

DO NOT OPEN THE SEAL OF THE BOOKLET UNTIL YOU ARE TOLD TO DO SO

Test Form NO.

7166675

DE - 2015



Indian Academy
Of Competitive Exams Pvt. Ltd.

Time Allowed : 2 Hours (for V. H. Candidates and Candidates Suffering from Cerebral Palsy : 2 Hrs 40 min)

Read the following instructions carefully before you begin to answer the question

Maximum Marks : 200

INSTRUCTION TO CANDIDATES

- This booklet contains 200 questions in all comprising the following four parts:
Part – I : General Intelligence (50 Questions)
Part – II: English Language (50 Questions)
Part – III: Quantitative Aptitude (50 Questions)
Part – IV: General Awareness (50 Questions)
- In questions set bilingually in English and Hindi language, in case of discrepancy, the English version will prevail.
- All questions are compulsory and carry equal marks.
- The paper carries negative marking 0.25 marks will be deducted for each wrong answer.
- Before you start to answer the questions you must check up this booklet and ensure that it contains all the pages (1-24) and sell that no page is missing or repeated. If you find any defect in this booklet, you must get it replaced immediately.**
- You will be supplied the answer sheet separately by the invigilator.
You must complete and code the details of Name, Roll Number, Ticket Number and Test form Number in the Answer Sheet carefully. You must also put your signature and Left – Hand thumb impression on the Answer Sheet at the prescribed place before you actually start answering the questions. These instructions must be fully complied with, failing which, your answer sheet will not be evaluated and you will be awarded ‘ZERO’ mark. **(V. H. / Cerebral Palsy candidates will have to ensure that these details will be filled in by the scribe. However, all V.H. / Cerebral Palsy candidates must put their Left – hand thumb impression at the space provided in the Answer Sheet. Those V. H. / Cerebral Palsy candidates who can sign should also put their signatures in addition to thumb impression.**
- Answers must be shown by completely blackening the corresponding circle on Side – II of the Answer Sheet against the relevant question number by **Black / Blue Ball – point pen** only. Answers which are not shown by black / blue ball point pen will not be awarded any mark.
- A machine will read the coded information in the OMR Answer Sheet. In case the information is incomplete / different from the information given in the application form, such candidate will be awarded ‘ZERO’ mark.
- The answer sheet must be handed over to the Invigilator before you leave the Examination Hall.
- Failure to comply with any of the above instructions will render a candidate liable to such action / penalty as may be deemed fit.**
- The manner in which the different questions are to be answered has been explained at the back of this Booklet (Page no. 24), which you should read carefully before actually answering the questions.
- Answer the questions as quickly and as carefully as you can. Some questions may be difficult and other s easy. Do not spend too much time on any question.
- In lieu of question Nos. 44 to 55 and 142 to 150, relating to figural portions, alternate questions have been provided to be attempted by V. H. / Cerebral Palsy candidates only.)
- No rough work is to be done on the Answer Sheet. Space for rough work has been provided below the questions in Part I and Part III of this booklet.**
- “Mobile phones and wireless communication devices are completely banned in the examination halls / rooms. Candidates are advised not to keep mobile phones / any other wireless communication devices with them even switching it off, in their own interest. Failing to comply with this provision will be considered as using unfair means in the examination and action will be taken against them including cancellation of their candidature.”

SSC (CHSL) 10 + 2 Afternoon Exam Paper 15-11-2015

1. What conclusion is **true** with respect to the given statements?

Statements:

- (i) Roy studies History and Political Science.
(ii) Roy Studies in Oxford University.

Conclusions:

- (a) Roy does not study Political Science.
(b) Roy studies History and Political Science in Oxford University
(c) Roy studies Social Science
(d) Roy does not study History

2. The mall is 250 metres north-west of the market. The school is 250 metres south-west of the market. In which direction is the school from the mall?

- (a) West (b) South (c) North (d) East

Directions: In question numbers 3 to 10, select the related word/ letters/ number from the given alternatives.

3. Carpentry : Skill :: _____ : Talent

- (a) Singing (b) Plumbing (c) Driving (d) Masonry

4. Female : Feminine :: Male : _____

- (a) Man (b) Masculine (c) Macho (d) Manager

5. P S : V Y :: F I : _____

- (a) V Z (b) W Z (c) I O (d) U X

6. KcaC : CacK :: XgmF : _____

- (a) FmgX (b) Gmf (c) EmgF (d) EgmX

7. 42 : 20 :: 64 : _____

- (a) 33 (b) 34 (c) 31 (d) 32

8. SUMO : PRJL :: TAXI : _____

- (a) WDXJ (b) QDVF (c) QXUF (d) QDNF

9. $\frac{1}{4} : \frac{1}{8} :: \frac{2}{3} : \frac{1}{3}$

- (a) $\frac{1}{2}$ (b) 1 (c) $\frac{1}{4}$ (d) $\frac{1}{3}$

10. Concord : Agreement :: Discord : _____

- (a) Comparison (b) Conflict (c) Association
(d) Blended

11. Two statements are given, each followed by two conclusion / assumption I and II. you have to consider the statement to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusion/ assumptions, if any, follow from the given statements.

Statements:

- (i) Some papers are pens (ii) All the pencils are pens

Conclusions:

- I. Some pens are pencils II. Some pens are papers
(a) Either I or II follows (b) Both I and II follow
(c) Only I conclusion follows
(d) Only II conclusion follows

12. If Ramya's rank is 22nd out of 46 students. What is her rank from the last?

- (a) 29 (b) 32 (c) 24 (d) 26

* No answer

13. Choose the similar group of numbers on the basis of certain common properties they possess:

(72, 66, 96)

- (a) (24, 69, 58) (b) (55, 66, 77) (c) (63, 70, 86)
(d) (54, 57, 78)

14. Which one of the given responses would be a meaningful order of the following?

1. India 2. Bangalore 3. Asia 4. Karnataka

- (a) 3, 1, 4, 2 (b) 3, 1, 2, 4 (c) 1, 2, 3, 4 (d) 3, 4, 2, 1

15. If FADE is coded as 3854 then how can GAGE be coded?

- (a) 2834 (b) 2824 (c) 2814 (d) 1824

16. Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it?

_bbm_amb_m_a_bbm

- (a) ambbm (b) mabam (c) abmab (d) mbabm

17. If it is possible to form a word with the first, fourth, seventh and eleventh letters in the word 'SUPERFLUOUS', write the first letter of that word.

- (a) O (b) E (c) S (d) L

18. After going 80 m from his house towards east, a person turns left and goes 20 m, then turns right and moves 100 m, then turns left and goes 60 m, then turns right and goes 120 m to reach the park. What is the distance between his house and the park?

- (a) 120 m (b) 20 m (c) 100 m (d) 80 m

* No Answer

19. If SUNDAY = 18, MONSOON = 21, YEAR = 12, then THURSDAY = ?

- (a) 26 (b) 42 (c) 28 (d) 24

20. The sum of ages of mother, daughter and son is 87 years. What will be the sum of their ages after 8 years?

- (a) 110 (b) 111 (c) 105 (d) 101

21. If '-' stands for addition, '+' for multiplication, '÷' for subtraction and '×' for division, which one of the following equations is correct?

- (a) $5 + 2 - 12 \times 6 \div 2 = 10$ (b) $5 \div 2 + 12 \times 6 - 2 = 4$
(c) $5 - 2 + 12 \times 6 \div 2 = 27$ (d) $5 + 2 - 12 \div 6 \times 2 = 13$

22. Unscramble the following letter to frame a meaningful word. Then find out the correct numerical position of the letters.

O T Y S R H I

1 2 3 4 5 6 7

- (a) 6 2 4 1 3 7 5 (b) 6 4 5 2 1 7 3 (c) 6 3 4 7 1 2 5

- (d) 5 7 4 2 1 5 3

23. If P denotes ÷, Q denotes ×, R denotes + and S denotes -, then $16Q12P6R5S4 = ?$

- (a) 32 (b) 33 (c) 30 (d) 31

24. In following series find 20th number.

9, 5, 1, -3, -7, -11, _____

- (a) -64 (b) -75 (c) -70 (d) -57

Directions: In question numbers 25 and 26, arrange the following words as per order in the dictionary.

25. 1. Range 2. Rain 3. Rein 4. Ranger

- (a) 2, 3, 4, 1 (b) 2, 1, 3, 4 (c) 2, 1, 4, 3 (d) 2, 4, 3, 1

26. 1. Necessary 2. Navigate 3. Nautical 4. Naval

- (a) 3, 4, 2, 1 (b) 3, 2, 4, 1 (c) 2, 4, 3, 1 (d) 4, 3, 2, 1

Directions: In question numbers 27 to 30, a series is given with one term missing. Choose the correct

alternative from the given ones that will complete the series.

27. 4, 11, 17, 22, ____, 29, 31, 32
 (a) 26 (b) 27 (c) 23 (d) 24
28. Y, T, P, ____, K
 (a) L (b) O (c) N (d) M
29. AZ, CX, FU, ____
 (a) IQ (b) KP (c) IR (d) IV
30. $6 + \sqrt{216}$; $7 + \sqrt{343}$; $8 + \sqrt{512}$; $9 + \sqrt{729}$; ____
 (a) $10 + \sqrt{10000}$ (b) $10 + \sqrt{10^5}$ (c) $10 + \sqrt{100}$
 (d) $10 + \sqrt{1000}$

Directions: In question numbers 31 to 34, select the missing number from the given responses.

31.

	4		3	
5	77	9	?	6
	8		?	

 (a) 79 (b) 73 (c) 75 (d) 77
32.

874		
1	3	5
2	4	6
3	1	9
1	7	?

 (a) 6 (b) 8 (c) 2 (d) 4

33.

4	8	16	32
5	15	?	135
6	24	96	384

 (a) 45 (b) 80 (c) 30 (d) 32

34.

125	
8	7

49	
3	4

121	
6	?

 (a) 20 (b) 5 (c) 4 (d) 21

Directions: In question numbers 35 to 43, find the odd word / letters / number / number pair from the given alternatives.

35. (a) DAC (b) UTV (c) IFH (d) NKM
36. (a) Cone (b) Rectangle (c) Circle (d) Triangle
37. (a) SQOM (b) WUSP (c) MKIG (d) ZXVT
38. (a) Tea : Beverages (b) Legumes : Nodules
 (c) Beans : pulses (d) Rice : Cereals
39. (a) SRQP (b) LKJI (c) HGFE (d) UVWX
40. (a) 3249 (b) 2709 (c) 8314 (d) 2518
41. (a) 56 (b) 76 (c) 56 (d) 36
42. (a) Knock (b) Wrong (c) Psychology (d) Fast
43. (a) (36, 27) (b) (23, 14) (c) (32, 29) (d) (45, 18)
44. The image of a clock in a mirror is seen as 3.15. What is the right time?
 (a) 10.45 (b) 7.45 (c) 9.45 (d) 8.15
45. A word is represented by only one set of numbers as given in any one of the alternatives. The set of numbers

given in the alternatives are represented by two classes of alphabets as in two matrices given below. The columns and rows of Matrix – I are numbered from 0 to 4 and that of Matrix – II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, e.g., ‘I’ can be represented by 00, 14 etc., and ‘N’ can be represented by 59, 68 etc. similarly, you have to identify the set for the word ‘ROAD’.

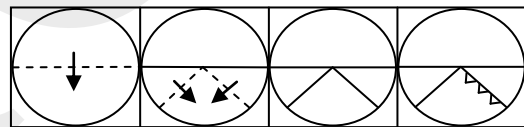
Matrix I

	0	1	2	3	4
0	I	M	W	S	Q
1	M	W	S	Q	I
2	W	S	Q	I	M
3	S	Q	I	M	W
4	Q	I	M	W	S

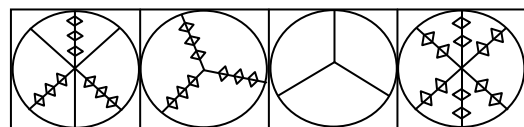
Matrix II

	5	6	7	8	9
5	O	A	D	R	N
6	A	D	R	N	O
7	D	R	N	O	A
8	R	N	O	A	D
9	N	O	A	D	r

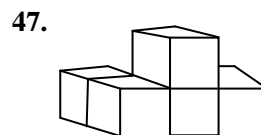
- (a) 56, 67, 57, 96 (b) 67, 57, 96, 56
 (c) 96, 67, 56, 57 (d) 57, 96, 56, 57
46. A piece of paper is folded and cut as shown below in the question figures. From the given answer figures, indicate how it will appear when opened?
 Question figures:



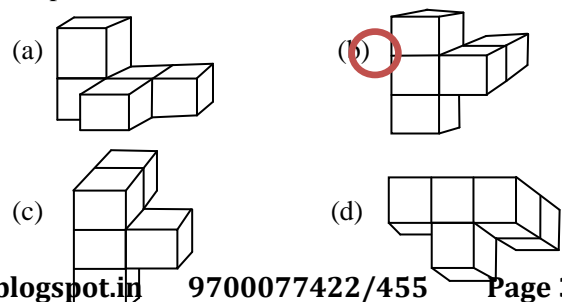
Answer figures:



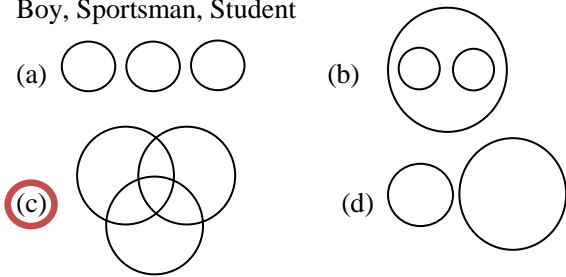
- (a) (b) (c) (d)
- * No Answer



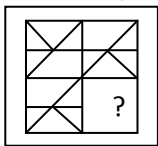
The solid so formed by joining unit cubes is rotated to obtain different positions, which of these cannot be the shape after it has turned?



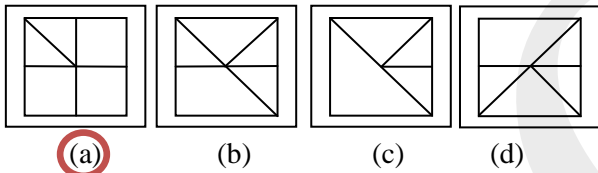
48. Which figure will best represent the relationship amongst the three classes?
Boy, Sportsman, Student



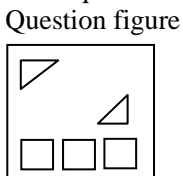
49. Which answer figure will complete the pattern in the question figure?
Question figure



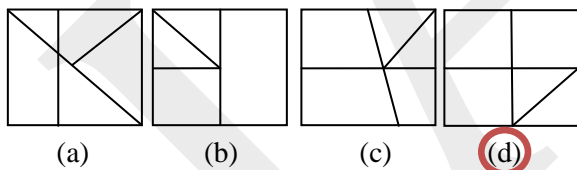
Answer Figures:



50. Identify the answer figure from which the pieces given in the question figure have been cut.



Answer Figures:



PART – II ENGLISH LANGUAGE

Directions: In question number 51 and 52, a sentence has been given in Active / Passive Voice. Out of the four alternatives suggested, select the one which best expresses the same sentence in Passive / Active Voice and mark your answer in the Answer Sheet.

51. The boys were making kites.
 (a) Kites were being made by the boys
 (b) Kites are made by the boys
 (c) The boys had made kites
 (d) Kites are being made by the boys.
52. He will not use the computer.
 (a) The computer will not be used by him.
 (b) The use of the computer will not be by him.
 (c) The computer he will not use
 (d) By him the computer will not be used.

Directions: In question numbers 53 and 54, a sentence has been given in Direct / Indirect. Out of the four alternatives suggested, select the one which best expresses the same sentence in Indirect / Direct and mark your answer in the Answer Sheet.

53. The Policeman said to the driver, "Do you have a licence?"
 (a) The policeman asked the driver whether he had a licence.
 (b) The policeman asked the driver whether he had had a licence.
 (c) The policeman asked the driver whether he had a licence.
 (d) The policeman asked the driver whether he have a licence.
54. The teacher said to the students, "March quietly to the ground."
 (a) The teacher instructed the students that they should march quietly to the ground.
 (b) The teacher instructed the students that they must march quietly to the ground.
 (c) The teacher instructed the students to march quietly to the ground.
 (d) The teacher said to the students that they should march quietly to the ground.

Directions: In question numbers 55 to 64, in the following passage some of the words have been left out. Read the passage carefully and choose the correct answer to each question out of the four alternatives and fill in the blanks.

In civilized life there is a rule 55 violence, against taking the 56 into our hands. It a rule which 57 of us observe so often, indeed, that a great 58 of people go through life 59 orderliness and non-violence as part of the scheme of nature. But when 60 comes into their midst 61 refuses to observe the current rules, and 62 the simple rule that might is right, the law-abiding numbers 63 society do not know what to do, and look on in 64 bewildered confusion.

55. (a) after (b) at (c) against (d) upon
 56. (a) police (b) people (c) rule (d) law
 57. (a) most (b) none (c) many (d) every
 58. (a) amount (b) number (c) capacity (d) sum
 59. (a) not expecting (b) expecting (c) not accepting (d) accepting
 60. (a) no one (b) any one (c) none (d) everyone
 61. (a) who (b) how (c) where (d) whom
 62. (a) following (b) followed (c) follows (d) follow
 63. (a) of (b) at (c) in (d) on
 64. (a) helping (b) helped (c) helpless (d) helpful
- Directions:** In question numbers 65 to 68, sentences are given with blanks to be filled in with an appropriate word (s). Four alternatives are suggested for each question. Choose the correct alternative out of the four and indicate it by blackening the appropriate circle [●] in the answer sheet.
65. As the doctor _____ into the room, the nurse handed him the temperature chart of the patient.
 (a) came (b) was coming (c) comes (d) is coming

66. All orders must ____ the rules
 (a) conform to (b) conforms to (c) conforming with
 (d) conforms with
67. She failed to ____ to her name.
 (a) line up (b) shine up (c) keep up (d) rise up
68. The economic ____ has affected our sales tremendously.
 (a) showdown (b) slowdown (c) crackdown
 (d) touchdown
Directions: In question numbers 69 to 72, four alternatives are given for the Idiom / Phrase underlined. Choose the alternative which best expresses the meaning of the Idiom / Phrase and mark it in the Answer Sheet.
69. To make up one's mind.
 (a) To remember things clearly
 (b) To remind oneself of something
 (c) To think creatively (d) To decide what to do
70. To put in a nut-shell.
 (a) To state something very concisely
 (b) To place something
 (c) To be blunt about something
 (d) To be long and exhaustive about something
71. Nowadays it has become a fashion to take French Leave.
 (a) Saying goodbye in French style
 (b) Absenting oneself without permission
 (c) Taking leave to go to France
 (d) Seeking permission from French
72. International monetary affairs are governed by the gnomes of Zurich.
 (a) foreign leaders (b) big international bankers
 (c) guardians of treasure (d) witchcraft of Zurich
Directions: In questions numbers 73 to 76, a part of the sentence is underlined. Below are given alternatives to the underlined part at (A), (B), (C) which may improve the sentence. Choose the correct alternative. In case no improvement is needed your answer is (D). Mark your answer in the Answer Sheet.
73. She had realized that she had seen him before.
 (a) had been realized (b) realized (c) has realized
 (d) no improvement
74. Being ill, he came to work.
 (a) He came to work and fell ill
 (b) Despite coming to work, he was ill
 (c) In spite of being ill, he came to work
 (d) No Improvement
75. She is willing to help you.
 (a) wilful (b) willingly (c) willfully
 (d) No Improvement
76. Hundreds of children are deaf born every year.
 (a) Deaf are born every (b) every born are deaf
 (c) are born deaf every (d) No Improvement
Directions: In question numbers 77 to 80, choose the word opposite in meaning to the given word and mark it in the answer sheet.
77. Appoint
 (a) Reward (b) yield (c) Disunite (d) Dismiss
78. Accusation
 (a) Complaint (b) Felicitation (c) Exculpation

(d) Encouragement

79. Bizarre
 (a) Ridiculous (b) Ordinary (c) Comical (d) Droll
80. Guilty
 (a) Honest (b) Innocent (c) Sorry (d) Dubious

Directions: In question numbers 81 to 84, four words are given in each question, out of which only one word is correctly spelt. Find the correctly spelt word and mark your answer in the Answer Sheet.

81. (a) Humein (b) humaen (c) humain (d) humane
82. (a) equanamous (b) ecuanemous (c) ecuanimous
 (d) equanimous

83. (a) labororry (b) laboratery (c) laborratory
 (d) laboratory

84. (a) Pedestrian (b) Padestrian (c) Pedistrian
 (d) Pedestrian

Directions: In question numbers 85 to 88, out of the four alternatives, choose the one which best expresses the meaning of the given word and mark it in the Answer Sheet.

85. Chastise
 (a) Upbraid (b) Monitor (c) Chase (d) Praise

86. Feeble
 (a) Playful (b) Pretty (c) Small (d) Weak

87. Maestro
 (a) Admirer (b) Employee (c) Novice (d) Genius

88. Pawn
 (a) Scrounge (b) Hire (c) Pledge (d) Sponge

Directions: In question numbers 89 to 92, the first and the last part of sentence are numbered 1 and 6. The rest of the sentence is split into four parts and named P, Q, R and S. these four parts are not given in their proper order. Read the sentence and find out which of the four combinations is correct. Then find the correct answer and indicate it in the Answer Sheet.

89. 1. Falcons have sharp angular wings
 P. to dive sharply

Q. and allow them

R. to chase their pretty

S. that give them the speed

6. to capture their victims

- (a) QPRS (b) PRSQ (c) SRQP (d) SQPR

90. 1. This summer was the most

P. to believe that next

Q. and we have reason

R. scorching in living memory

S. year and the year after

6. will be hotter still

- (a) SRPQ (b) SPQR (c) QSPR (d) RQPS

91. 1. The students

P. touched the

Q. arrived and

R. their teacher

S. feet of

6. with reverence

- (a) RQSP (b) QPSR (c) QPRS (d) QRSP

92. 1. The watchman
P. and found two thieves
Q. woke up when
R. with black masks
S. he heard the dog barking
6. trying to get in.
(a) QSRP (b) PQRS (c) QSPR (d) SPQR
- Directions:** In question numbers 93 to 96, some parts of the sentences have errors and some are correct. Find out which part of a sentence has an error and blacken the circle [•] corresponding to the appropriate letter (A), (B), (C). if a sentence is free from error, blacken the circle corresponding to (D) in the Answer Sheet.
93. Make what you write (a) / and say more (b) / absorbed and engrossing (c) / No error (d)
94. They came here in (a) / the evening and begin making (b) / further arrangements (c) / No error (d)
95. One must (a) / obey one's (b) / teachers (c) / No error (d)
96. She always fed (a) / her childrens (b) / before she fed her dog (c) / No error (d)
- Directions:** In question numbers 97 to 100, out of the four alternatives, choose the one which can be substituted for the given words/ sentences and indicate it by blackening the appropriate circle [•] in the Answer sheet.
97. One who compiles a dictionary
(a) cartographer (b) Bibliographer (c) lapidist
(d) lexicographer
98. A gathering at a religious place
(a) Spectators (b) Mob (c) Audience (d) Congregation
99. A place where birds are kept
(a) Aviary (b) Sanctuary (c) Apiary (d) Aquarium
100. Art of working with metals.
(a) Metaphysics (b) Metallurgy (c) Metalloid
(d) Meteorite

PART – III QUANTITATIVE APTITUDE

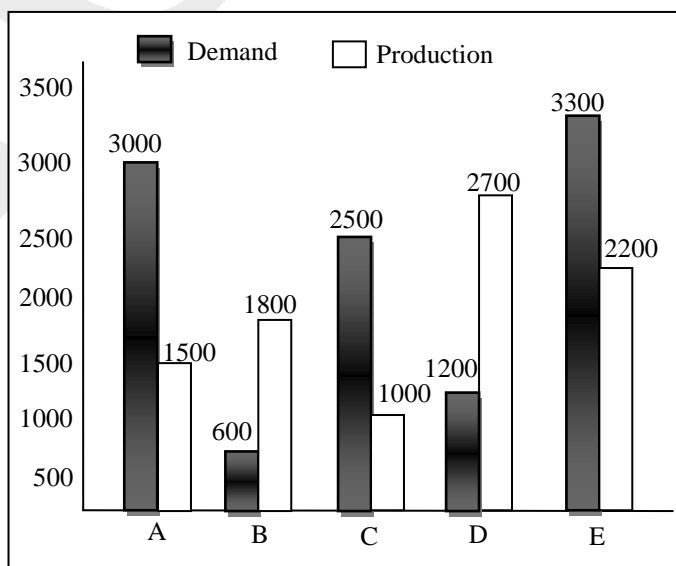
101. $\angle A$ of $\triangle ABC$ is a right angle. AD is perpendicular on BC. If BC = 14 cm and BD = 5 cm, then measure of AD is
(a) $\sqrt{5}$ cm (b) $3\sqrt{5}$ cm (c) $3.5\sqrt{5}$ cm (d) $2\sqrt{5}$ cm
102. If $\frac{a}{b} + \frac{b}{a} = 2$, then the value of $a - b$ is
(a) 2 (b) -1 (c) 1 (d) 1
103. A candidate who gets 25% marks in an examination, fails by 30 marks. But if he get 32% marks, he gets 42 marks more than the minimum pass marks. Find the pass percentage of marks.
(a) 20% (b) 25% (c) 12% (d) 52%
104. A man travels for 5 hours 15 minutes. If he covers the first half of the journey at 60 km/h and rest at 45 km/h. find the total distance travelled by him.
(a) 189 km (b) 378 km (c) 270 km (d) $1028\frac{6}{7}$ km
105. In $\triangle ABC$, $\angle B = 90^\circ$, AB = 8 cm and BC = 15 cm then $\sin C = ?$

- (a) $\frac{8}{17}$ (b) $\frac{15}{8}$ (c) $\frac{8}{15}$ (d) $\frac{15}{17}$
106. The average of 12 numbers is 15 and the average of the first two is 14. What is the average of the rest?
(a) $15\frac{1}{5}$ (b) 14 (c) $14\frac{1}{5}$ (d) 15
107. A merchant has 1000kg sugar, part of which he sells at 8% profit and the rest at 18% profit. He gains 14% on the whole. The quantity sold at 8% profit is:
(a) 600 kg (b) 640 kg (c) 400 kg (d) 560 kg
108. If $\cos\theta = \frac{p}{\sqrt{p^2+q^2}}$, then the value of $\tan\theta$ is
(a) $\frac{p}{q}$ (b) $\frac{p}{p^2+q^2}$ (c) $\frac{q}{\sqrt{p^2+q^2}}$ (d) $\frac{q}{\sqrt{p^2-q^2}}$
* No Answer
109. In a circle with centre at O(0,0) and radius 5 cm, AB is a chord of length 8 cm. if OM is perpendicular to AB, then the length of OM is
(a) 3 cm (b) 4 cm (c) 1 cm (d) 2.5 cm
110. The average expenditure of a man for the first five months is Rs. 1200 and for the next seven months is Rs. 1300. If he saves Rs. 2900 in that year, his monthly average income is:
(a) Rs. 1600 (b) Rs. 1700 (c) Rs. 1400 (d) Rs. 1500
111. A, B and C can complete a piece of work in 24, 5 and 12 days respectively. Working together, they will complete the same work in
(a) $3\frac{3}{7}$ days (b) 4 days (c) $\frac{1}{24}$ days (d) $\frac{7}{24}$ days
* No Answer
112. How much $66\frac{2}{3}\%$ of Rs. 312 exceeds Rs. 200?
(a) Rs. 4 (b) Rs. 8 (c) Rs. 104 (d) Rs. 96
113. Successive discounts of 20% and 10% are equivalent to a single discount of:
(a) 28% (b) 25% (c) 30% (d) 15%
114. Two trains start at the same time from A and B and proceed toward each other at the speed of 75 km / hr and 50 km/ hr respectively. When both meet at a point in between, one train found to be travelled 175 km more than the other. Find the distance between A and B.
(a) 785 km (b) 758 km (c) 857 km (d) 875 km
115. A number x is divisible by 7. What this number is divided by 8, 12 and 16, it leaves a remainder 3 in each case. The least value of x is
(a) 149 (b) 150 (c) 147 (d) 148
116. Let ABC be a triangle and AD be the perpendicular from the vertex A on the side BC such that $AD^2 = BD \cdot CD$. then measure of $\angle BAC$ is
(a) 90° (b) 75° (c) 120° (d) 100°
117. At what rate of compound interest per annum will a sum of Rs. 1200 become Rs. 1348.32 in 2 years?
(a) 6.5% (b) 7% (c) 6% (d) 7.5%
118. If ABCD be a rhombus, AC is its smallest diagonal and $\angle ABC = 60^\circ$, find length of a side of the rhombus when AC = 6 cm.
(a) 3 cm (b) $6\sqrt{2}$ cm (c) $3\sqrt{3}$ cm (d) 6 cm
119. Among the following statements, the statement which is not correct is:
(a) Every natural number is a real number
(b) Every real number is a rational number

- (c) Every integer is a rational number
(d) Every natural number is an integer
120. The volume of a right circular cone which is obtained from a wooden cube of edge 4.2 dm wasting minimum amount of wood is
(a) 194.04 cu. dm (b) 19.404 cu. dm
(c) 1940.4 cu. dm (d) 19404 cu. dm
121. If $x = y = z$, then $\frac{(x+y+z)^2}{x^2+y^2+z^2}$ is
(a) 2 (b) 3 (c) 1 (d) 4
122. The Vulgar fraction of $0.39\overline{39}$ is:
(a) $\frac{11}{39}$ (b) $\frac{17}{39}$ (c) $\frac{13}{33}$ (d) $\frac{15}{33}$
123. The numerical value of $\frac{9}{\cos^2 \theta} + 4\cos^2 \theta + \frac{5}{1+\tan^2 \theta}$:
(a) 7 (b) 9 (c) 4 (d) 5
124. The quotient when 10^{100} is divided by 5^{75} is:
(a) 10^{25} (b) 2^{75} (c) $2^{75} \times 10^{25}$ (d) $2^{25} \times 10^{75}$
125. The ratio of syrup and water in a mixture is 3 : 1, then the percentage of syrup in this mixture is:
(a) 25% (b) $66\frac{2}{3}\%$ (c) $33\frac{1}{3}\%$ (d) 75%
126. If Rahim deposited the same amount of Rs. x in a bank at the beginning of successive 3 years and the bank pays simple interest of 5% per annum, then the amount at his credit at the end of 3rd year will be:
(a) Rs. $\frac{1261}{400}x$ (b) Rs. $\frac{21}{20}x$ (c) Rs. $\frac{26481}{8000}x$
(d) Rs. $\frac{861}{400}x$
127. In $\triangle ABC$, $AD \perp BC$ and $AD^2 = BD \cdot DC$. the measure of $\angle BAC$ is
(a) 75° (b) 90° (c) 45° (d) 60°
128. If $x = a(b - c)$, $y = b(c - a)$, $z = c(a - b)$, then the value of $\left(\frac{x}{a}\right)^3 + \left(\frac{y}{b}\right)^3 + \left(\frac{z}{c}\right)^3$ is
(a) $\frac{xyz}{abc}$ (b) 0 (c) $\frac{3xyz}{abc}$ (d) $\frac{2xyz}{abc}$
129. If a man were to sell his hand-cart for Rs. 720, he would lose 25%. At what price must he sell it to gain 25%?
(a) Rs. 960 (b) Rs. 1152 (c) Rs. 768 (d) Rs. 1200
130. If the ratio of principal and the simple interest of 5 years is 10 : 3, then the rate of interest is:
(a) 6% (b) 8% (c) 3% (d) 5%
131. If $\tan \theta + \sec \theta = 3$, θ being acute, the value of $5 \sin \theta$ is:
(a) $\sqrt{\frac{3}{5}}$ (b) $\frac{5}{\sqrt{3}}$ (c) 4 (d) $\frac{5}{2}$
132. If $\frac{x}{y} = \frac{a+2}{a-2}$, then the value of $\frac{x^2 - y^2}{x^2 + y^2}$ is
(a) $\frac{2a}{a^2+2}$ (b) $\frac{4a}{a^2+4}$ (c) $\frac{2a}{a^2+4}$ (d) $\frac{4a}{a^2+2}$
133. After allowing a discount of 20%, a radio is available for Rs. 1200. Its marked price was:
(a) Rs. 1500 (b) Rs. 1800 (c) Rs. 1400 (d) Rs. 1550
134. Base of a right prism is a rectangle, the ratio of whose length and breadth is 3 : 2. If the height of the prism is 12 cm and total surface area is 288sq. cm, the volume of the prism is
(a) 288 cm^3 (b) 290 cm^3 (c) 286 cm^3 (d) 291 cm^3

135. A plate on square base made of brass is of length x cm and width 1mm. the plate weights 4725 gm. If 1 cubic cm of brass weighs 8.4 gram, then the value of x is
(a) 76 (b) 72 (c) 74 (d) 75
136. A can do in one day three times the work done by B in one day. They together finish $\frac{2}{5}$ of the work in 9 days. The number of days by which B can do the work alone is
(a) 120 days (b) 100 days (c) 30days (d) 90 days
137. Length of each edge of a regular tetrahedron is 1 cm. its volume is
(a) $\frac{1}{4}\sqrt{3}$ cu. cm (b) $\frac{\sqrt{2}}{6}$ cu. cm (c) $\frac{1}{12}\sqrt{2}$ cu. cm
(d) $\frac{\sqrt{3}}{12}$ cu. cm
138. If $\sqrt{y} = 4x$, then $\frac{x^2}{y}$ is:
(a) $\frac{1}{16}$ (b) $\frac{1}{4}$ (c) 4 (d) 2
139. Measure of each interior angel of a regular hexagon is
(a) 60° (b) 45° (c) 20° (d) 100°
140. A man purchased an article for Rs. 1500 and sold it at 25% above the cost price. If he has to pay Rs. 75 as tax on it, his net profit percentage will be:
(a) 25% (b) 30% (c) 15% (d) 20%
141. If A, B and C be the angles of a triangle, then out of the following, the incorrect relation is
(a) $\tan\left(\frac{A+B}{2}\right) = \sec\frac{C}{2}$ (b) $\cot\left(\frac{A+B}{2}\right) = \tan\frac{C}{2}$
(c) $\sin\frac{A+B}{2} = \cos\frac{C}{2}$ (d) $\cos\left(\frac{A+B}{2}\right) = \sin\frac{C}{2}$

The following chart represents Demand and Production for 5 companies ABCDE.



On the basis of the graph answer Question No. 142 – 146.

142. If $x\%$ of demand for company C equals demand for company B, then x equals:
(a) 20 (b) 60 (c) 4 (d) 24
143. The difference between average demand and average production of the five companies taken together is:
(a) 280 (b) 130 (c) 620 (d) 400
144. If company A desires to meet the demand by purchasing surplus production of a company, then the most suitable company is:

- (a) D (b) E (c) B (d) C

145. If the production of company D is h times of the production of company A, then h equals:

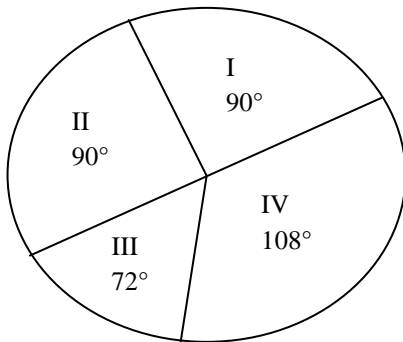
- (a) 2.5 (b) 1.2 (c) 1.8 (d) 1.5

146. The ratio of the number of companies having more demand than production to those having more production than demand is

- (a) 2 : 2 (b) 3 : 2 (c) 2 : 3 (d) 4 : 1

The total expenditure of company for a particular month is Rs. 60000. The various heads of expenditure I to IV are indicated in a pie chart given below. These heads are:

- I. Raw materials II. Conveyance III. Electricity
IV. Overhead expenses



Study the pie chart and answer question Nos. 147 to 150.

147. What percentage of total expenditure is on electricity

- (a) 25% (b) 30% (c) 20% (d) 23%

148. What is the amount spent on overhead expenses?

- (a) Rs. 15,000 (b) Rs. 18,000 (c) Rs. 10,000
(d) Rs. 12,000

149. What percentage of total expenditure is on raw materials?

- (a) 30% (b) 60% (c) 23% (d) 25%

150. Total expenditure on conveyance is:

- (a) Rs. 15,000 (b) Rs. 20,000 (c) Rs. 10,000
(d) Rs. 12,000

PART – IV GENERAL AWARENESS

151. Who composed the Allahabad Pillar inscription?

- (a) Mahasena (b) Veerasena (c) Vishnusena
(d) Harisena

152. If the president wants to resign, he shall address his letter of resignation to:

- (a) Vice President of India
(b) Speaker of Lok Sabha (c) Chief Justice of India
(d) Prime Minister of India

153. Among the following districts of Tamil Nadu, which district is unfit for cultivation due to increased salinity

- (a) Tirucirapalli (b) Nagapattinam (c) Ramanthapuram
(d) Coimbatore

154. The most abundant element by number in the living system is:

- (a) Hydrogen (b) Oxygen (c) Carbon (d) Nitrogen

155. Mixed economy means

- (a) Co-existence of public and private sectors
(b) Co-existence of rich and poor

(c) Co-existence of small and large industries

(d) Promoting both agriculture and industries in the economy

156. Christmas factor is involved in

- (a) Excretion (b) Digestion (c) Respiration

(d) Blood Coagulation

157. The Simplest CPU – scheduling algorithm is ____

(a) Round – robin scheduling algorithm

(b) Multilevel scheduling algorithm

(c) FCFS Scheduling algorithm

(d) SJF scheduling algorithm

158. The first Bio-sphere Reserve in India has been established in

(a) Nilgiri (b) Nanda Devi (c) Hazaribagh

(d) Kanha

159. Which article of the Indian Constitution deals with Electron Commission?

(a) Article 356 (b) Article 360 (c) Article 324

(d) Article 352

160. Arundhati Roy is the author of:

(a) Disgrace (b) The Tin Drum

(c) My Childhood Days (d) God of Small Things

161. The largest reservoir of fresh water is:

(a) Ground water (b) Ponds (c) Lakes (d) Glaciers

162. The “King of Metals” is

(a) Silver (b) Iron (c) Aluminium (d) Gold

163. What is Kyoto Protocol?

(a) It is an agreement among countries to take steps for planting trees to control pollution

(b) It is an agreement among countries to start using nuclear energy

(c) It is an agreement among countries to take steps for reducing global warming

(d) It is an agreement among countries to take steps for reducing acid rain

164. Plank’s constant has the dimensions of:

(a) Linear momentum (b) Angular momentum

(c) Force

(d) energy

165. The amount of matter in a ball of steel is its:

(a) Mass (b) Density (c) Volume (d) Weight

166. In which of the Round Table Conference Mahatma Gandhi participated?

(a) First Round Table Conference, 1930

(b) Second Round Table Conference, 1931

(c) Third Round Table Conference, 1932

(d) All of the above

167. Kimono is a dress style of which Asian Country?

(a) Korea (b) Laos (c) China (d) Japan

168. Which was the first linguistic state to be created?

(a) Tamil Nadu (b) Andhra Pradesh (c) Maharashtra

(d) Kerala

169. Who discovered the link between electricity and magnetism?

(a) Maxwell (b) Diesel (c) Michael Faraday

(d) Volta

170. Which of the following phenomenon helps to conclude that light is a transverse wave?

(a) Diffraction (b) Polarisation (c) Refraction

(d) Interference

171. Earth day is celebrated on:
 (a) April 22 (b) September 17 (c) February 16
 (d) April 4
172. All forms of ROM are also known as
 (a) middleware (b) Firmware (c) Shareware
 (d) Freeware
173. Kathakali is a dance prevalent in which state?
 (a) Andhra Pradesh (b) Tamil Nadu (c) Orissa
 (d) Kerala
174. Which of the following rivers originates from Trans Himalayas?
 (a) Sindu (b) Saraswathi (c) Ganga (d) Yamuna
175. Transpiration increases in:
 (a) Hot, damp and windy condition
 (b) Cool, damp and windy condition
 (c) Cool, dry and still condition
 (d) Hot, dry and windy condition
176. What is the number of players on each side in Rugby Football?
 (a) 16 (b) 12 (c) 11 (d) 15
177. When was the League of Nations established?
 (a) In 1920 (b) In 1939 (c) In 1914 (d) In 1918
178. The headquarters of the Survey of India Dept. (department) is located at:
 (a) Dehradun (b) Hyderabad (c) New Delhi
 (d) Jaipur
179. Blowing Air with open pipe is an example of:
 (a) Isochoric Process (b) Isobaric Process
 (c) Adiabatic Process (d) Isothermal Process
180. A demand curve will not shift:
 (a) When only prices of substitute products change
 (b) When there is a change in advertisement expenditure
 (c) When only price of the commodity change
 (d) When only income changes
181. The time element in price analysis was introduced by:
 (a) Alfred Marshall (b) J.S. Mill (c) J. R. Hicks
 (d) J. M. Keynes
182. Which of the following scientist proved that the path of each planet around the sun is elliptical?
 (a) Galileo (b) Newton (c) Copernicus (d) Kepler
183. The most suitable unit for expressing nuclear radius is:
 (a) Fermi (b) Angstrom (c) Micron (d) Nanometre
184. Minamata disease is caused by pollution of water by
 (a) Tin (b) methyl isocyanate (c) mercury
 (d) lead
185. Natural system of classification was proposed by _____ botanists.
 (a) German (b) Swedish (c) British (d) Indian
186. By whom was the autonomous investment separated from induced investment?
 (a) Malthus (b) Joan Robinson (c) Adam Smith
 (d) Schumpeter
187. Dr. P. Rama Rao Committee is related to which of the following?
 (a) Defence (b) Industry (c) Agriculture
 (d) Taxes
188. Who built the famous Shiva temple at Ellora?
 (a) Mauryan Emperor Ashoka
 (b) Gupta King Samudra Gupta
 (c) Chalukyan King Pulikeshi II
 (d) Rashtrakuta Ruler Krishna I
189. Rand is the currency of:
 (a) Iran (b) Romania (c) Norway (d) Namibia
 * No answer
190. Amino acids are required for the synthesis of:
 (a) Lipids (b) Proteins (c) Carbohydrates
 (d) Alkaloids
191. Who is the author of the book "Romancing with Life"?
 (a) Dev Anand (b) Shashi Tharoor (c) Bill Clinton
 (d) Kapil Dev
192. World Wild life fund was founded in:
 (a) 1969 (b) 1992 (c) 1961 (d) 1965
193. The Lalita Kala Akademi is devoted to the promotion of:
 (a) Literature (b) Music (c) Dance and Drama
 (d) Fine Arts
194. Where did the Black – Hole tragedy took place?
 (a) Calcutta (b) Murshidabad (c) Dacca
 (d) Monghyr
195. Todar Mal, the brilliant revenue officer served under:
 (a) Bhagwan Das (b) Humayun (c) Baz Bahadur
 (d) Sher Shah
196. Iron filling can be separated from a heterogeneous mixture using the technique of:
 (a) Magnetization (b) Sedimentation
 (c) Evaporation (d) Sublimation
197. How much of world's surface is covered by water?
 (a) 70% (b) 80% (c) 25% (d) 55%
198. India born Vijai Sheshadri won the prestigious '2014 Pulitzer Prize in which of the following categories?
 (a) Poetry (b) Drama (c) Journalism (d) Music
199. If xylem and phloem are arranged in the same radius, such a vascular bundle is called:
 (a) Bicolateral (b) Concentric (c) Radial
 (d) Collateral
200. When price of a substitute of commodity 'x' falls, the demand for 'x'.
 (a) Remains unchanged (b) Increases at increasing rate
 (c) rises (d) Falls

***** ALL THE BEST *****