CHAPTER 02

Classification

Classification means to group various objects on the basis of a certain common quality that they possess and spot the odd one out. In this test, questions are designed to test the candidate's ability of classifying given objects and find the one that doesn't belong to the group.

In this type of questions, all the items except one, follow a certain rule or pattern or they possess some common quality or characteristics between them and one which is odd does not possess the common quality or characteristics. The candidate has to find that odd item.

Classification can be of three types from which questions are generally asked in competitive exams, i.e.

1. Word Classification

2. Alphabet Classification

3. Number Classification

1. Word Classification- In this classification, either words or pairs of words are given and the candidate has to find out the basis of similarity between them so as to separate the odd word or pair of words.

Example 1: Choose the odd one out.

(a) Optical disc   (b) Magnetic Storage   (c) Solid State Drive   (d) Petabyte

Sol. (d) Except petabyte, all others are storage devices, but petabyte is a unit of measurement used to measure the data.

Example 2: Choose the odd pair of words.

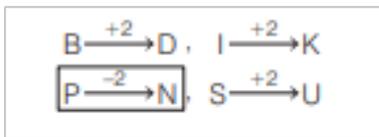(a) Cow : Calf   (b) Dog : Bitch   (c) Lion : Cub   (d) Tortoise : Turtle

Sol. (b) Except in Dog : Bitch, all other pairs have the second word as the young one of the first. In Dog:Bitch, second is the female of the first.

2. Alphabet Classification (Letter Classification)- Sometimes we are given a group of alphabets and we are asked to find the odd letter group out of them. The candidate must understand the relationship within each group and only then one can be able to solve such questions.

Example 3: Choose the group of letters which is different from others.

(a) B D   (b) I K   (c) P N   (d) S U
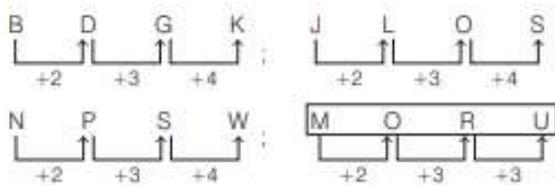
Sol. (c) Here,

All except PN follows the same pattern. So, PN is the odd one.

Example 4: Choose the odd letter group.

(a) BDGK   (b) JLOS   (c) NPSW   (d) MORU

Sol. (d) Here,

All except MORU, follows the same pattern. So, MORU is the odd one.

3. Number Classification- In this type, certain numbers are given either in simple group or pairs, out of which all except one share some common property and hence are alike while one is different. This number is to be chosen as the answer.

Example 5: Choose the number which is different from others in the group.

(a) 12   (b) 25   (c) 37   (d) 49

Sol. (c) Clearly, 37 is the only prime number in the group.

Example 6: Choose the number/pair/group which is different from others.

(a) 50-66   (b) 22-38   (c) 64-80   (d) 63-77

Sol. (d) Clearly, in each of the pairs except (d), the second number is 16 more than the first.

Practice Questions

Directions (Q. Nos. 1-16) In each of these questions, four words have been given out of which three are alike in some manner while the fourth one is different.

Choose out the odd one.

1. (a) Pear (b) Apple (c) Guava (d) Orange

2. (a) Football (b) Volleyball (c) Cricket (d) Chess

3. (a) Tortoise (b) Duck (c) Snake (d) Whale

4. (a) Violet (b) Blue (c) Green (d) White

5. (a) Tea (b) Cinchona (c) Rubber (d) Chalk

6. (a) Bajra (b) Mustard (c) Rice (d) Wheat

7. (a) Rashtrapati Bhavan (b) Chatrapati Shivaji Terminus (c) Taj Mahal (d) Sun Temple

8. (a) Tonnes (b) Quintals (c) Grams (d) Kilometres

9. (a) Dagger (b) Hammer (c) Knife (d) Sword

10. (a) King (b) Queen (c) Bishop (d) Minister

11. (a) Feeling (b) Joy (c) Anxiety (d) Anger

12. (a) Aluminum (b) Iron (c) Copper (d) Brass

13. (a) Silent valley (b) Silicon valley (c) Indus valley (d) Damodar valley

14. (a) Spade (b) Knife (c) Axe (d) Blacksmith

15. (a) Garlic (b) Chilli (c) Ginger (d) Potato

16. (a) Manure (b) Nitrogen (c) Ammonia (d) Urea

Directions (Q. Nos. 17-27) In these questions, four pairs of words are given, out of which the words in three pairs bear a certain common relationship.

Choose the pair in which the words are differently related.

17. (a) Shoe : Leather   (b) Iron : Axe   (c) Table : Wood   (d) Jewelry : Gold

18. (a) Saturn : Planet   (b) Sun : Star   (c) Milky Way : Constellation   (d) Titan : Satellite

19. (a) Principal : School   (b) Pages : Note book   (c) Letters : Word   (d) Students : Class

20. (a) Dim : Bright   (b) Wrong : Right   (c) Shallow : Deep   (d) Genuine : Real

21. (a) Nitrogen & oxygen : Air   (b) Sulphur & Phosphorous : Match stick

   (c) Hydrogen & Oxygen : Water   (d) Magnesium & Silver : Stainless steel

22. (a) Water : Thirst   (b) Talent : Education   (c) Food : Hunger   (d) Air : Suffocation

23. (a) Sky : Cloud   (b) Purse : Wallet   (c) Cupboard : Almirah   (d) Chair : Stool

24. (a) Tree : Stem   (b) Face: Eye   (c) Chair : Sofa   (d) Plant : Flower

25. (a) Shirt : Dress   (b) Boy : Girl   (c) Mango : Fruit   (d) Table : Furniture

26. (a) Pen – Ink   (b) Pot – Water   (c) Bottle – Tonic   (d) Cylinder – Air

27. (a) Bulb – Filament   (b) Pencil – Lead   (c) Leaf - Flower   (d) Fruit – Seed

28. Which among the following is a mismatched pair of religion practiced and its holy book?

(a) Islam : Quran   (b) Sikhism : Guru Granth Saheb

(c) Jainism : Upanishad   (d) Christianity : Bible

Directions (Q. Nos. 29-43) In each of these questions, some groups of letters are given, all of which except one, share a common similarity while one is different.

Choose the odd one out.

29. (a) A   (b) O   (c) U   (d) Y

30. (a) GE   (b) MK   (c) WU   (d) QN

31. (a) AE   (b) AI   (c) IO   (d) EI

32. (a) ABD   (b) FGI   (c) LMO   (d) STU

33. (a) BDW   (b) DFU   (c) FHS   (d) GIQ

34. (a) VRT   (b) RMP   (c) YUW   (d) FBD

35. (a) DEB   (b) HIF   (c) NOL   (d) RTP

36. (a) HJN   (b) JLP   (c) PRU   (d) QSW

37. (a) CHG   (b) LMM   (c) BBC   (d) HEG

38. (a) RAT   (b) OUT   (c) BED   (d) LOT

39. (a) D H F   (b) K O M   (c) R V T   (d) W Y X

40. (a) A Y B Z   (b) B X C Y   (c) D V E W   (d) M P O N

41. (a) C P B O   (b) B O D Q   (c) A N H U   (d) E S G T

42. (a) P R S Q   (b) U W X V   (c) L O N M   (d) C E F D

43. (a) M O N J K   (b) A C A Z V   (c) G M R G S   (d) M E T E I

44. (a) 17   (b) 27   (c) 29   (d) 37

45. (a) 29   (b) 53   (c) 85   (d) 125

46. (a) 37   (b) 45   (c) 49   (d) 65

47. (a) 35   (b) 49   (c) 50   (d) 63

48. (a) 120   (b) 168   (c) 290   (d) 380

49. (a) 126   (b) 217   (c) 345   (d) 513

50. (a) 13   (b) 17   (c) 23   (d) 37

51. (a) 4867   (b) 5555   (c) 6243   (d) 6655

52. (a) 272   (b) 210   (c) 240   (d) 304

53. (a) 34 : 43   (b) 55 : 62   (c) 62 : 71   (d) 83 : 92

54. (a) 12 : 96   (b) 13:117   (c) 15 : 120   (d) 16 : 128

55. (a) 12 : 72   (b) 24 : 36   (c) 60 : 74   (d) 84 : 96

56. (a) 18 : 108   (b) 23 : 138   (c) 20 : 80   (d) 26 : 156

57. (a) 62 : 37   (b) 74 : 40   (c) 85 : 60   (d) 103 : 78

58. (a) 34 : 12   (b) 43 : 30   (c) 52 : 21   (d) 62 : 19

59. (a) 7 : 18   (b) 9 : 26   (c) 11 : 36   (d) 13 : 42

60. (a) 133 : 98   (b) 150 : 115   (c) 182 : 140   (d) 188 : 153

ANSWERS

1.	(d)	**2.**	(d)	**3.**	(d)	**4.**	(d)	**5.**	(d)	**6.**	(b)	**7.**	(a)	**8.**	(c)	**9.**	(b)	**10.**	(d)
11.	(a)	**12.**	(d)	**13.**	(b)	**14.**	(d)	**15.**	(b)	**16.**	(b)	**17.**	(b)	**18.**	(b)	**19.**	(a)	**20.**	(d)
21.	(d)	**22.**	(b)	**23.**	(a)	**24.**	(c)	**25.**	(b)	**26.**	(a)	**27.**	(c)	**28.**	(d)	**29.**	(d)	**30.**	(d)
31.	(b)	**32.**	(d)	**33.**	(a)	**34.**	(b)	**35.**	(d)	**36.**	(c)	**37.**	(d)	**38.**	(c)	**39.**	(d)	**40.**	(d)
41.	(d)	**42.**	(c)	**43.**	(a)	**44.**	(b)	**45.**	(d)	**46.**	(c)	**47.**	(c)	**48.**	(d)	**49.**	(c)	**50.**	(c)
51.	(d)	**52.**	(c)	**53.**	(b)	**54.**	(b)	**55.**	(c)	**56.**	(c)	**57.**	(b)	**58.**	(d)	**59.**	(c)	**60.**	(c)

Hints & Solutions:

1. (d) Orange is the only citrus fruit in the group.

2. (d) Except chess, all others are outdoor games.

3. (d) Except whale, all others lay eggs.

4. (d) All except white, are the colors of the rainbow.

5. (d) All except chalk, are obtained from plants.

6. (b) All except Mustard, are food grains while Mustard is an oilseed.

7. (a) Except Rashtrapati Bhavan, all others are declared as word heritage site by UNESCO.

8. (d) All except kilometers are units to measure weights.

9. (b) All except Hammer, are sharp-edged and have a cutting action.

10. (d) All except Minister, are chessmen.

11. (a) Except feeling, all others denote various types of feelings.

12. (d) Only brass is an alloy and all others are metal. Hence, brass is different.

13. (b) Except silicon valley all others real places, while bangalore is known as silicon valley.

14. (d) All except Blacksmith, are tools.

15. (b) All except Chilli, are modified stems.

16. (b) All except Nitrogen, are used as fertilizers.

17. (b) In all pairs except Iron : Axe, first is a product made from the second.

18. (c) Saturn is a planet, sun is a star and titan is a satellite, but milky way is not a constellation it is a galaxy.

19. (a) Except (a), in all other pairs second word is the collection of first i.e. a note book is a collection of pages, a word is a collection of letters and a class is a collection of students.

20. (d) In all pairs except Genuine : Real, the two words are antonyms of each other.

21. (d) The major components of air are Nitrogen & Oxygen, of match stick are Sulphur & Phosphorous and of water are Hydrogen & Oxygen. But Stainless Steel does not contain Magnesium & Silver.

22. (b) In all other except Talent : Education, lack of first causes the second.

23. (a) In all pairs except Sky : Cloud, the two words denote things which serve the same purpose.

24. (c) In all pairs except Chair : Sofa, second is a part of the first.

25. (b) In all pairs except Boy : Girl, second denotes the class to which the first belongs.

26. (a) Except Pen-Ink in all other, the second is kept in the first

27. (c) In all pairs except Leaf-Flower, the second is contained in the first.

28. (c) The holy book of Jainism is Agam Literature. Hence, Jainism : Upanished, is odd one out.

29. (d) All letters except Y are vowels.

30. (d) Here,

$G \xrightarrow{-2} E, M \xrightarrow{-2} K, W \xrightarrow{-2} U, Q \xrightarrow{-3} N$

All except QN follow the same pattern.

So, QN is the odd one.

31. (b) Except AI, all other groups contain two consecutive vowels of the English alphabet.

32. (d) Here, $A \xrightarrow{+1} B \xrightarrow{+2} D, F \xrightarrow{+1} G \xrightarrow{+2} I,$

$L \xrightarrow{+1} M \xrightarrow{+2} O, S \xrightarrow{+1} T \xrightarrow{+1} U$

all except STU follow the same pattern. So, STU is the odd one

33. (d) Here, $B \xrightarrow{+2} D \xleftarrow{opposite} W,$

$D \xrightarrow{+2} F \xleftarrow{opposite} U,$

$F \xrightarrow{+2} H \xleftarrow{opposite} S,$

$G \xrightarrow{+2} I \longrightarrow Q$

All excpet GIQ follow the same pattern. So, GIQ is the odd one.

34. (b) Here, $V \xleftarrow{+4} R \xrightarrow{+2} T, R \xleftarrow{+5} M \xrightarrow{+2} P,$

$Y \xleftarrow{+4} U \xrightarrow{+2} W, F \xleftarrow{+4} B \xrightarrow{+2} D$

All except RMP follow the same pattern. So, RMP is the odd one.

35. (d) Here, $D \xrightarrow{+1} E \xrightarrow{-3} B, H \xrightarrow{+1} I \xrightarrow{-3} F,$

$N \xrightarrow{+1} O \xrightarrow{-3} L, R \xrightarrow{+2} T \xrightarrow{-4} P$

All except RTP follow the same pattern. So, RTP is the odd one.

36. (c) Here, $H \xrightarrow{+2} J \xrightarrow{+4} N, J \xrightarrow{+2} L \xrightarrow{+4} P,$

$P \xrightarrow{+2} R \xrightarrow{+3} U, Q \xrightarrow{+2} S \xrightarrow{+4} W$

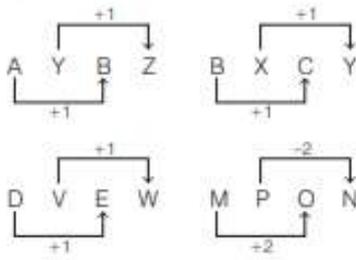All except PRU follow the same pattern. So, PRU is the odd one.

37. (d) HEG is the only group of letters that contains a vowel while others consists consonants only.

38. (b) OUT is the only group of letters that contains two vowels, while other consists one vowel.

39. (d) Here, $D \xrightarrow{+4} H \xrightarrow{-2} F,$

$K \xrightarrow{+4} O \xrightarrow{-2} M,$

$R \xrightarrow{+4} V \xrightarrow{-2} T,$

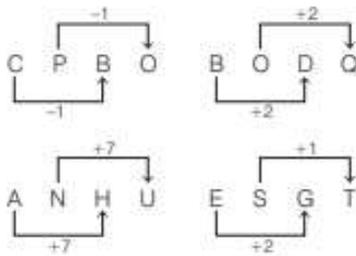$W \xrightarrow{+2} Y \xrightarrow{-1} X$

All except WYX follow the same pattern. So, WYX is the odd one
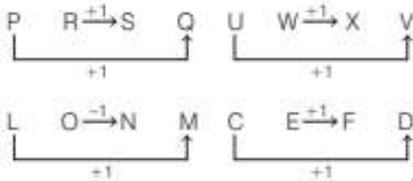
40. (d) Here,

All except MPON follow the same pattern.
So, MPON is the odd one.

41. (d) Here, number of alphabets between alternate letters is similar

Hence, ESGT is the odd one.

42. (c) Here,

All except LONM follow the same pattern.
Hence, LONM is the odd one.

43. (a) Except MONJK, in all other alternatives atleast one letter is repeated.

44. (b) Each of the numbers except 27, is a prime number.

45. (d) 125 is the only number in the group which is a perfect cube.

46. (c) 49 is the only perfect square in the group.

47. (c) Each of the numbers except 50 is divisible by 7.

48. (d) Each of the numbers except 380, is either one less or one more than the square of a certain number.

49. (c) Each of the numbers except 345, is one more than the cube of a certain number.

50. (c) Each of the given numbers is a prime number. But the number obtained on reversing the digits of each of the numbers except 23, is also a prime number.

51. (d) Here,

4867 ⇒ 4 + 8 + 6 + 7 = 25 i.e divisible by 5

5555 ⇒ 5 + 5 + 5 + 5 = 20 i.e divisible by 5

6243 ⇒ 6 + 2 + 4 + 3 = 15 i.e divisible 5

6655 ⇒ 6 + 6 + 5 + 5 = 22 i.e not divisible by 5

All except 6655 follow the same pattern.

Hence, 6655 is the odd one.

52. (c) Here,

272 ⇒ 2 + 7 + 2 = 11 i.e prime number

210 ⇒ 2 + 1 + 0 = 3 i.e prime number

240 ⇒ 2 + 4 + 0 = 6 i.e composite number

304 ⇒ 3 + 0 + 4 = 7 i.e prime number

All except 240 follow the same pattern.

Hence, 240 is the odd one.

53. (b) In all other pairs, second number is 9 more than the first except 55 : 62.

54. (b) Here,

All except 13 : 117 follows the same pattern.

Hence, 13 : 117 is the odd one

55. (c) The HCF of two numbers in all other pairs is 12 except 60 : 74.

56. (c) In all pairs except 20 : 80, second number is 6 times the first.

57. (b) In all pairs except 74 : 40, the difference between the two numbers is 25.

58. (d) Here,

$34 : 12 \Rightarrow 3 + 4 + 1 + 2 = 10$

$43 : 30 \Rightarrow 4 + 10 + 3 + 3 + 0 = 10$

$52 : 21 \Rightarrow 5 + 2 + 2 + 1 = 10$

$62 : 19 \Rightarrow 6 + 2 + 1 + 9 = 18$

All except 62 : 19 follow the same pattern.

Hence, 62 : 19 is the odd one.

59. (c)

All except 11 : 36 follow the same patter.

Hence, 11:36 is the odd one.

60. (c) In all pairs except 182 : 140, first number is 35 more than the second.