Name of the Section	Number of Questions asked	Marks allotted
Arithmetic Ability	20	20
Reasoning & General Intelligence	25	25
General Awareness	30	30
General Science	25	25

Numerical Ability

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

On the occasion of a cultural program in a stadium, there are 400 artists in all who are participating in four different events viz- Drama, Dance, Skit, and Singing.

The ratio of male to female artists is 2:3. 25% of the female artists are participating in Drama. 40% of the female artists are participating in Dance. The remaining female artists are participating in Skit and Singing in the ratio of 4:3. The ratio of male artists who are participating in Drama and other events together is 1:7. 25% of those male artists who are not participating in Drama are participating in Singing. The remaining male artists are participating in Dance and Skit in the ratio of 3:4.

1. What is the total number of female artists who are participating in Drama and Skit together?

1.106

2.104

3.108

4. 112

5.110

2. What is the difference between the male artists participating in Skit and the female artists participating in Singing?

1.20

2. 24

3.22

4.25

5. 21

3. What is the ratio of the female artists participating in Singing to those male artists participating in Dance?

1. 2:3

2.5:6

3.3:4

4. 6:7

5. 4:5

4. What is the total number of artists participating in Dance and Drama together?	2. 39		
-	3. 118615		
1. 221	4. 1647		
2. 222	5. 13289		
3. 208	8. 53, 217, 1943, 31103, 775551. 77555		
4. 228	2. 217		
5. 218	3. 1943		
5. What is the ratio of the male artists participating in Singing to the female artists	4. 53		
participating in Skit?	5. 31103		
1. 39:47	9. 2394, 798, 3192, 688.4, 3830.4, 547.2		
2. 38:47	1. 3830.4		
3. 36:47	2. 547.2		
4. 35:48	3. 688.4		
5. 35:47	4. 798		
	5. 3192		
Directions (6-10): In the following number series only one number is wrong. Find out the wrong	10. 28, 31, 68, 216, 896		
number.	1. 896		
6. 749,8901, 1089, 1345, 1669, 2069	2. 28		
1. 1669	3. 31		
2. 749	4. 216		
3. 890	5. 68		
4. 2069	11. A dishonest trader marks up his goods by 80%		
5. 1089	and gives a discount of 25%. Besides, he gets 20% more amount per kg from a wholesaler and sells		
7. 39, 235, 1647, 13289, 118615	10% less per kg to customers. What is the overall profit percentage?		
1. 235			

2. 76%	3. 14		
3. 78%	4. 12		
4. 75%	5. 8		
5. 80% 12. A man ordered 4 pairs of black shoes and some pair of brown shoes. The price of black shoes is twice to that of brown shoes. While preparing the bill the clerk interchanged the number of black	15. Two trains P and Q starts from Delhi and Patna towards each other. After passing each other they take 4 hrs 48 min and 3 hrs 20 min to reach their destination respectively. If the train from Delhi is moving at 45 km/hr, then find the speed of the other train.		
and brown pairs of shoes by mistake, which			
increase the bill by 40%. What is the total number of black and brown shoes?	1. 58 km/hr		
1. 12	2. 54 km/hr		
2. 16	3. 56 km/hr		
	4. 52 km/hr		
3. 14	5. 50 km/hr		
4. 10	16. Two pipes can fill a tank with water in 15 hrs		
5. 18	and 12 hrs respectively and a third pipe can empty		
13. On what sum of money will the CI of 2 years be the same as the SI on rs. 416 for 10 years, the rate	it in 4hrs. if the pipes are opened at 8, 9 and 11 am respectively the bank will be emptied at		
of interest being 8% pa.?	1. 2.40 pm		
1. Rs. 2500	2. 1.40 pm		
2. Rs. 1500	3. 3.20 pm		
3. Rs. 3000	4. 2.50 pm		
4. Rs. 2000	5. 1.50 pm		
5. Rs. 4000	17. A path of uniform width runs around inside a		
14. The speed of the current is 4 km/hr. A boat goes 10 km upstream and comes back to starting point in 80 min. What is the speed of the boat in	rectangular field 38m long and 32m wide. if the path occupies 600 m ² , then the width of the path is:		
still water? (in km/hr)	1. 10m		
1. 10	2. 6m		
2. 16	3. 4m		

- 4.5m
- 5.8m

18. What time will be taken by a boat to cover a distance of 80 km along the stream, if speed of boat in still water is 6 kmph and speed of stream is 2 kmph?

- 1. 10kmph
- 2. 20 kmph
- 3. 25 kmph
- 4. 30 kmph
- 5. 40 kmph

19. Ravi can row a certain distance downstream in 8 hours and can return the same distance in 12 hours . If the stream flows at the rate of 4 kmph , then find the speed of Ravi in still water?

- 1. 10kmph
- 2. 20 kmph
- 3. 25 kmph
- 4. 30 kmph
- 5. 40 kmph

20. A man speed in still water is 15 kmph, while river is flowing with a speed of 3 kmph and time taken to cover a certain distance upstream is 3 hours more than taken to cover the same distance downstream. Find the distance.

- 1.100 km
- 2. 103 km
- 3. 108 km
- 4. 110 km

5. 115 km

Reasoning

Directions (21-25): Study the following information carefully and answer the questions given below:

There are eight persons viz, A, B, C, D, E, F, H and J are sitting around a circle. Five of them are facing towards the centre.

They read different newspapers viz, Hindustan Times (H.T), The Indian Express, The Hindu, The Economic Times, Navbharat Times, Washington Post, The Herald and The Dawn, but not necessarily in the same order. D is facing away from the centre but reads neither "The Hindus 'nor' The Indian Express.' The one who reads The Washington post sits exactly between F and B. C is on the immediate right of H, who is not facing away from the centre. The one who reads The Indian Express is not the neighbour of B. The one who reads The Economic Times is on the immediate right of C. There are three persons between H and B. E sits second to the left of D and he reads The Indian Express. F is an immediate neighbour of both C and the one who reads The Washington Post. The Economics Times is read by either H or B. The one who read 'The Herald' is facing towards the centre. D sits on the immediate right of the one who read Navbharat Times. The one who reads The Dawn sits exactly between I and the one who reads The Hindu. A does not read The Washington Post. The one who is on the immediate right of H read the Hindu and is not facing the centre.

- 21. Which of the following papers is read by the one who sits on the immediate right of J?
- 1. The Hindu
- 2. The Herald

- 3. The Dawn
- 4. Navbharat Times
- 5. The Economic Times

22. Which of the following is matched correctly?

- 1. A- Hindustan Times
- 2. H- The Dawn
- 3. C- The Economic Times
- 4. B- The Herald
- 5. F- The Hindu

23. Which of the following groups is facing away from the centre?

- 1. A, B, D
- 2. A, C, D
- 3. E. A. D
- 4. J, C, D
- 5. H, D, B

24. If D is related to A and in the same way H is related to C in a certain way, then F is related to

- 1. J
- 2. C
- 3. None
- 4. A
- 5. B

25. How many persons sit between the one who

reads The Dawn and the one who reads Navbharat Times?

- 1. Three
- 2. Two
- 3. One
- 4. None
- 5. Other than the given options

Directions (26-30): Study the following information carefully and answer the questions given below:

Seven person P, Q, R, S, T, U and V like different dance forms, viz- Mask dance Bihu, Nati, Mandi, Bharatnatyam, Nautanki and Lavani, but not necessarily in the same order. Each of them has a different profession, viz-Banking, Acting, Business, Dancing, Anchoring, teaching and Writing, but not necessarily in the same order. P is an Anchor. S likes Lavani. The person who likes Bharatnatyam is doing a job of Acting. The person who does teaching is fond of Nati dance. U does not like Teaching, Acting, Banking or Dancing. U does not like Nautanki, Bihu or Mandi. Q doesn't have a profession of Business, Acting, Banking or Dancing. Q does not like Mandi, Mask dance, Bihu or Nautanki. R does not like Bharatnatyam and his profession is neither Banking nor Dancing. Neither S nor V does a job a Banking. P does not like Bihu dance and mask dance. The person who does Business likes Nautanki.

26. Who among the following does a job of teaching?

- 1. Q
- 2. U
- 3. S
- 4. T

5. Can't say

2. R

3. T

27. Which of the following combinations is true according to the given information?

4. V

1. P- Mask dance- Anchoring

5. Other than the given options

2. R- Nati- Teaching

3. T- Bihu- Writing

- 4. S- Lavani- Dancing
- 5. All the above

Directions (31-35): In each of the following questions below are given some statements followed by some conclusions. You have to take the given statements to be true if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which one of the given conclusions logically definitely does not follow:

28. Which of the following is true about V?

1. Bharatnatyam - Acting

2. Lavani- Writing

3. Nati - Teaching

4. Nautanki - Business

5. Mask dance - writing

31. Statements:

All soils are stones.

29. The person who has the profession of Banking, likes?

1. Mask dance

2. Bharatnatyam

3. Mandi

4. Lavani

5. Bihu

Some stones are hills.

All mountains are not clouds.

Conclusions:

- I) Some soils being clouds is a possibility.
- 2) Some soils are hills is a possibility.
- 3) No stone is cloud.
- 4) All mountains being stones is a possibility.
- 5) No stone is a soil.

32. Statements:

Some waters are streams.

All streams are canals.

All canals are rivers,

Some streams are ponds.

Conclusions:

I) All ponds are canals.

2) All canals are pond is a possibility

30. Who among the following likes a Nautanki?

1. P

- 3) All streams are rivers.
- 4) All canals are waters is a possibility.
- 5) All streams are not canals.

33. Statements:

Some trees are forests.

Some forests are animals.

All herbivores are pets.

All animals are not herbivores.

Conclusions:

- 1) Some trees are animals.
- 2) No pet is a herbivore.
- 3) Some trees are animals is a possibility.
- 4) All herbivores being trees is a possibility.
- 5) All forest being animals is a possibility.

34. Statements:

Some buses are trains.

Some trains are metroes.

Some metroes are smarts.

All smarts are electronic vans.

Conclusions:

- 1) No electronic van is a smart.
- 2) Some metroes are electronic vans.
- 3) Some trains being electronic vans is a possibility.
- 4) Some electronic vans are buses is a possibility
- 5) Some trains are buses.

35. Statements:

All apples are oranges

All apples are not papayas.

Some papayas are guavas.

Some oranges are sweets.

Conclusions:

- I) All apples being sweets is a possibility.
- 2) All guavas are sweets
- 3) All sweets being guavas is a possibility.
- 4) Some papayas are not apples.
- 5) No orange is sweet.

Directions(36-40) Read the information carefully and answer the questions:

A + B means	A is the Father of B
A × B means	A is the Sister of B
A \$ B means	A is the Wife of B
A %B means	A is the Mother of B
A ÷ B means	A is the Son of B

36. What should come in place of the question mark, to establish that J is the brother of T in the expression = $J \div P \% H ? T \% L$



b) ÷

c) \$

e) None of The Above

37. Which among the given expression indicate that M is the daughter of D:

a) L + R
$$\$$$
 D \times M \times T

b) L
$$R D + M \times T$$

c) L + R
$$\$$$
 D + M \times T

d) None of The Above

38. Which among the following options is true, if the expression I + T % J × L ÷ K is definitely true:

- a) L is the daughter of T
- b) K is the son in law of I
- c) I is the grandmother of L
- d) J is the brother of L
- e) None of The Above

39. Which among the following expressions is

true, if Y is the son of X is definitely false:

- a) W % L \times T \times Y \div X
- b) W \$ X + L + Y + T
- c) W % $X + T \times Y \div L$
- d) None of The Above

mark, to establish that T is the sister - in - law of Q in the expression = $R \% T \times P ? Q + V$

- a) +
- b) ×
- c) \$
- d) None of The Above

40. What should come in place of the question

Directions (41-45): Study the following information carefully and answer the questions given below:

The digits in the numbers are to be coded as follows:

Digit	3	9	5	8	1	7	0	4	6	2
Code	М	0	Q	K	Т	S	Р	L	R	N

Following conditions are to be observed:

- (i) If the first digit is odd and the last digit is even, they are to be coded as Δ and δ respectively.
- (ii) If the first digit is even and the last digit is odd, they are to be coded as \$ and £ respectively.
- (iii) If 2 is preceded as well as followed by an odd digit, it is to be coded as α .
- (iv) If 5 is preceded as well as followed by an even digit, it is to be coded as β .
- (v) 0 is not considered as either even or odd.

- 42. \$MRβLQS£ is the code for which of the following numbers?
- a) 23654579
- b) 43654577
- c) 23545679
- d) Can't be determined
- e) None of these

41. What will be the code for 1692746?

- a) ΔROαSLδ
- b) TROαSLR
- c) ΔRONSLδ
- d) ΔPOδSLδ
- e) None of these

43. What will be the code for 3256789?

- a) ΔNQRSKδ
- b) MαβRSKO
- c) MaQRSKO
- d) MNBRSKO
- e) None of these

44. What will be the code for 8765403?

- a) KSRβLPM
- b) \$SRQLP£
- c) \$SRBLP£
- d) \$SPβLR£
- e) None of these

45. KQTαSMNL is the code for which of the following numbers?

- a) 85157324
- b) 85217324
- c) 81527324
- d) 85127234
- e) None of these

General Awareness

46. The capital city of Myanmar is

- a) Maputo
- b) Naypyidaw
- c) Ulaanbaatar
- d) Phnom Penh
- e) None of these

47. What per cent Swachh Bharat cess was imposed by the govt (effective Nov 15,2015) on all taxable services recently?

- a) 0.5 per cent
- b) 1 per cent
- c) 1.5 per cent
- d) 2 per cent

e) None of these

48. The Paragliding World Cup 2015 was held recently in

- a) Jammu & Kashmir
- b) Arunachal Pradesh
- c) Himachal Pradesh
- d) Meghalaya
- e) None of these

49. Abraham M Keita won the 2015 International Children's Peace Prize recently. He is from

- a) Liberia
- b) Ghana
- c) Nigeria
- d) Cameroon
- e) None of these

50. Credit lending is not allowed in case of which of the following type of banks?

- a) Small Banks
- b) Payments Banks
- c) Cooperative Banks
- d) RRBs
- e) None of these

51. The central govt 's scheme for financial restructuring of debt of power distribution companies is named

- a) SAVERA
- b) UDAY
- c) SHAKTI
- d) ROSHNI
- e) None of these

52. Which of the following is the least populated state in the country as per 2011 census?

- a) Nagaland
- b) Goa
- c) Sikkim
- d) Tripura
- e) None of these

53. Which of the following became the first blind-friendly railway station in India recently?

- a) Chennai, Tamil Nadu
- b) New Delhi, Delhi
- c) Kochi, Kerala
- d) Mysuru, Karnataka
- e) None of these

54. Jimmy Morales, a former TV comedian, won the recent presidential election in

- a) Honduras
- b) Belize
- c) Guatemala
- d) Nicaragua
- e) None of these

55. Which of the following countries topped the World Bank's Ease of Doing Business List 2016?

- a) China
- b) US
- c) Denmark
- d) Singapore
- e) None of these

56. Name the three districts of Uttrakhand in which liquor has been banned by Uttarakhand High Court

- a. Uttarkashi, Rudraprayag, and Chamoli
- b. Almora, Bageshwar and Chamoli
- c. Dehradun, Haridwar and Nainital
- d. Uttarkashi, Rudraprayag and Haridwar
- e) None of these

57. Trump appoints former WWE CEO as Small Business Admin head, name the person

- a. Vince McMahon
- b. Shane McMahon
- c. Linda McMahon
- d. Paul Michael Levesque
- e) None of these

58. Name the city that made the public transport free to tackle air pollution

- a. London
- b. Paris
- c. New York
- d. Sydney
- e) None of these

59. Name the food safety regulator of India

- a. Food Safety and Standards Authority of India
- b. Food Safety Authority of India
- c. Food Security and Standards Authority of India
- d. Food Safety and Security Authority of India
- e) None of these

60. Recently, India removed import duty on a food crop, name it :

- a. Rice
- b. Soya
- c. Millet
- d. Wheat
- e) None of these

61. The new Taxation Laws (2nd Amendment) Bill 2016, will entail a tax of 30 per cent of the income declared, an additional surcharge of 33 percent of the tax amount, and a penalty of

- a. 30%
- b. 15 %
- c. 20%
- d. 10%
- e) None of these

62. "A son has no legal right to live in the selfacquired house of his parent" which high court stated this line?

- a. Madhya Pradesh High Court
- b. Mumbai High Court
- c. Delhi High Court
- d. Gujarat High Court
- e) None of these

63. Who among the following won the Infosys Prize in Mathematics 2016?

- a. Kaneenika Sinha
- b. Akshay Venkatesh
- c. Manjul Bhargava
- d. Govind Rangrajan
- e) None of these

64. Who among the following Indian-American women is appointed to serve as Administrator of the Centers for Medicare and Medicaid Services by Donald Trump?

- a. Rachel Roy
- b. Kavita Ramdas,
- c. Seema Verma
- d. Jhumpa Lahiri
- e) None of these
- 65. Whose 158th birthday was commemorated by Google Doodle for his contribution radio in communication and who was the first to use a semiconductor to detect radio waves?
- a. Vikaram Sarabhai
- b. Jagdish Chandra Bose
- c. Meghnad Saha
- d. Birbal Sahni
- e) None of these

66. A semiconductor device can perform the function of a(n)

- a) vacuum tube
- b) Super conductor
- c) insulator
- d) All the above
- e) None of these

67.The major endocrine gland which is situated in the brain is

- a) pituitary gland
- b) thyroid gland
- c) pancreas
- d) testes
- e) None of these

68. The alteration of the composition or structure of a rock by heat, pressure, or other natural agents is called

- a) sedimentation
- b) metamorphism
- c) solidification
- d) crystallization
- e) None of these

69. Which of the following is commonly known as blood cancer?

- a) Leukaemia
- b) Leukoderma
- c) Rosacea
- d) Psoriasis
- e) None of these

70. Iron rusts faster in which of the following?

a) Salt water

b) Distilled water	e) None of these		
c) River water			
d) Rain water	74. The unit of measurement of the strength of a		
e) None of these	magnetic field is		
	a) Joule		
71. Rusting of iron requires	b) Tesla		
a) Oxygen only	c) Henry		
b) Water only	d) Newton meter		
c) Carbon dioxide only	e) None of these		
•			
d) Oxygen and water	75. As per rules, the prescribed highest limits of		
e) None of these	noise levels for residential localities during the day and the night respectively are		
72. Which of the following plant species is adapted	a) 65 and 55 decibels		
to shade or low-light intensities?	b) 75 and 70 decibels		
a) Sciophytes	c) 50 and 40decibels		
b) Xerophytes	d) 55 and 45 decibels		
c) Heliophytes			
d) Epiphyte	General Science		
e) None of these			
	76. In which of the following the velocity of light is the highest?		
72 The resently released film (The Man Who Know	(A) Water		
73. The recently released film 'The Man Who Knew Infinity' is based on the life of	(B) Wood		
•	(C) Vacuum		
a) Srinivasa Ramanujan	(D) Glass (E) None of these		
b) Aryabhata	(L) None of these		
c) CV Raman	77. On which principle hydrogen bomb works?		
d) Vashishtha Narayan Singh	(A) Nuclear fission(B) Nuclear fusion		
-,	_,		

(C) Electromagnetic effect (B) High speed of light (D) Photoelectric effect (C) Reflection of sound (E) None of these (D) Refraction of sound (E) None of these 78. Whose ore is cinnabar? 84. Where is Forest Survey of India located? (A) Mercury (B) Gold (A) Kolkata (B) Guwahati (C) Silver (D) Iron (C) Lucknow (E) None of these (D) Dehradun (E) None of these 79. Which is called as the brain of the computer? (A) Scanner 85. Who invented electric battery? (B) CPU (A) Faraday (C) Modem (B) Ostrad (D) Monitor (C) Newton (E) None of these (D) Volta (E) None of these 80. Where RBCs are formed? (A) Kidney 86. Which of the following organ of human body (B) Liver has the highest number of bones? (A) Vertebrae (C) Spleen (D) Bone marrow (B) Fingers (E) None of these (C) Brain (D) Mouth 81. How many litres are there in a barrel? (E) None of these (A) 159 87. Air bubble in water works as..... (B) 151 (C) 100(A) Concave lens (D) 101 (B) Convex lens (E) None of these (C) Convexo convex lens (D) None of these 82. Who used the term 'cell' for the first time? (E) None of these (A) Robert Brown (B) Robert Hooke 88. What is the percentage of gold in 18 carat (C) Schleiden gold? (D) Schwann (A) 82% (E) None of these (B) 75% (C) 80% 83. Echo is caused due to (D) 90% (A) High speed of sound (E) None of these

89. Which one of the following is the largest mammal?

- (A) Giraffe
- (B) Elephant
- (C) Blue Whale
- (D) Rhinoceros
- (E) None of these

90. Rayon fibre is made up of

- (A) Cellulose
- (B) Petroleum
- (C) Paper
- (D) Polythene
- (E) None of these

91. Which part of the camera works similar to that of the retina of human's eye?

- (A) Lens
- (B) Film
- (C) Shutter
- (D) None of these
- (E) None of these

92. What is the normal blood pressure of human?

- (A) 90 / 120 mm of Hg
- (B) 90 / 140 mm of Hg
- (C) 100 / 140 mm of Hg
- (D) 80 / 120 mm of Hg
- (E) None of these

93. Which type of radiation is absorbed by the upper layer of the atmosphere?

- (A) Radio waves
- (B) Ultraviolet
- (C) Infrared
- (D) Visible
- (E) None of these

94. Where is Indira Gandhi Atomic Research Center located?

- (A) Sriharikota
- (B) Mumbai
- (C) Thiruvananthapuram
- (D) Kalpakkam
- (E) None of these

95. Which of the following disease is caused by Virus?

- (A) Hepatitis
- (B) Tuberculosis
- (C) Typhoid
- (D) Cholera
- (E) None of these

96. A fuse wire should have following characteristics ----

- (A) Low melting point, high resistance
- (B) High melting point, low resistance
- (C) Low melting point, low resistance
- (D) High melting point, high resistance
- (E) None of these

97. Which of the following are decomposers?

- (A) Animals
- (B) Birds
- (C) Bacteria and Fungi
- (D) Soil and water
- (E) None of these

98. Which type of coal is used to produce thermal electricity?

- (A) Bituminous
- (B) Anthracite
- (C) Lignite
- (D) Peat
- (E) None of these

99. Which of the following is the substitute for wool?

- (A) PVC
- (B) Mercerized cotton
- (C) Polythene
- (D) Nylon 6, 6
- (E) None of these

100. Which of the following element is essential for the formation and growth of bones and cartilages?

- (A) Zinc
- (B) Silicon
- (C) Magnesium
- (D) Calcium
- (E) None of these

4. 1;

Required answer = (20+45) + (60+96)= 65+ 156 = 221

5. 4;

Required ratio = 35:48

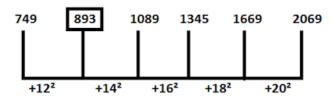
6. 3: The series is

7. 5; The series is

39

235

x7+2



1647

x8+3

13179

x9+4

118615

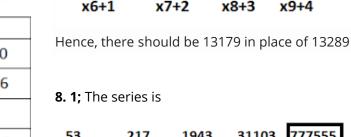
Hence, there should be 893 in place of 890.

Answer:

(1-5):

Number of male artists = 160 Number of female artists = 240

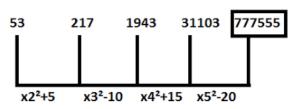
Male	Female
Drama = $\frac{1 \times 160}{8}$ = 20	Drama = $\frac{25 \times 240}{100}$ = 60
Dance = $105 \times \frac{3}{7} = 45$	Dance = $\frac{40 \times 240}{100}$ = 96
Skit = $105 \times \frac{4}{7} \times 60$	Skit = $\frac{4}{7} \times 84 = 48$
Singing = $\frac{25 \times 140}{100}$ = 35	Singing = $\frac{3}{7} \times 84 = 36$



8. 1; The series is

9. 3; The series is

x6+1



hence, there should be 777555 in place of 77555

2. 2;

1.3;

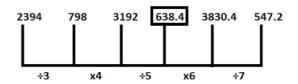
Required difference = 60 - 36 = 24

Required answer = 60 + 48 = 108

3. 5:

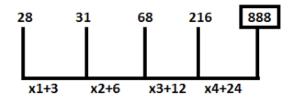
Required ratio = 36:45=4:5

www.BankExamsToday.Com



Hence, there should be 888 in place of 896

10. 1; The series is



Hence, there should be 888 in place of 896

$$CP = \frac{100}{120} = \frac{10}{12}$$

11. 5;

Since he purchases 120 gm and pays Rs. 100 by assuming actual CP of 1gm = Rs. 1)

$$\therefore SP = \frac{135}{90} = \frac{3}{2} = \frac{18}{12}$$

∴ Profit percentage =

$$\frac{\frac{18}{12} - \frac{10}{12}}{\frac{10}{12}} \times 100 = 80\%$$

12.1;

	Black shoes	Bro	wn shoes	
Price	3	:	1	
Number of pairs	4	:	Х	
Total	12	:	Х	

Total price in original bill = rs. (12 + x)In wrong bill = Rs. (3x + 4)Bill increased by 40% = 2/5

$$\therefore 5(\frac{3x+4}{7}) = 12 + x$$

 \Rightarrow 15x + 20 = 84 + 7x

 \Rightarrow 8x = 64

 \Rightarrow x = 8 pairs

 \therefore Total pairs = 8 + 4 = 12 pairs

13. 4;

SI for 10 years on 416 =

$$=\frac{416\times10\times8}{100}=332.8$$

Let the principal for CI be Rs, P

$$\Rightarrow$$
 CI = P $(1 + \frac{8}{100})^2 - P$

$$\Rightarrow 332.8 = P\left[\left(\frac{27}{25}\right)^2 - 1\right]$$

$$\therefore P = \frac{332.8 \times 625}{104} = Rs. 2000$$

14. 2;

Let the speed of boat be x km/hr

According to the question,

$$\Rightarrow \frac{10}{x-4} + \frac{10}{x+4} = \frac{80}{60}$$

$$\Rightarrow$$
 10 (x+4 + x-4) = 4/3 (x² - 16)

$$\Rightarrow 15x = x^2 - 16$$

$$\Rightarrow x^2 - 16 - 15x = 0$$

$$\Rightarrow$$
 x = 16, -1

 \therefore So ,the speed of boat in still water = 16km/hr

15. 2;

Let the speed of other train be x km/hr

$$\frac{S_1}{S_2} = \sqrt{\frac{Time\ taken\ by\ train\ Q}{Time\ taken\ by\ train\ P}}$$

$$\Rightarrow \frac{x}{45} = \sqrt{\frac{288 \times 60}{60 \times 200}} = \sqrt{\frac{36}{25}} = \frac{6}{5}$$

$$\therefore x = 45 \times \frac{6}{5} = 54 \text{ km/hr}$$

16. 1;

Part filled by A from 8 am to 11 am

$$=\frac{3}{15}=\frac{1}{5}$$

Part filled by B from 9 am to 11 am

$$=\frac{2}{12}=\frac{1}{6}$$

Total part filled till 11 am

$$=\frac{1}{5}+\frac{1}{6}=\frac{11}{30}$$

At 11 am pipe C is opened to empty it

∴ Part of thank emptied in 1 hr

$$=\frac{1}{4} \cdot \frac{1}{15} \cdot \frac{1}{12} = \frac{1}{10}$$

∴ 11/30 part will be

emptied in

$$=\frac{11}{30} \times 10 = \frac{11}{3} \text{ hrs} = 3 \text{ hours } 40 \text{ min}$$

.e. at 2:40 pm

17. 4;

Let the width of the path be x km

∴ Area of the path

$$= 140x - 4x^2$$

$$\therefore 140x - 4x^2 = 600$$

$$\Rightarrow 4x^2 - 140x + 600 = 0$$

$$\Rightarrow$$
 x² - 35x+ 150 = 0

$$\Rightarrow$$
 x (x-30) - 5 (x-30) = 0

$$\Rightarrow$$
 (x-5) (x-30) =0

$$\therefore x = 5 \text{ as } x \neq 30$$

18.

Along with stream = Down Stream = 6+2 = 8 kmph Time taken = 80/8 = 10 kmph

19.

$$==>$$
. $8(x+4) = 12(x-4)$

$$==> 8x + 32 = 12x - 48$$

$$==> X = 80/4 = 20 \text{ kmph}$$

20.

Speed of Downstream = 15+3 = 18 kmph

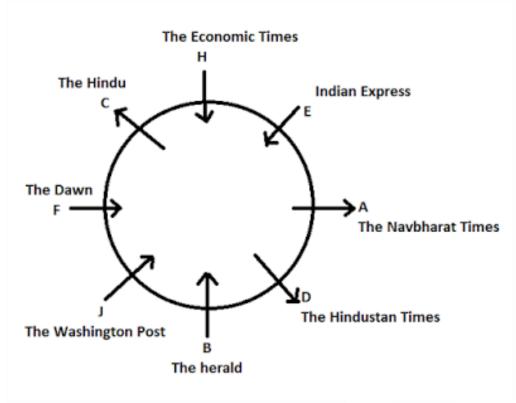
Speed of Upstream = 15-3 = 12 kmph

$$==> X/12 - X/18 = 3$$

$$==> X = 36 \times 3$$

$$==> X = 108 \text{ km}$$

(21-25)



21. The Herald

22. B- The Herald

23. A, C, D

24. None

25. Three

(26-30)

Person	Dance form	Profession
Р	Mandi	Anchoring
Q	Nati	Teaching
R	Nautanki	Business
S	Lavani	Dancing
Т	Bihu	Banking
U	Mask dance	Writing

V	Bharatnatyam	Acting

- **26.** 1
- **27.** 4
- **28.** 1
- **29.** 5
- **30.** 2
- **31.** There is no definite relation between soil and cloud. But the possibility in 1) exists. Hence conclusion l) conclusion 1) follow.

Again, All soil are stones (A) + some stones are hills (I) = A + I = No conclusion. But the possibility in 2) exists and the possibility between mountains and stone also exists. Hence conclusion 4) follows Now, All mountains are not clouds (O) some mountains are not clouds (O). So, we can't say no stone is cloud. Hence 3) may follows. Again, All soils are stone (A) — conversion some stones are soils (I). Hence 5) does not follow.

32. Some streams are pounds (I) conversion Some pounds are streams (I) + All streams are canals (A) = I+A Some pounds are canals. Thus conclusion I) may follows and possibility in 2) exist. Hence But the conclusion 1) and 2) follow.

Again, All streams are canals (A) + All canals are rivers (A) = A + A = A = All stream are rivers (A). Hence 3) follows. Now, Some waters are streams (I) + All streams are canals (A) = I + A = I = Some waters are canals (I). Thus, possibility in 4) exists. Hence 4) follows. From statements second conclusion 5) does

not follow.

33. 2; From statements first and second.

Some trees are forest (I)+ Some forests are animals (I)=I+I = No conclusion. But 1) may follows and possibility in 3) exists. Hence conclusion 1) and 3) follow. Again, all herbivores are pets (A) – conversion – Some pets are herbivores (I). Hence conclusion 2) does not follow. From statements second possibility

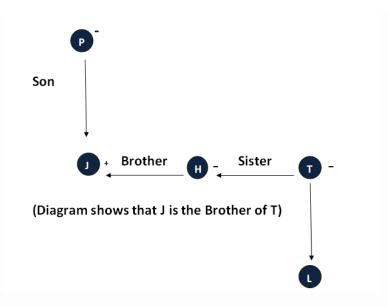
in 5) exist. Hence 5) follows. And possibility in 4) also follows.

- **34.**1; Some metroes are Smart (I)+ All smart are electronic vans (A)= I+A=I= Some metroes are electronic vans (I). Hence conclusion 2) follows. But from statement four conclusion 2) follows. But from statement four conclusion 1) does not follow. There is no negative statements. So possibility in 3) and 4) exist. Hence conclusion 3) and 4) follow. Again, conclusion 5) follows from statement first.
- **35.**5; All apples are oranges (A)-conversion some oranges are apples (I)+ All apples are not papayas (O)-conversion some apples are not papayas (O)=I+O= No conclusion.

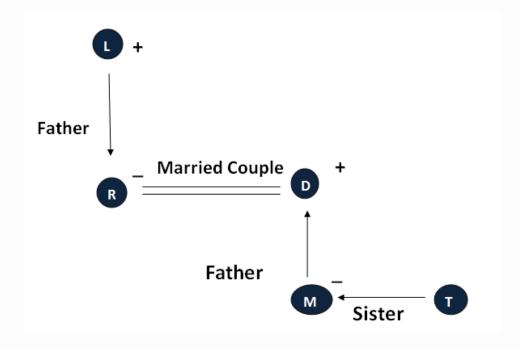
So, the possibilities in 1) and 3)exist. And conclusion 2) and 4) may follow.

Again, conclusion 5) does not follow from statement four.

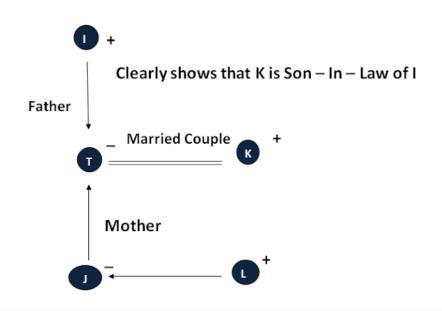
36. (Option A)



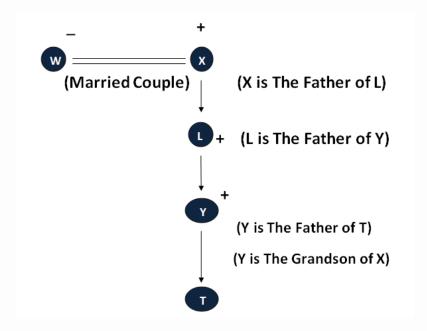
37. (Option C)



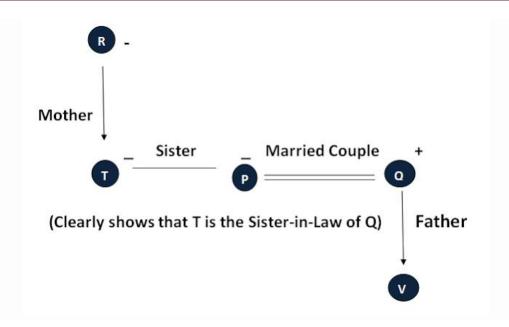
38. (Option B)



39. (Option B)



40. (Option C)



- **56.** a
- **41.** a; Conditions (i) and (iii) apply **57.** c
- **42.** d; There are numerous possibilities. **58.** b
- **43.** b; Conditions (iii) and (iv) apply
- **44.** c; Conditions (ii) and (iv) apply
- **45.** e: 85127324 **60.** d
- **46.** b) Naypyidaw **61.** d
- **47.** a) 0.5 per cent **62.** c
- **48.** c) Himachal Pradesh **63.** b
- **49.** a) Liberia **64.** c
- **50.** b) Payments Banks **65.** b
- **51.** b) UDAY **66.** a) vacuum tube
- **52.** c) Sikkim **67.** a) pituitary gland
- **53.** d) Mysuru, Karnataka **68.** b) metamorphism
- **54.** c) Guatemala **69.** a) Leukaemia
- **55.** d) Singapore **70.** a) Salt water

- **71.** d) Oxygen and water
- 72. a) Sciophytes
- 73. b) Aryabhata
- **74.** b) Tesla
- **75.** d) 55 and 45 decibels
- **76. (C)** In vacuum speed of light is the highest.
- **77. (B)** Hydrogen bomb works on the principle of nuclear fusion.
- **78. (A)** Cinnabar (HgS) is the ore of mercury.
- **79. (B)** CPU is called as the brain of the computer.
- **80. (D)** RBCs are formed in bone marrow.
- **81. (A)** One barrel = 159 litres
- 82. (B) Robert Hooke coined the term 'cell'.
- **83. (C)** Echo is caused due to the reflection of sound.
- **84. (D)** Forest Survey of India is located at Dehradun.
- **85. (D)** Volta invented electric battery.
- **86. (A)** Vertebrae has 39 bones; highest in the human body.
- **87. (A)** Air bubble in water works as concave lens.
- **88. (B)** Pure gold is of 24 carat; % of gold in 18 carat gold is 75.
- **89. (C)** Blue Whale is the largest mammal.
- 90. (A) Rayon fibre is made up of cellulose.
- **91. (B)** Film of the camera works similar to that of the retina of human's eye.
- **92. (D)** Normal blood pressure of human is 80 / 120 mm of Hg.
- **93. (C)** Infrared radiation is absorbed by the upper layer of the atmosphere.
- **94. (D)** Indira Gandhi Atomic Research Center is located at Kalpakkam.
- 95. (A) Hepatitis is a viral disease.
- **96. (A)** A fuse wire should have low melting point, high resistance.
- **97. (C)** Bacteria and fungi are categorized as decomposers.
- **98. (B)** Anthracite coal is used in the production of thermal electricity.

99. (D) Nylon 6, 6 is the substitute for wool **100. (D)** Calcium is essential for the formation and growth of bones and cartilages.

