \quad (a - 2)(a - 3) = 0$
$\Rightarrow \qquad a = 2 \text{ or} 3$
II. $\quad 2b^2 - 13b + 21 = 0$
$\Rightarrow \quad (b - 3)(2b - 7) = 0$
$\Rightarrow \qquad b = 3 \text{ or} \dfrac{7}{2}$
∴ $\qquad a \leq b$

25. (A) I. $\qquad 2a^2 + a - 1 = 0$

$\Rightarrow \qquad (a + 1)(2a - 1) = 0$

$\Rightarrow \qquad a = -1 \text{ or } \dfrac{1}{2}$

II. $\qquad 12b^2 - 17b + 6 = 0$

$\Rightarrow \qquad (4b - 3)(3b - 2) = 0$

$\Rightarrow \qquad b = \dfrac{3}{4} \text{ or } \dfrac{2}{3}$

$\therefore \qquad a < b$

26. (A) Speed of the train $= \dfrac{200 + 400}{36}$

$= \dfrac{50}{3} \text{ m/sec}$

$= \dfrac{50}{3} \times \dfrac{18}{5}$

$= 60 \text{ km/hr.}$

27. (C) Let A can complete the work in x days

$\therefore$ B and C will complete work in $\dfrac{x}{2}$ days and $\dfrac{x}{4}$ days respectively.

$\because \qquad \dfrac{x}{4} = \dfrac{7}{1}$

$\Rightarrow \qquad x = 28$

$\because \quad \dfrac{1}{28} + \dfrac{1}{14} + \dfrac{1}{7} = \dfrac{1}{4}$

$\therefore$ All the three A, B and C together will complete the work in 4 days.

28. (D) Reqd. ways $= {}^5P_5 \lfloor 5$

$= 120$

29. (B) Let the number be $(10x + y)$

$\because \quad (10x + y) - (10y + x) = 63$

$\Rightarrow \qquad x - y = 7$

and $\qquad x + y = 11$

$\therefore \qquad x = 9$

and $\qquad y = 2$

$\therefore \qquad$ Reqd. number $= 92$

30. (D) Let the fraction be $\dfrac{x}{y}$

$\because \qquad \dfrac{x + 2x}{y + 3y} = \dfrac{15}{26}$

$\Rightarrow \qquad \dfrac{3x}{4y} = \dfrac{15}{26}$

$\therefore \qquad \dfrac{x}{y} = \dfrac{15}{26} \times \dfrac{4}{3}$

$= \dfrac{10}{13}$

31. (C) $\therefore$ C. P. of the article

$= \dfrac{996 + 894}{2} = \text{Rs. } 945$

32. (D) Let the age of Nishi and Vinnee be $6x$ years and $5x$ years respectively.

$\because \qquad \dfrac{6x + 9}{5x + 9} = \dfrac{9}{8}$

$\Rightarrow \qquad 48x + 72 = 45x + 81$

$\Rightarrow \qquad 3x = 9$

$\therefore \qquad x = 3$

$\therefore$ Reqd. difference $= 6 \times 3 - 5 \times 3$

$= 3 \text{ years}$

33. (E) Rate $= \dfrac{30240 \times 100}{84000 \times 3}\% = 12\%$

$\therefore$ C. I. $= 84000 \left[\left(1 + \dfrac{12}{100}\right)^3 - 1 \right]$

$= 84000 \left(\dfrac{28 \times 28 \times 28 - 25 \times 25 \times 25}{25 \times 25 \times 25} \right)$

$= 84000 \times \dfrac{6327}{15625}$

$= \text{Rs. } 34013.95$

34. (C) Average age of remaining girls

$= \dfrac{1050 - (25 \times 12 + 25 \times 16)}{25}$

$= \dfrac{1050 - 700}{25}$

$= 14 \text{ years}$

35. (B) $\because \quad x \times \dfrac{1}{5} = 81$ (Here x is the number)

$\Rightarrow \qquad x = 81 \times 5$

$= 405$

$\therefore \qquad \dfrac{x \times 68}{100} = \dfrac{405 \times 68}{100}$

$= 275.4$

36. (B) Total number of chocolates

$= 40 \times \dfrac{40 \times 20}{100} + 8 \times \dfrac{40 \times 25}{100}$

$= 320 + 80 = 400$

37. (A) $\dfrac{35}{100}$ of $\dfrac{45}{100}$ of $\dfrac{7}{9}$ of $3600 = 441$

38. (C) Reqd. Probability

$$= \dfrac{{}^2C_1 \times {}^3C_2 + {}^2C_2 \times {}^3C_1}{{}^5C_3}$$

$$= \dfrac{(2 \times 3 + 1 \times 3)}{10}$$

$$= \dfrac{6 + 3}{10} = \dfrac{9}{10}$$

39. (E) $\dfrac{4}{9}$ of $495 \sim \dfrac{5}{12}$ of $516 = 220 \sim 215 = 5$

40. (A) Let the monthly salary of Ms. Deepti be Rs. x

$$\because \quad x \times \dfrac{11}{100} = 5236$$

$$\therefore \quad x = \dfrac{5236 \times 100}{11}$$

$$= \text{Rs. } 47600$$

$\therefore$ Total annual amount invested

$$= 47600 \left(\dfrac{11}{100} + \dfrac{19}{100} + \dfrac{7}{100} \right) \times 12$$

$$= \text{Rs. } 17612 \times 12$$

$$= \text{Rs. } 2,11,344$$

41. (C) $\because \quad \dfrac{?}{432} = \dfrac{243}{?}$

$$\Rightarrow \quad (?)^2 = 432 \times 243$$

$$\therefore \quad ? = \sqrt{104976}$$

$$= 324$$

42. (B) Let the total amount be Rs. x

$$\because \quad x - (44620 + 32764) = \dfrac{x \times 32}{100}$$

$$\Rightarrow \quad x - 77384 = 0.32x$$

$$\Rightarrow \quad x - 0.32x = 77384$$

$$\therefore \quad x = \dfrac{77384}{0.68}$$

$$= \text{Rs. } 113800$$

43. (B) Let the monthly salary of Manas be Rs. x

$$\because \quad \dfrac{12x}{100} \times \dfrac{2}{3} = \text{Rs. } 2240$$

$$\therefore \quad x = \dfrac{2240 \times 100 \times 3}{12 \times 2}$$

$$= \text{Rs. } 28000$$

44. (A) Given fractions

$$= \dfrac{2}{5}, \dfrac{3}{8}, \dfrac{4}{9}, \dfrac{5}{13}, \dfrac{6}{11}$$

$$= 0.40, 0.37, 0.44, 0.38, 0.54$$

$\because$ The fractions in ascending order

$$= \dfrac{3}{8}, \dfrac{5}{13}, \dfrac{2}{5}, \dfrac{4}{9}, \dfrac{6}{11}$$

$\therefore$ Fraction on 4th order $= \dfrac{4}{9}$

45. (D) Let the shares of A, B, C and D be Rs. $2x$, $3x$, $7x$ and $11x$ respectively.

$$\because \quad 7x - 2x = 2755$$

$$\therefore \quad x = \dfrac{2755}{5} = 551$$

$\therefore$ Shares of B and D together $= (3 + 11)x$

$$= 14 \times 551$$

$$= \text{Rs. } 7714$$

46. (B) From II, $\dfrac{6x + 5}{5x + 5} = \dfrac{7}{6}$

$$\Rightarrow \quad 36x + 30 = 35x + 35$$

$$\Rightarrow \quad x = 5$$

$$\therefore \quad \text{Age of Anand} = 6 \times 5$$

$$= 30 \text{ years}$$

Hence, only statement II alone is sufficient.

47. (E) From I,

$$(100x + 10y + z) - \dfrac{3}{5}(100x + 10y + z) = 90$$

From II, $(100x + 10y + z) \times \dfrac{1}{4}$

$$= (100x + 10y + z) \times \dfrac{25}{100}$$

We need more data.

48. (E) Data is insufficient.

49. (C) From I and II together,

Salary of A $= 5 \times 65780 - (88545 + 59020)$

$$= 328900 - 147565$$

$$= \text{Rs. } 181335$$

50. (A) From I,

S. P. of 1 watch $= 15675$

and C. P. of 1 watch $= 15675 \times \dfrac{4}{5}$

$$= \text{Rs. } 12540$$

$$\therefore \quad \text{Profit} = 15675 - 12540$$

$$= \text{Rs. } 3135$$

Hence, only statement I alone is sufficient.

General Knowledge/Computer Knowledge

1. Which of the following is **not** a 'Social Sector Programme' run by the Govt. of India ?
   (A) National Rural Health Mission
   (B) Sarva Shiksha Abhiyan
   (C) Mid-Day Meal Scheme
   (D) Integrated Child Development Services
   (E) Bharat Nirman

2. In order to augment Credit flow to small and poor borrowers, commercial banks are required to provide how much percentage of their priority sector advances to weaker sections of the society ?
   (A) 15%   (B) 20%
   (C) 30%   (D) 25%
   (E) 35%

3. As reported in some newspapers/magazines a large number of children/infants are falling sick because of the use of melamine contaminated dairy products in the world. Due to this many countries like Africa, Japan, Singapore, etc. have stopped import of these products. Which of the following countries was the main exporter of such products ?
   (A) China   (B) Bangladesh
   (C) Pakistan   (D) Iran
   (E) None of these

4. Which of the following is the abbreviated name of the programme launched in India for the economic empowerment of persons with severe to profound disabilities ?
   (A) ARUNIM   (B) NREGA
   (C) GCMMF   (D) UNCTAD
   (E) SCOPE

5. Which of the following is/are objective(s) of the **'Rural Drinking water supply Programme'** launched by the Govt. of India ?
   1. Supply safe drinking water to all villages.
   2. Assisting local communities to maintain sources of safe drinking water in good condition.
   3. Giving special attention for water supply to Scheduled Caste and Scheduled Tribes.
   (A) Only 1   (B) Only 2

   (C) Only 3   (D) All 1, 2 and 3
   (E) None of these

6. Which of the following is **not a Source of Tax Revenue** collected by the Govt. of India ?
   (A) Custom Duty   (B) Excise Duty
   (C) Income Tax   (D) Service Tax
   (E) Dividends and Profits

7. India is now out of the nuclear sanction imposed on it about 16 years back. This sanction was imposed by which of the following organisations ?
   (A) Nuclear Suppliers Group (NSG)
   (B) Organisation of Petroleum Exporting Countries (OPEC)
   (C) INTERPOL
   (D) UN Security Council
   (E) None of these

8. Very often we read in news-papers about the Foreign Direct Investment (FDI) Through Automatic Route. What is meant by Automatic Route ?
   1. It is a process which allows foreign investors to trade shares of any Indian Company on day-to-day basis openly in stock markets.
   2. It is a process by which Indian Companies are allowed to issue shares to any foreign investor as a part of their paid up Capital in the project in which they have made an investment.
   3. It is a process in which all foreign investors are asked to make all their investments in Indian projects in rupee currency only and that too in cash only. Technical knowhow or any other type of participation is not allowed as a part of investment.
   (A) Only 1   (B) Only 2
   (C) Only 3   (D) Both 1 and 3
   (E) All 1, 2 and 3

9. The Govt. of India is planning to introduce a **'National Security Exception Act'** in the Parliament, which will work on the lines of

Exxon-Florio provision prevalent in the USA. What is the purpose of the proposed Act ?

1. The Act is a part of Indo-US Nuclear Pact as this only will allow India to start building nuclear facilities in the country.

2. The Act will empower the Govt. of India to stall any foreign Company from acquiring any local asset (FDI) if it is found to be compromising with national security.

3. The Act will empower the Govt. of India to control terrorism in a better way as all e-services will be under thorough scrutiny by security agencies.

(A) Only 1   (B) Only 2
(C) Only 3   (D) Both 1 and 3
(E) All 1, 2 and 3

10. Which of the following is **not** included in the list of UN Millennium Goals ?
(A) Eradicate extreme poverty and hunger
(B) Develop a global partnership for development
(C) Promote Gender equality
(D) Reduce Child Mortality
(E) Make World Nuclear free

11. Which of the following agencies/ bodies has asked all foreign funds to come forward and register itself as Foreign Institutional Investments (FIIs) prior to any investment in India ?
(A) RBI
(B) SEBI
(C) IBA
(D) Registrar of Companies
(E) None of these

12. India recently signed an agreement in the field of hydrocarbon with which of the following countries for which Hernan Martinez Torres, Minister of Energy of that country was in India ?
(A) Zambia   (B) Ukraine
(C) Colombia   (D) Turkey
(E) None of these

13. As reported in the newspapers some people are of the opinion that India may not be able to achieve its export targets set for the year 2008-09. Which of the following is/are the reason(s) of their worry ?

1. There was a major flood in some parts of Bihar, Orissa, Gujarat and some other States recently, owing to which fruit/horticultural crop has not reached export markets in sufficient quantity.

2. Rupee is frequently getting depreciated against US dollar.

3. Some major economies of the world are passing through the phase of economic recession. Hence many export orders are cancelled.

(A) Only 1   (B) Only 2
(C) Only 3   (D) Both 1 and 3 only
(E) None of these

14. While talking to the Press/ Media/Group of experts in Singapore the former Governor of RBI, Dr. Y. V. Reddy, said that the impact of global financial turmoil will be less on Asia. What in opinion of the people like Dr. Reddy are the strengths of Asian Financial System which will help it to sustain the turmoil ? (Pickup correct statement(s) as your answer.)

1. Banks in Asia are better capitalized and are not much exposed to sophisticated derivatives.

2. Asian economies were in a high growth mode and hence they have better ability to withstand the crisis.

3. Most of the Asian countries used to enjoy a strong fiscal position and current account surpluses in the past. This has given them an ability to bail out a failing financial institution in case it appeared.

(A) Only 1   (B) Only 2
(C) Only 3   (D) All 1, 2 and 3
(E) None of these

15. As per the reports published in the newspapers recently Indian Rupee was on depreciation and there was a time when the depreciation was about 17% in six months. Which of the following was/were the main cause(s) of this continuous fall ?

1. Foreign fund flow was very low.

2. There was heavy demand for the US dollar in the local forex market.

3. RBI all of a sudden decided to lower the CRR.

(A) Only 1
(B) Only 2
(C) Both 1 and 2 only
(D) Only 3
(E) All 1, 2 and 3

16. The issues related to the Land Acquisition for setting-up 'Special Economic Zones (SEZs)' is frequently seen in the news-papers these days. As per existing laws maximum how much area is allowed to be acquired for a SEZ ?
(A) 1000 hectares   (B) 2000 hectares
(C) 3000 hectares   (D) 5000 hectares
(E) None of these

17. Which of the following was one of the major point of disagreement between various countries over which the talks at World Trade Organisation (WTO) got collapsed recently ?
(A) Subsidy to farmers
(B) Providing special status to India
(C) Drafting a new constitution for WTO
(D) Drafting a common Trade Policy for next 5 years
(E) None of these

18. The support price of which of the following commodities was raised by 33%-40% recently to make it Rs. 2,500 per quintal ?
(A) Cotton   (B) Sugarcane
(C) Wheat   (D) Palm Oil
(E) None of these

19. Who amongst the following cricketers made a World Record of 12 Sixes in a One Day International Match recently ?
(A) Sachin Tendulkar
(B) Xavier Marshall
(C) Muttiah Muralitharan
(D) Mike Hussey
(E) None of these

20. Which of the following cities became the first 100% e-literate city of India ?
(A) Pune   (B) Hyderabad
(C) Kozhikode   (D) Jaipur
(E) Bangalore

21. As we all know India will continue to be a net importer of steel as the demand of the same is likely to increase by about 11% in days to come. What is the percentage growth in inland production of steel ?
(A) 3%   (B) 5%
(C) 7%   (D) 8%
(E) 10%

22. International Literacy Day is observed on which of the following days ?
(A) September 18   (B) September 8
(C) October 18   (D) October 8
(E) None of these

23. Which of the following teams won the Durand Cup Football played in New Delhi in September 2008 ?
(A) Tata Motors
(B) Indian Railways
(C) Churchill Brothers
(D) Mahindra United
(E) None of these

24. Which of the following is/are part of New National Biofuel Policy 2008 launched by the Govt. of India ?
1. Minimum Support Price with a provision of periodic revision.
2. No duties or taxes would be levied on Biodiesel.
3. Biodiesel production to be taken up from non-edible oil seeds in waste/marginal lands.
(A) Only 1   (B) Only 2
(C) Only 3   (D) All 1, 2 and 3
(E) None of these

25. Who amongst the following was given the Mahatma Gandhi Award for Reconciliation and Peace 2008 ?
(A) Akio Ishii   (B) Bill Gates
(C) Nelson Mandela   (D) Prince Charles
(E) None of these

26. Which of the following is/are some of the recommendations of the Raghurajan Committee on financial sector reforms ?
1. Target inflation control rather than controlling money supply.
2. Open Corporate and Govt. Bond markets.
3. Provide liberal regulations for mergers and acquisitions.

(A) Only 1   (B) Only 2

(C) Only 3   (D) All 1, 2 and 3

(E) None of these

27. Who amongst the following is the author of the book 'Inside Third World' ?

(A) Amit Choudhury   (B) William Goldings

(C) V. Harrison   (D) Nana Palkiwala

(E) None of these

28. The '18th Safety Olympics' was organised in—

(A) Seoul   (B) Berlin

(C) London   (D) Moscow

(E) New York

29. Mahendra Kapoor who died recently was a famous—

(A) Politician   (B) Social Worker

(C) Journalist   (D) Sportsman

(E) Playback Singer

30. The Prime Minister of India recently released the Economic Outlook for 2008-09. According to the document Indian economy will grow at what rate during the period of the review ?

(A) 7·7%   (B) 8%

(C) 8·33%   (D) 9·7%

(E) None of these

31. The 48th National Open Athletics Championship was held at—

(A) Kochi   (B) Delhi

(C) Jaipur   (D) Lucknow

(E) Panaji

32. Which of the following countries refused to ratify the 'Lisbon Treaty', a very crucial agreement for reforms in the constitution of the European Union ?

(A) Russia   (B) Poland

(C) Germany   (D) France

(E) Italy

33. Who amongst the following is the author of the book 'The Other Side of Midnight' ?

(A) Salman Rushdie

(B) Katherine Mayo

(C) Ernest Hamingway

(D) H. G. Wells

(E) Sydney Sheldon

34. China recently resolved its border dispute with which of the following countries ? (As per agreement Yinlong island will be handed over to China.)

(A) Mongolia   (B) Japan

(C) India   (D) Taiwan

(E) Russia

35. Two new countries recently signed the protocols to become the member of the North Atlantic Treaty Organisation (NATO). These countries are—

(A) Ukraine–Croatia   (B) Croatia–Albania

(C) Georgia–Russia   (D) Georgia–Croatia

(E) None of these

36. .... are specially designed computer chips that reside inside other devices, such as your car or your electronic thermostat.

(A) Servers

(B) Embedded computers

(C) Robotic computers

(D) Mainframes

(E) None of these

37. This part of the operating system manages the essential peripherals, such as the keyboard, screen, disk drives, and parallel and serial ports ......

(A) Basic input/output system

(B) Secondary input/output system

(C) Peripheral input/output system

(D) Marginal input/output system

(E) None of these

38. .... viruses are often transmitted by a floppy disk left in the floppy disk drive.

(A) Trojan horse   (B) Boot-sector

(C) Script   (D) Logic bomb

(E) None of these

39. Servers are computers that provide resources to other computers connected to a ......

(A) Mainframe   (B) Network

(C) Supercomputer   (D) Client

(E) None of these

40. A database management system (DBMS) is a......

(A) Hardware system used to create, maintain and provide controlled access to a database

(B) Hardware system used to create, maintain and provide uncontrolled access to a database

(C) Software system used to create, maintain and provide uncontrolled access to a database

(D) Software system used to create, maintain and provide controlled access to a database

(E) None of these

41. A proxy server is used for which of the following ?

(A) To provide security against unauthorized users

(B) To process client requests for Web pages

(C) To process client requests for database access

(D) To provide TCP/IP

(E) None of these

42. .... are words that a programming language has set aside for its own use.

(A) Control words

(B) Reserved words

(C) Control structures

(D) Reserved keys

(E) None of these

43. Granting an outside organization access to internal web pages is often implemented using a(n)....

(A) Extranet (B) Intranet

(C) Internet (D) Hacker

(E) None of these

44. Which term identifies a specific computer on the Web and the main page of the entire site ?

(A) URL (B) Web site address

(C) Hyperlink (D) Domain name

(E) None of these

45. The purpose of the primary key in a database is to ....

(A) Unlock the database

(B) Provide a map of the data

(C) Establish constraints on database operations

(D) Uniquely identify a record

(E) None of these

46. A(n) .... uses pictures (called icons) and menus displayed on the screen to send commands to the computer system.

(A) Command-based user interface

(B) GUI

(C) System utility

(D) API

(E) None of these

47. .... are viruses that are triggered by the passage of time or on a certain date.

(A) Boot-sector viruses

(B) Macro viruses

(C) Time bombs

(D) Worms

(E) None of these

48. Which of the following places the common data elements in order from smallest to largest ?

(A) Character, file, record, field, database

(B) Character, record, field, file, database

(C) Character, field, record, file, database

(D) Bit, byte, character, record, field, file, database

(E) None of these

49. Which of the following statements is false concerning file names ?

(A) Files may share the same name or the same extension but not both

(B) Every file in the same folder must have a unique name

(C) File extension is another name for file type

(D) The file extension comes before the dot (.) followed by the file name

(E) None of these

50. Which of the following would most likely not be a symptom of a virus ?

(A) Existing program files and icons disappear

(B) The CD-ROM stops functioning

(C) The Web browser opens to an unusual home page

(D) Odd messages or images are displayed on the screen

(E) None of these

Answers with Hints

English Language

Directions—(Q. 1–7) Read the following passage carefully and answer the questions given below it. Certain phrases in the passage have been printed in **bold** to help you locate them while answering some of the questions.

Anyone who forms his own opinions and beliefs will feel that he owes no responsibility to the majority for his conclusions. If he is a genuine lover of truth, if he is inspired by a passion for seeing things as they are and a detestation of holding ideas which do not conform to facts, he will be wholly independent of the acquiesce of those around him. When he proceeds to **apply his beliefs in the practical conduct of life**, the position is different. There are then good reasons why his attitude should be less rigid. The society in which he is placed is an ancient and composite growth. The people from whom he dissents have not come by their opinions and institutions by a process of mere haphazard. These opinions and customs all had their origin in a certain real or supposed fitness. They have a certain depth of root in the lives of a proportion of the existing generation. Their fitness for satisfying needs may have misplaced, and their congruity with one another may have come to an end. That is only one side of the truth. The most passionate propagandist cannot penetrate to them.

In common language we speak of a generation as something possessed of a kind of exact unity, with all its parts and members homogeneous. Yet plainly it is not this. It is a whole, but a whole in a state of constant flux, its factors and elements are eternally shifting. It is not one, but many generations. Each of the seven ages of man is neighbour to all the rest. The column of the veterans is already sinking into the last abyss, while the column of the newest recruits is forming.

To its tradition, the tendency and its possibilities, only a proportion of each can have nerve enough to grasp the banner of a new truth and endurance to bear it along rugged and untrodden ways.

Then we must remember the substance of which life is made. We must consider what an overwhelming preponderance of the most persistent energies and most concentrated interests of a society must be absorbed between material cares and the solitude of the affections. It is obviously unreasonable to lose patience and quarrel with one's time because it is tardy in throwing off its institutions and beliefs, and slow to achieve the transformation which is the problem in front of it. Men and women have to live. The task for most of us is hard enough to make us well pleased with even such imperfect shelter as we find in daily use and customs. To insist on a whole community being made at once to submit to the supremacy of new practices and ideas that have just begun to acclaim themselves to the most advanced speculative intelligence of the time. This, even if it were a possible process, would do much to make life impracticable and to hurry on social dissolution.

1. The overnight changes in social settings are not desirable because it will—
   (A) retard the progress
   (B) lead to social disintegration
   (C) give vitality to social life
   (D) make a society too narrow to survive
   (E) None of these

2. The hard task according to author is to—
   (1) change the society
   (2) earn a living
   (3) change according to times

(A) Only (1) and (3)   (B) Only (2) and (3)
(C) Only (1) and (2)   (D) Only (1)
(E) Only (3)

3. The problems which is discussed in the passage reflects—
   (A) realist attitude of the author
   (B) the pessimistic views expressed by a group of people
   (C) a doctrinaire that explains the role of culture
   (D) making good use of genuine lover of truth
   (E) None of these

4. Which of the following best describes the phrase **apply his beliefs in the practical conduct of life** as used in the passage ?
   (A) To indoctrinate what he believes
   (B) To denounce what he believes
   (C) To preach what is practiced
   (D) To practice what is preached
   (E) None of these

5. According to author a generation, which is heterogeneous, should be perceived as—
   (A) sum total of the parts of the subsystem
   (B) a whole which is not a total of the parts
   (C) fragmented group of people
   (D) individual inter linkages connected through synergy
   (E) None of these

6. According to the passage, which of the following is true ?
   (A) Impatience of intellectuals with practical problems is the source of progress
   (B) Day to day concerns dominates the life of most people
   (C) Intellectuals are the leaders of social transformation
   (D) Social change will be slow in the absence of effective leaders
   (E) None of these

7. According to passage from which of the following do the customs and traditions originate ?
   (A) Ignorance of events happening around
   (B) Leadership prevailing in the contemporary society

(C) Social utility of the societal set up
(D) Conflicts of individuals living in society
(E) None of these

Directions—(Q. 8–12) In each of the following questions, an idiomatic expression and its four possible meanings are given. Find out the correct meaning of idiomatic expression and indicate the letter of that meaning as your answer. If you do not find any correct answer, mark (E) *i.e.,* 'None of these' as your answer.

8. **Runs down**
   (A) Squandering away
   (B) Amounts to
   (C) Incurring
   (D) Taking chance to meet
   (E) None of these

9. **Stand over**
   (A) Vindicate   (B) Postpone
   (C) Enduring   (D) Support
   (E) None of these

10. **Knocked up**
    (A) Get exhausted   (B) Die in an accident
    (C) Wandered about   (D) Sold at an auction
    (E) None of these

11. **Make over**
    (A) Prove   (B) Decipher
    (C) Discover   (D) Give in charity
    (E) None of these

12. **Work on**
    (A) Solve   (B) Influence
    (C) Excite   (D) Apply force to
    (E) None of these

Directions—(Q. 13–25) Read each sentence to find out whether there is any grammatical error in it. The error, if any will be in one part of the sentence. The letter of that part is the answer. If there is no error the answer is (E). (Ignore errors of punctuation, if any.)

13. Selling peanuts / on the road is / the only
        (A)   (B)   (C)
    means of earning / in respect of most of the
                                    (D)
    people.   No error
                                         (E)

14. Her talk was / judged by many / as one of the
      (A)   (B)   (C)
most important talks / given in the seminar.
                       (D)
                           No error
                           (E)

15. The boy who was guilty with / having stolen
            (A)   (B)
the cell phone / came out / with the truth.
                (C)   (D)
                       No error
                        (E)

16. She is the teacher / whom I know / has helped
        (A)   (B)   (C)
my son / in the examination.   No error
       (D)   (E)

17. You cannot demand / all your articles / unless
        (A)   (B)   (C)
you do not / give advance notice. No error
              (D)   (E)

18. We insisted, but neither/Iona nor her assistant/
           (A)   (B)
are ready to / work on Sunday. No error
     (C)   (D)   (E)

19. There is just not enough / time in my unit to
           (A)   (B)
sit round / talking about how we feel / about
                (C)   (D)
each other.   No error
                        (E)

20. The act will be passed / with a comfortable
        (A)   (B)
majority if all / the partisans of / her group
                (C)   (D)
favours it.   No error
                        (E)

21. Hardly had I / entered the airport / than I met /
      (A)   (B)   (C)
my cousin Tilak.   No error
   (D)   (E)

22. An anti-terrorism cell is opened / by the town
            (A)   (B)
police / three months ago / as a precautionary
           (C)   (D)
measure.   No error
                      (E)

23. The artist who was giving / detailed descrip-
          (A)   (B)
tion of / the sculptures was / speaking fluently
             (C)   (D)
French.   No error
                      (E)

24. Martin would attempt / to open the umbrella /
        (A)   (B)
when her spectacles slipped off / and fell
             (C)   (D)
down.   No error
                    (E)

25. If you had not / reached so quickly, / we might
      (A)   (B)   (C)
well / have had a disaster.   No error
   (D)   (E)

Directions—(Q. 26–35) Which of the phrases (A), (B), (C) and (D) given below each sentence should replace the phrases printed in **bold** type to make the sentence grammatically correct. If the sentence is correct as it is, mark (E) *i.e.*, 'No correction required' as the answer.

26. She had created problems even when she was on training while **she was still waiting** to take full charge of her duties.

(A) she has been waiting

(B) she had been still

(C) she would have still

(D) she has still to wait

(E) No correction required

27. The director insisted on his orders being carried out **with the letter.**

(A) for the letter   (B) to the letter

(C) by the letter   (D) into the letter

(E) No correction required

28. He admired the speed with which Koti completed the work and **appreciating the method adopted** by him.

(A) appreciate the method being adopted

(B) appreciated the method adopted

(C) appreciate the method of adoption

(D) appreciate the adopting method

(E) No correction required

29. Unless I get some break, **I should not be able** to do any more work.
    - (A) shall not be able
    - (B) should be unable
    - (C) shall not be unable
    - (D) should not be unable
    - (E) No correction required

30. Some people have a habit of **wearing their heart on their sleeves.**
    - (A) bearing their heart on their sleeves
    - (B) wearing heart on their sleeves
    - (C) wearing their heart on sleeves
    - (D) bearing their heart on their sleeve
    - (E) No correction required

31. Your plea that you **were thorough ignorant** of the consequences cannot be accepted.
    - (A) had thorough ignorance
    - (B) were thoroughly ignorance
    - (C) had thoroughly ignorant
    - (D) were thoroughly ignorant
    - (E) No correction required

32. I had met him after the party **where he had been** given an inspiring speech.
    - (A) when he had
    - (B) where he would have
    - (C) in which he was given
    - (D) where he had
    - (E) No correction required

33. Because of scientific progress, we **except to live better than our parents have.**
    - (A) should expect to live better than our parent
    - (B) expect to live as good as our parents live
    - (C) expect to live better than our parents did
    - (D) expected to live better than our parents
    - (E) No correction required

34. I cannot **put up with** that nasty fellow.
    - (A) put up
    - (B) put at
    - (C) put on with
    - (D) put up in
    - (E) No correction required

35. It is useless to run away from every danger, **risks must not be** taken.
    - (A) no risks must be
    - (B) any risk must be
    - (C) although risks must be
    - (D) some risks must be
    - (E) no correction needed

Directions—(Q. 36–40) In each question below, a sentence with four words printed in **bold** type is given. These are lettered as (A), (B), (C) and (D). One of these four words may be either wrongly spelt or inappropriate in the context of the sentence. Find out the word that is wrongly spelt or inappropriate, if any. The letter of that word is your answer. If all the four words are correctly spelt and also appropriate in the context of the sentence, mark (E) *i.e.*, 'All correct' as your answer.

36. After **several** rounds of **discussions** the
         (A)   (B)
    Manager **accented** to our **proposal.**
         (C)   (D)
                 All correct
                 (E)

37. The **indafatigable** zeal and **fearlessness** with
         (A)   (B)
    which the youth worked **rejoiced** me beyond
              (C)
    measure.   All correct
    (D)   (E)

38. He **sliped** away in the **night** and **reached**
       (A)   (B)   (C)
    there in the **morning.** All correct
         (D)   (E)

39. He let the **laugher** wash **away** the **tension** and
         (A)   (B)   (C)
    then **held** up her hand. All correct
       (D)   (E)

40. The author also **advocated** fresh **vegetable**
             (A)   (B)
    and **fruits** as **natural** diet of aged people.
       (C)   (D)
                All correct
                (E)

Directions—(Q. 41–50) In the following passage there are blanks, each of which has been **numbered**. These **numbers** are printed below the

passage and against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

It is a pity that we do not have good books on insurance written by Indian authors ...(41)... to the steady growth of literature on the subject in other countries especially, the U.S.A. whose insurance laws and ...(42)... are very much similar to those of our country. And students studying in our colleges and the millions of insurance employees appearing for various insurance examinations have to depend ...(43)... on books written by foreign authors. As these books mainly deal with the problems of insurance industry of foreign countries the ...(44)... of the insurance scene in India and the various legal ...(45)... and insurance procedures remains very weak. To ...(46)... the insurance employees and the college students who have opted for ...(47)... courses in insurance with different aspects of theory and practice of insurance we should have good and ...(48)... text books. The book under review written by V.M.R. Nair himself an experienced and ...(49)... expert on insurance law based on leading Indian cases will be found very useful by students of insurance sector as a ...(50)... guide to the principles of insurance.

41. (A) paving   (B) corresponding
    (C) following   (D) emphasize
    (E) correcting

42. (A) process   (B) product
    (C) notes   (D) currency
    (E) procedures

43. (A) slightly   (B) upon
    (C) still   (D) at
    (E) until

44. (A) prove   (B) search
    (C) application   (D) understanding
    (E) acknowledge

45. (A) law   (B) aspects
    (C) experts   (D) books
    (E) loop

46. (A) equip   (B) arm
    (C) decorate   (D) promote
    (E) load

47. (A) optional   (B) expensive
    (C) tough   (D) deep
    (E) specialized

48. (A) authentic   (B) voluminous
    (C) many   (D) prompt
    (E) shining

49. (A) consulting   (B) qualified
    (C) rich   (D) merchant
    (E) tired

50. (A) learned   (B) powerful
    (C) ready   (D) comprehensive
    (E) prescribed

Answers with Explanations

1. (B)   2. (A)   3. (A)   4. (D)   5. (E)
6. (D)   7. (B)   8. (E)   9. (B)   10. (A)
11. (D)   12. (B)

13. (A) Change 'peanuts' to 'peanut'.
14. (E)
15. (A) Change 'with' to 'of'.
16. (B) Change 'whom' to 'who'.
17. (C) Delete 'do not'. It is redundant.
18. (C) Change 'are' to 'is'.
19. (D) Change 'each other' to 'one another'.
20. (D) Change 'favours' to 'favour'.
21. (C) Change 'than' to 'when'.
22. (A) Change 'is' to 'was'.
23. (D) Change 'fluently' to 'Fluent'.
24. (E)
25. (C) Put 'as' before well.
26. (A)   27. (E)   28. (B)   29. (A)   30. (E)
31. (D)   32. (D)   33. (C)   34. (E)   35. (C)
36. (C) Change 'accented' to 'assented'.
37. (A) Change 'Indafatigable' to 'Indefatigable'.
38. (A) Change 'Sliped' to 'Slipped'.
39. (A) Change 'Laugher' to 'Laughter'.
40. (B) Change 'vegetable' to 'vegetables'.
41. (B)   42. (E)   43. (C)   44. (C)   45. (B)
46. (B)   47. (E)   48. (A)   49. (B)   50. (D)