

Section – I
(General English)

Direction (Q. Nos. 1 to 4) : Read the following passage carefully and answer the questions that follow.

Soft-bodied animals like caterpillars often fall a prey to voracious hunters like birds or reptiles. Despite having no means to 'actively' defend themselves with weapons like claws or jaws, they have nevertheless, evolved other equally effective deterrents. A particular species of the caterpillar lives at an altitude of over 2,500 meters in the Himalayas. It uses prominent colours to inform would be predators of its inedibility. In the event that an inexperienced or adventurous bird did eat the caterpillar, it would probably vomit it out soon after, and subsequently desist from attacking similar species in the future. Though this would do the unfortunate victim no good, the species benefits. A rare example of the martyr among animals.

1. Caterpillars cannot defend themselves because they :
(A) are lazy
(B) have no claws or jaws
(C) are passive animals
(D) cannot acquire weapons
2. The expression "other equally effective deterrents" means :
(A) Deterrents that are as powerful as those the caterpillars have
(B) Preventive weapons which have equal effect of others
(C) Preventive equipment which is as effective as something that has been already mentioned in the passage
(D) Mechanism which scares everyone equally well
3. The Himalayan caterpillar uses prominent colours to :
(A) Defend itself
(B) Warn the predator
(C) Reveal itself
(D) Attack the predator
4. Experienced birds do not attack the Himalayan caterpillars because they are :
(A) Diseased
(B) Inedible
(C) Repulsive
(D) Very aggressive

Direction (Q. No. 5) : Find the correct indirect speech.

5. "Oh you spoiled my best sari", she said.
(A) She said that you have spoiled my best sari.
(B) She lamented that he had spoiled her best sari.
(C) She explained that he spoilt her best sari.
(D) She wished that he had spoiled her best sari.

Direction (Q. Nos. 6 & 7) : Identify the correct sentence or sentences. Check grammar, usage, mechanics, redundancy, punctuation, spelling and style elements.

6. (i) A hotel's inhabitants are transient, they come and go and the population changes every night.
- (ii) While collating the evidence in the murder case on observing a broken branch the forensic expert asked as to what was it's purpose ?
- (iii) The executive said that the newspaper had committed libel when it called him a stinking, no-good, corrupt, incompetent, overpaid, lying, incompetent moron.
- (iv) Our taxi driver paused briefly on the way to the airport in order to vilify the driver of the car that had nearly forced him off the road.
- (A) (i) only (B) (ii) and (iii)
(C) (i), (ii) and (iii) (D) (iii) and (iv)
7. (i) It was serendipity, rather than genius, that, led the archeologist to his breathtaking discovery, of the ancient civilization.
- (ii) When the rich man gave a million dollars to the museum, cynics said he was merely trying to buy himself a reputation as a cultured person.
- (iii) The ascendancy of the new regime had been a great boon for the economy of the tiny tropical kingdom.
- (iv) The Air Force debunked UFO sightings, but millions of Americans didn't listen.
- (A) (i) and (ii) (B) (ii) and (iii)
(C) (iii) and (iv) (D) (iv) only

Direction (Q. No. 8) : Check proper spelling.

8. Choose the word out of the following options which is spelt correctly :
- (A) Conscentious (B) Conscientious
(C) Consciencious (D) Conscientus

Direction (Q. No. 9) : The word given below is used in four different sentences. Choose the option that has an incorrect or inappropriate usage of the word.

9. Impatient :
- (A) Swati became impatient when we suggested that she could not accompany us to the river rafting expedition.
- (B) The impatient driver slammed the brakes so hard at every stop that passengers were thrown around quite dangerously.
- (C) The parents were worried because they felt their son was very quiet and impatient.
- (D) The teacher is worried about Rajesh because he is a bad listener and impatient although a bright student.

Direction (Q. Nos. 10 to 14) : Each question gives a word followed by four choices. From the choices, select most suitable synonym (word which means the same) for the question word and mark its number as the answer.

10. TYRO :
(A) Apprentice (B) Traitor
(C) Devotee (D) Adherent
11. SENTENTIOUS :
(A) Harsh (B) Absurd
(C) Digressive (D) Moralistic
12. AGROUND :
(A) Knotted (B) Smooth
(C) Stranded (D) Mended
13. INCREDIBLE :
(A) Suspicious (B) Unbelievable
(C) Transparent (D) Justified
14. LIBERTY :
(A) Permission (B) Freedom
(C) Consent (D) Authenticity

Direction (Q. Nos. 15 to 19) : Choose the word opposite in meaning to the given word.

15. Lenient :
(A) Obstinate (B) Annoyed
(C) Rude (D) Harsh
16. Dearth :
(A) Extravagance (B) Scarcity
(C) Abundance (D) Sufficiency
17. Naive :
(A) Cunning (B) Wealthy
(C) Sophisticated (D) Complicated
18. Malicious :
(A) Boastful (B) Indifferent
(C) Kind (D) Generous
19. Robust :
(A) Thin (B) Emaciated
(C) Light (D) Strong

Direction (Q. Nos. 20 to 23) : Choose the answer option which will correctly fill the blanks.

20. _____ man ran into the street. A car hit _____ man.
(A) A, a (B) An, the
(C) the, the (D) A, the
21. The interesting thing about _____ Romans is all the roads that they built in Britain.
(A) A (B) An
(C) No article (D) The

22. Albert Einstein was _____ famous scientist. Einstein won _____ Nobel Prize in Physics in 1921. Einstein left his country and lived in _____ United States until he died in 1955.
- (A) A, the, an (B) A, the, the
(C) A, an, the (D) An, an, the
23. Are you shopping for _____ health club to join so you can get in shape ? Shop wisely ! You could end up choosing _____ wrong club and losing more money than pounds.
- (A) the, a (B) the, the
(C) A, the (D) An, the

Direction (Q. Nos. 24 to 26) : Choose the option which will correctly fill the blank.

24. This train travels from London _____ Paris.
- (A) at (B) to
(C) over (D) below
25. We stood at the back _____ the theater.
- (A) of (B) on
(C) in (D) for
26. I will work _____ five o'clock.
- (A) until (B) up
(C) in (D) to

Direction (Q. Nos. 27 to 29) : Choose the word nearest in meaning to the word in *ITALICS* from the given options.

27. The *antidote* to these problems is hard to find.
- (A) Cause for (B) Result of
(C) Remedy for (D) Consequence of
28. Because of a family *feud*, he never spoke to his wife's parents.
- (A) Crisis (B) Trouble
(C) Problem (D) Quarrel
29. The article is written in a very *lucid* style.
- (A) Elaborate (B) Clear
(C) Intricate (D) Noble

Direction (Q. Nos. 30 to 35) : Read the passage and answer the questions that follow on the basis of the information provided in the passage.

The pioneers of the teaching of science imagined that its introduction into education would remove the conventionality, artificiality, and backward-lookingness which were characteristics of classical studies, but they were gravely disappointed. So, too, in their time had the humanists thought that the study of the classical authors in the original would banish at once the dull pedantry and superstition of medieval scholasticism. The professional schoolmaster was a match for both of them, and has almost managed to make the understanding of chemical reactions as dull and as dogmatic an affair as the reading of Virgil's Aeneid.

The chief claim for the use of science in education is that it teaches a child something about the actual universe in which he is living, in making him acquainted with the results of scientific discovery, and at the same time teaches him how to think logically and inductively by studying scientific method. A certain limited success has been reached in the first of these aims, but practically none at all in the second. Those privileged members of the community who have been through a secondary or public school education may be expected to know something about the elementary physics and chemistry of a hundred years ago, but they probably know hardly more than any bright boy can pick up from an interest in wireless or scientific hobbies out of school hours.

As to the learning of scientific method, the whole thing is palpably a farce. Actually, for the convenience of teachers and the requirements of the examination system, it is necessary that the pupils not only do not learn scientific method but learn precisely the reverse, that is, to believe exactly what they are told and to reproduce it when asked, whether it seems nonsense to them or not. The way in which educated people respond to such quackeries as spiritualism or astrology, not to say more dangerous ones such as racial theories or currency myths, shows that fifty years of education in the method of science in Britain or Germany has produced no visible effect whatever.

The only way of learning the method of science is the long and bitter way of personal experience, and, until the educational or social systems are altered to make this possible, the best we can expect is the production of a minority of people who are able to acquire some of the techniques of science and a still smaller minority who are able to use and develop them.

30. The author implies that the 'professional school master' has :
- (A) No interest in teaching science (B) Thwarted attempts to enliven education
(C) Aided true learning (D) Supported the humanists
31. The author's attitude to secondary and public school education in the sciences is :
- (A) Ambivalent (B) Neutral
(C) Supportive (D) Contemptuous
32. The word 'palpably' most nearly means :
- (A) Empirically (B) Obviously
(C) Tentatively (D) Markedly
33. The author blames all of the following for the failure to impart scientific method through the education system except :
- (A) Poor teaching (B) Examination methods
(C) Lack of interest on the part of students (D) The social and education system
34. If the author were to study current education in science to see how things have changed since he wrote the piece, he would probably be most interested in the answer to which of the following questions ?
- (A) Do students know more about the world about them ?
(B) Do students spend more time in laboratories ?
(C) Can students apply their knowledge logically ?
(D) Have textbooks improved ?
35. Astrology is mentioned as an example of :
- (A) A science that needs to be better understood
(B) A belief which no educated people hold
(C) Something unsupportable to those who have absorbed the methods of science
(D) The gravest danger to society

Direction (Q. Nos. 36 to 40) : Identify the correct sentence.

36. (A) There is no denying the fact that tattoos are becoming more popular these days.
(B) There is no denial of the fact tattoos are becoming more popular every day.
(C) There is no denying the fact that tattoos is becoming rather popular today.
(D) There is no denying the fact that tattoos are becoming ever popular each day.
37. (A) A successful entrepreneur is those who organizes a business venture and assumes the risk for it.
(B) A successful entrepreneur is someone who organizes a business venture and who assumes the risk for it.
(C) A successful entrepreneur indicates people who organize a business venture and assumes the risk for it.
(D) A successful entrepreneur is someone who organizes a business venture and assumes the risk for it.
38. (A) Appropriate penitential policy aimed on social reintegration of the criminals is one of the most important factors while evaluating functioning of democracy in different countries.
(B) Appropriate penitential policy aimed at social reintegration of the criminals is one of the most important factors while evaluating functioning of democracy in different countries.
(C) Appropriate penitential policy aims at social reintegration of the criminals is one of the most important factors when evaluating functioning of democracy in different countries.
(D) Appropriate penitential policy aimed in social reintegration of the criminals is one of the most important factors in evaluating functioning of democracy in different countries.
39. (A) The Director of the Archeological Survey of India wants but a single good piece of pottery for conducting the carbon dating test.
(B) The Director of the Archeological Survey of India wanted but only a whole piece of pottery to conduct a carbon dating test.
(C) The Director of the Archeological Survey of India wanted but only one good piece of pottery to conduct a carbon dating test.
(D) The Director of the Archeological Survey of India wanted but one good piece of pottery to conduct a carbon dating test.
40. (A) Dan ate heartily because baked beans is one of his favorite dishes.
(B) Dan ate heartily because baked beans are one of his favorite dishes.
(C) Dan ate heartily because baked beans is one of his favorite dish.
(D) Dan ate heartily because baked beans are his favorite dishes.

Section – II
(General Knowledge)

41. Who among the following rejected the title of "Knighthood" and refused to accept a position in the Council of the Secretary of State for India ?
- (A) Motilal Nehru (B) M. G. Ranade
(C) G. K. Gokhale (D) B. G. Tilak
42. Which one of the following revolts was made famous by Bankim Chandra Chatterjee in his novel 'Anand Math' ?
- (A) Bhil uprising (B) Rangpur and Dinapur uprising
(C) Bishnupur and Birbhum rebellion (D) Sannyasi rebellion
43. At which Congress Session was the Working Committee authorized to launch a programme of civil disobedience ?
- (A) Bombay (B) Karachi
(C) Lahore (D) Madras
44. Which of the Ashoka's edicts mentions about his victory over Kalinga ?
- (A) Major Rock Edict XIII (B) Major Rock Edict XI
(C) Pillar Edict VI (D) Pillar Edict VII
45. Who was the First Chief Justice of Orissa High Court ?
- (A) Lingaraj Panigrahi (B) Bira Kishore Ray
(C) B. Jagannadha Das (D) R. Laxman Narasimham
46. Statutory grants are given to states by the centre on the recommendation of :
- (A) NITIAayog (B) National Development Council
(C) Finance Ministry (D) Finance Commission
47. Human Development Report is published by :
- (A) WB (B) IMF
(C) UNDP (D) WEF
48. A 'Closed Economy' is an economy in which :
- (A) The money supply is fully controlled
(B) Deficit financing takes place
(C) Only exports take place
(D) Neither exports nor imports take place

49. In the context of Indian economy 'Open Market Operations' refers to :
- (A) Borrowing by scheduled banks from the RBI
 (B) Lending by commercial banks to industry and trade
 (C) Purchase and sale of government securities by the RBI
 (D) None of these
50. Priority sector lending by banks in India constitutes the lending to :
- (A) Agriculture
 (B) Micro and Small Enterprises
 (C) Weaker Sections
 (D) All of these
51. Which of the following Acts laid the foundation of central administration ?
- (A) Charter Act of 1833 (B) Regulating Act of 1773
 (C) Charter Act of 1853 (D) Pitts India Act of 1784
52. "Doctrine of Basic Structure" limits the power of which of the following ?
- (A) President (B) Supreme Court and High Courts
 (C) Cabinet (D) Parliament
53. In which of its landmark judgement, SC ruled that there could not be any blanket immunity from judicial review of laws included in the 9th Schedule ?
- (A) Keshwanandbharti Case (B) Berubari Union Case
 (C) Golaknath Case (D) I. R. Coelho Case
54. Consider the following pairs :
- | Provision | Borrowed From |
|---|-----------------------|
| (I) Power of Judicial Review | American Constitution |
| (II) Directive Principles of State Policy | Canadian Constitution |
| (III) The idea of Residuary Powers | British Constitution |
- Which of the pairs given above is/are correctly matched ?
- (A) (I) only (B) (II) and (III) only
 (C) (I) and (III) only (D) (I), (II) and (III)
55. In which of these states a Tribal Welfare Minister is appointed by Governor ?
- (A) Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha
 (B) Madhya Pradesh, Odisha, Bihar, West Bengal
 (C) Chhattisgarh, Jharkhand, Bihar, Odisha
 (D) Odisha, Chhattisgarh, Bihar, Madhya Pradesh

56. The most important strategy for the conservation of biodiversity together with traditional human life is the establishment of :
- (A) Biosphere Reserves (B) Botanical Gardens
(C) National Parks (D) Wildlife Sanctuaries
57. Which one of the following is associated with the issue of control and phasing out of the use of ozone depletion substances ?
- (A) Basel Convention (B) Montreal Protocol
(C) Kyoto Protocol (D) Nagoya Protocol
58. CORPAT Exercise is held bi-annually between India and which of the following countries ?
- (A) Japan (B) Maldives
(C) Indonesia (D) Thailand
59. Who has won the prestigious International Booker Prize – 2021 for the book "At Night All Blood is Black" ?
- (A) Linwood Barclay (B) Jane Casey
(C) David Diop (D) Lucy Ferriss
60. What is the name of the app launched by the Ayush Ministry for the "International Yoga Day 2021" ?
- (A) Yoga Science (B) Namaste Yoga
(C) Yoga for All (D) Bharat Yoga
61. Which of the following contributes to the process of denudation ?
- (A) Decomposition (B) Transportation
(C) Weathering (D) Erosion
62. The arrangement of minerals in metamorphic rocks in layers or lines while undergoing recrystallisation due to the deformation caused by tectonic shearing is referred to as :
- (A) Foliation (B) Exfoliation
(C) Lithification (D) Mineralisation
63. Which one of the following has the highest energy ?
- (A) Blue light (B) Red light
(C) Green light (D) Yellow light
64. The most reactive among the halogens is :
- (A) Fluorine (B) Chlorine
(C) Bromine (D) Iodine

65. The hormone insulin is a :
- (A) Glycolipid (B) Fatty Acid
(C) Peptide (D) Sterol
66. Odisha Government has approved which scheme for improving nutrition outcomes in 125 hard to reach blocks of 22 districts in the state ?
- (A) POSHAN (B) AHARA
(C) SATHI (D) SOPAN
67. How many medals have been won by India at the Tokyo Paralympics 2021 ?
- (A) 17 (B) 19
(C) 21 (D) 15
68. Indian para-athlete Krishna Nagar has won the gold medal in which event at the 2020 Paralympics ?
- (A) Archery (B) Taekwondo
(C) Badminton (D) Tennis
69. Dustlik is the name of the Joint Military Exercise between India and :
- (A) US (B) Japan
(C) Uzbekistan (D) Kazakhstan
70. Which of the following are the Geographical Indication Tags of Orissa ?
- (A) Odisha Rasagola (B) Odisha Pattachitra
(C) Kandhamal Haladi (D) All of these
71. Which Article of the Constitution of India safeguards one's right to privacy ?
- (A) Article 19 (B) Article 21
(C) Article 25 (D) Article 29
72. Which of the following Committees of the Constituent Assembly were headed by Sardar Patel ?
- (A) Union Powers Committee (B) Rules of Procedure Committee
(C) States Committee (D) Provincial Constitutional Committee
73. During the freedom struggle, Aruna Asaf Ali was a major woman organizer of underground activities in :
- (A) Civil Disobedience Movement (B) Non-Cooperation Movement
(C) Quit India Movement (D) Swadeshi Movement

74. Quit India Movement was launched in response to :
- (A) Cabinet Mission Plan (B) Cripps Proposal
(C) Simon Commission Report (D) Wavell Plan
75. The 1929 Session of Indian National Congress is of significance in the history of the freedom movement because the :
- (A) Attainment of Self Government was declared as the objective of the Congress
(B) Attainment of Poorna Swaraj was adopted as the goal of the Congress
(C) Non-Cooperation Movement was launched
(D) Decision to participate in the Round Table Conference in London was taken
76. High temperature and low pressure over the Indian Subcontinent during the summer season draws air from the Indian Ocean leading to the in blowing of the :
- (A) South-east Monsoon (B) Trade Winds
(C) South-west Monsoon (D) Klesterlies
77. In the Indian context, the term "De-notified tribes" refers to :
- (A) Tribes which are aboriginals
(B) Nomadic Tribes
(C) Tribes practicing shifting cultivation
(D) Tribes which were earlier classified as criminal tribes
78. Which one of the following is not a biosphere reserve ?
- (A) Agasthyamalai (B) Nallamala
(C) Nilgiri (D) Panchmarhi
79. Which of the following hills are found where the Eastern Ghats and the Western Ghats meet ?
- (A) Anamalai Hills (B) Cardamom Hills
(C) Nilgiri Hills (D) Shevoroy Hills
80. What is common in the three cities of Pittsburg, Jamshedpur and Sheffield ?
- (A) They are centres of Iron and Steel Industry
(B) They are places of hydroelectric power generation
(C) They are automobile manufacturing hubs
(D) They are cotton growing regions of black soil

Section – III
(Logical Reasoning)

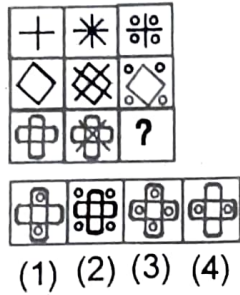
81. Consider the given statement(s) to be true and decide which of the given conclusions/assumptions can definitely be drawn from the given statement.

Statements : All gates are doors. All gates are windows. All windows are almirahs. No almirahs are tables.

Conclusions :

- | | |
|----------------------------|-----------------------------------|
| (I) Some doors are tables. | (II) No doors are tables. |
| (III) No tables are gates. | (IV) Some doors are not almirahs. |
- (A) Only (I), (II) and (III) follow (B) Only (II) and (III) follow
(C) Only (III) follows (D) None of these
82. Three persons A, B and C are standing in a queue. There are five persons between A and B and eight persons between B and C. If there are three persons ahead of C and 21 behind A, then what could be the minimum number of persons in the queue ?
- (A) 27 (B) 28
(C) 40 (D) 41
83. If TORTISE is coded as VQTVKUG, then ELEPHANT is coded as :
- (A) GRJJPVNOR (B) RNRQGCOV
(C) GNGRJCPV (D) GRJCPVGN
84. A and B start from a point simultaneously. A move to his East and travels 2 km and B moves to his South and travels 2 km. A takes turn 90° clockwise and travels 2 km. B takes left turn 90° anticlockwise and travels 2 km. Where would they be found from the starting point ?
- (A) Both in South-East region (B) Both in East region
(C) A in East and B in North region (D) A in South and B in North region
85. Somu travelled from a point A straight to B, a distance of 12 km. He turned right and travelled 8 km and reached point C. From that point took right turn and travelled 6 km and reached point D. What is the minimum distance between final point and initial point ?
- (A) 10 km (B) 12 km
(C) 13 km (D) 14 km
86. Which of the following expressions will be true if the given expression ' $A > B \geq C < D < E$ ' is definitely true ?
- (A) $A \geq C$ (B) $E > C$
(C) $D \geq B$ (D) $A > D$
87. If ' $P \S Q$ ' means 'P is the father of Q'; ' $P \# Q$ ' means 'P is the mother of Q'; ' $P * Q$ ' means 'P is the sister of Q', then how is D related to N in $N \# A \S B * D$?
- (A) Nephew (B) Grandson
(C) Granddaughter (D) Cannot be determined

88. If RUSH is coded as 66, then how is GIRL coded as ?
 (A) 75 (B) 64
 (C) 47 (D) 46
89. Which one of the given responses would be a meaningful order of the following words ?
 1. Heel, 2. Shoulder, 3. Face, 4. Neck, 5. Knee, 6. Chest, 7. Thigh, 8. Stomach, 9. Skull and 10. Hand.
 (A) 3, 4, 7, 9, 2, 5, 8, 10, 6, 1 (B) 9, 3, 4, 2, 10, 6, 8, 7, 5, 1
 (C) 2, 4, 7, 10, 1, 5, 8, 9, 6, 3 (D) 4, 7, 10, 1, 9, 6, 3, 2, 5, 8
90. Select a suitable figure from the four alternatives that would complete the figure matrix :



- (A) 1 (B) 2
 (C) 3 (D) 4
91. Randhir ranks 15th from the bottom in a class of 45 students. What is her rank from the top ?
 (A) 31 (B) 25
 (C) 29 (D) 30
92. Choose a word that comes first in a English dictionary from the following four words :
 (A) Temple (B) Tenant
 (C) Terminate (D) Temperature
93. Find the odd word/letters/number pair from the given alternatives :
 (A) High – Up (B) Past – Present
 (C) Often – Seldom (D) Fresh – Stale
94. Pointing out to a photograph, a man tells his friend 'She is the daughter of the only son of my father's wife'. How is the girl in the photograph related to the man ?
 (A) Niece (B) Sister
 (C) Cousin (D) Daughter
95. Five children were administered psychological tests to know their intellectual levels. In the report, psychologists pointed out that the child A is less intelligent than the child B. The child C is less intelligent than the child D. The child B is less intelligent than the child C and child A is more intelligent than the child E. Which child is the most intelligent ?
 (A) A (B) B
 (C) D (D) E

96. If '+' means 'x', '-' means '÷', 'x' means '-' and '÷' means '+', then what will be the value of $16 \div 64 - 8 \times 4 + 2$?
- (A) 12 (B) 24
(C) 16 (D) 18
97. Which of the following jumbled words is not an animal ?
- (A) LATHPEEN (B) TICRECK
(C) FEFEOC (D) TAR
98. Find the missing number :
- 2, 5, 10, 17, 26, ?
- (A) 36 (B) 49
(C) 37 (D) 47
99. Consider the given statement(s) to be true and decide which of the given conclusions/assumptions can definitely be drawn from the given statement :
- Statements** : All books are trees. All trees are lions.
- Conclusions** :
- (I) All books are lions. (II) All lions are books.
(III) All trees are books. (IV) Some lions are books.
- (A) Only conclusions (I) and (III) follow (B) Only conclusions (I) and (IV) follow
(C) None of the conclusions follow (D) All conclusions follow
100. If $24 \times 2 = 84$ and $32 \times 3 = 69$, then $13 \times 3 = ?$
- (A) 38 (B) 93
(C) 16 (D) 10
101. The ratio of the ages of man and his wife is 4 : 3. After 4 years, the ratio will be 9 : 7. If at the time of marriage, the ratio was 5 : 3, how many years ago were they married ?
- (A) 12 (B) 24
(C) 5 (D) 8
102. C is wife of B, E is the son of C, A is the brother of B and father of D. What is the relationship of E to D ?
- (A) Mother (B) Sister
(C) Brother (D) Cousin
103. In a certain code language, 'ke xa hu de' means 'she is eating apples' ; 'ke te qu' means 'she sells toys' and 'su li de' means 'I like apples'. Which word in that language means 'she' and 'apples' ?
- (A) xa and de (B) xa and ke
(C) ke and de (D) ke and xa

104. If '+' means 'minus', '-' means 'added to', 'x' means 'divided by' and '÷' means 'multiplied by', then which of the following will be the value of the following expression ?

$$8 \times 2 - 4 + 6 \div 2 = ?$$

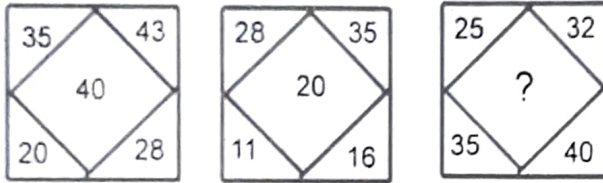
- (A) 2 (B) 4
(C) 6 (D) 12

105. In this letter series, some of the letters are missing which are given in that order as one of the alternatives below it. Choose the correct alternative.

A ____ BCCB ____ CA ____ CCA ____ BAAB ____ C.

- (A) ACCAB (B) ABCAA
(C) ABABC (D) BACAA

106. Find the missing number from the given responses :



- (A) 55 (B) 68
(C) 79 (D) 86

Direction (Q. Nos. 107 to 110) : Study the following information carefully and answers the given questions.

Twelve persons are sitting in two parallel rows containing six persons each, in such a way that there is an equal distance between adjacent persons. In Row – 1 : A, B, C, D, E and F are seated (but not necessarily in the same order) and all of them are facing south. In Row – 2 : P, Q, R, S, T and V are seated (but not necessarily in the same order) and all of them are facing north. Therefore, in the given seating arrangement each person seated in a row faces another person of the other row. 'A' sits third to the left of 'E'. The person facing A sits second to the left of T. Two persons are sitting between T and P. C and D are immediate neighbours. C and D do not sit at any of the extreme ends of the line. Only one person sits between B and C. The person facing D is an immediate neighbour of Q. V is not an immediate neighbour of P. S does not face A.

107. Who amongst the following sits second to the right of the person who faces R ?

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

108. Which of the following statements regarding B is true ?

- (A) B sits second to the left of C (B) A sits to immediate left of B
(C) T faces B (D) D is an immediate neighbour of B

109. Who amongst the following faces P ?
- (A) A (B) D
(C) C (D) E
110. Three of the following four are alike in a certain way based on the given seating arrangement and thus form a group. Which is the one that **does not** belong to the group ?
- (A) F (B) Q
(C) T (D) C
111. Find the odd word/number/letters/number pair from the given alternatives :
- (A) Ornithology : Birds (B) Mycology : Fungi
(C) Biology : Botany (D) Phycology : Algae
112. Select the correct one and fill up the blank :
- $B_2CD, \text{---}, BCD_4, B_5CD, BC_6D.$
- (A) B_2C_2D (B) BC_3D
(C) B_2C_3D (D) BCD_7
113. Select the related word/letters/number from the given alternatives :
- LOGIC : BHFNK :: CLERK : ?
- (A) XVRPA (B) QBKJA
(C) LPRTU (D) JQDKB
114. Select the related word/letters/number from the given alternatives :
- Parrot : Cage :: Man : ?
- (A) Home (B) Life
(C) House (D) Prison
115. The below question consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer.
- Is X the father of Y ?
- (I) Y is the only son of X.
(II) Z is the mother of Y.
- (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 both the statements (I) and (II) even together are not sufficient to answer the question.
(D) If the data in both the statements (I) and (II) together are necessary to answer the question.

Section – IV

(Quantitative Aptitude)

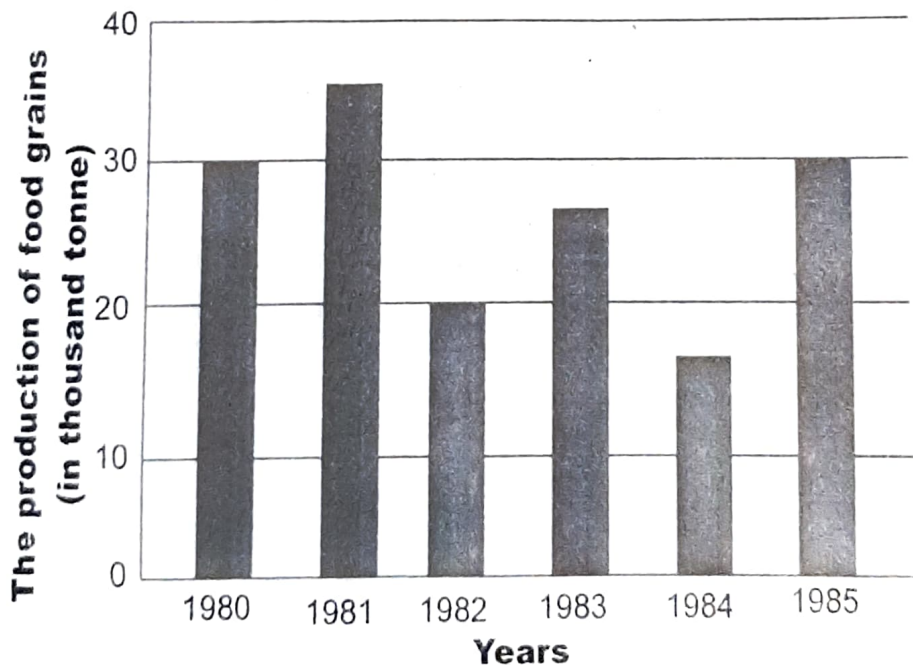
116. 3 women and 18 children together take 2 days to complete a piece of work. How many days will 9 children take to complete the piece of work if 6 women can complete the piece of work in 3 days ?
- (A) 9 days (B) 7 days
(C) 5 days (D) 6 days
117. What should come in place of question mark (?) in the following ?
 $(49)^2 \times (7)^8 + (343)^3 = (7)^?$
- (A) 3 (B) 11
(C) 7 (D) 9
118. What should come in place of question mark (?) in the following ?
 $7825 - 9236 + 5234 = ? \times 25$
- (A) 152.92 (B) 152.29
(C) 125.29 (D) 125.92
119. What should come in place of question mark (?) in the following question ?
 $5 \times ? = 8042 \div 4$
- (A) 296.1 (B) 5433.6
(C) 10052.5 (D) 402.1
120. What should come in place of the question mark (?) in the following number series ?
 3, 4, 9, 28, 113, ?
- (A) 782 (B) 566
(C) 424 (D) 646
121. In a stream running at 3 km/h, a motorboat goes 8 km upstream and back again to the starting point in 120 minutes. What is the speed of the motorboat in still water ?
- (A) 8 km/h (B) 9 km/h
(C) 10 km/h (D) 12 km/h
122. Solid sphere of radius 6 cm is melted into a hollow cylinder of uniform thickness. If the external radius of the base of the cylinder is 5 cm and its height is 32 cm, find the uniform thickness of the cylinder ?
- (A) 3 cm (B) 1.5 cm
(C) 1 cm (D) 2.5 cm
123. 4 men and 16 women can complete a piece of work in 10 days. 10 children and 12 women can complete the same work in 12 days. 5 children and 6 men can complete the same work in 15 days. Then in how many days will thrice work can be completed by 6 men, 8 women and 20 children ?
- (A) 16 days (B) 24 days
(C) 32 days (D) 20 days

124. 56% of $440 - 36\%$ of $240 = ?\%$ of 320 :
- (A) 40% (B) 50%
(C) 60% (D) 75%
125. What is the unit digit of the given sum : $1 + 22 + 33 + 44 + 55 + 66$?
- (A) 1 (B) 4
(C) 7 (D) 9
126. In how many different ways can the letters of the word 'VENTURE' be arranged ?
- (A) 840 (B) 5040
(C) 1260 (D) 2520
127. A 280 meters long train crosses a platform thrice its length in 6 minutes 40 seconds. What is the speed of the train ?
- (A) 3.2 m/s (B) 1.4 m/s
(C) 2.8 m/s (D) Cannot be determined
128. At present, Anil's age is 1.5 times the age of Purvi. Eight years hence, the ratio of the ages of Anil and Purvi will be $25 : 18$. What is Purvi's present age ?
- (A) 50 yr (B) 28 yr
(C) 42 yr (D) 36 yr
129. The ratio of Sita's, Riya's and Kunal's monthly income is $84 : 76 : 89$. If Riya's annual income is Rs. $4,56,000$, what is the sum of Sita's and Kunal's annual incomes ?
- (A) Rs. $11,95,000$ (B) Rs. $9,83,500$
(C) Rs. $11,30,000$ (D) Rs. $10,38,000$
130. The average weight of 21 boys was recorded as 64 kg. If the weight of the teacher was added, the average increased by 1 kg. What was the teacher's weight ?
- (A) 86 kg (B) 64 kg
(C) 72 kg (D) 98 kg
131. Four bells ring at the intervals of $6, 8, 12$ and 18 seconds. They start ringing together at 12 'o clock. After how many seconds will they ring together again ?
- (A) 72 (B) 84
(C) 60 (D) 48
132. A fraction becomes $\frac{4}{5}$ if 1 is added to both numerator and denominator. If, however, 5 is subtracted from both numerator and denominator the fraction becomes $\frac{1}{2}$. What is the fraction ?
- (A) $\frac{7}{9}$ (B) $\frac{8}{9}$
(C) $\frac{6}{9}$ (D) None of these

133. A mosaic tile, square in shape has an area of 3.24 ft^2 . Which of the following area can be floored using these tiles without any Wastage/Breakage ?
 (A) $180 \text{ ft} \times 180 \text{ ft}$ (B) $324 \text{ ft} \times 4 \text{ ft}$
 (C) $126 \text{ ft} \times 96 \text{ ft}$ (D) Both (B) and (C)
134. HCF of two numbers is 24 and LCM is 148. The product of two numbers is :
 (A) 24×148 (B) $12 \times 4 \times 74$
 (C) $37 \times 6 \times 8$ (D) Data inconsistent
135. What is the greatest number that will divide 38, 45 and 52 and leave remainders 2, 3 and 4 respectively ?
 (A) 7 (B) 6
 (C) 2 (D) 7.543
136. G is the centroid of an equilateral $\triangle ABC$. If $BC = 14 \text{ cm}$, then find the length of AG :
 (A) $14/3$ (B) $14\sqrt{3}$
 (C) $14/3\sqrt{3}$ (D) $7\sqrt{3}$
137. In a class, there are 30 boys whose average weight decreases by 200 g when a boy whose weight was 25 kg leaves the class and new one is admitted. Find the weight of the new boy :
 (A) 19 kg (B) 15 kg
 (C) 20 kg (D) 24 kg

Direction (Q. Nos. 138 to 140) : Read the following graph carefully and answer the questions that follow.

The production of food grains of a country in different years.



138. The sum of production of food grains in the years 1982 and 1984 is equal to that in the year :
 (A) 1980 (B) 1981
 (C) 1983 (D) 1985

139. The difference of the production of food grains for the year 1981 and 1985 is :
- (A) 500 tonne (B) 1,000 tonne
(C) 5,000 tonne (D) 10 tonne
140. The percentage increase in production from 1984 to 1985 was :
- (A) 65 (B) 100
(C) 130 (D) 150
141. The value of $nC_{n-1} + nC_{n-2}$ is :
- (A) $n/2$ (B) $n(n+1)/2$
(C) $n(n-1)/2$ (D) $(n+1)^2/2$
142. Simplify $(144^{-3/2})^{-1/6}$:
- (A) $2\sqrt{3}$ (B) 6
(C) $3\sqrt{2}$ (D) 4
143. In the following questions two equations numbered I and II are given. You have to solve both the equations and give answer :
- (I) $x^2 - 6x + 8 = 0$
(II) $3y^2 - 10y + 7 = 0$
- (A) If $x = y$ or the relationship cannot be established
(B) If $x > y$
(C) If $x < y$
(D) If $x \geq y$
144. Three pipes A, B and C are connected to a tank. A and B together can fill the tank in 12 hours, B and C together in 8 hrs and C and A together in 6 hrs. In how much time will each pipe fill the tank separately ?
- (A) 16 hrs, 24 hrs, $48/5$ hrs
(B) 16 hrs, 48 hrs, $48/5$ hrs
(C) 8 hrs, 48 hrs, $48/5$ hrs
(D) 16 hrs, 48 hrs, $44/5$ hrs
145. A card is drawn at random from a pack of 52 cards. What is the probability that it is neither a heart nor a king ?
- (A) $4/13$ (B) $9/13$
(C) $2/13$ (D) $3/13$

146. When Rahul was born, his father was 32 years older than his brother and his mother was 25 years older than his sister. If Rahul's brother is 6 years older than him and his mother is 6 years younger than his father, how old was Rahul's sister when he was born ?
- (A) 15 years (B) 10 years
(C) 19 years (D) 7 years
147. The difference between simple and compound interest compounded annually on a certain sum of money for 2 years at 4% per annum is Re 1. The sum (in Rs.) is :
- (A) 630 (B) 640
(C) 625 (D) 650
148. Find the cost price if, by selling goods for Rs. 279, a merchant loses 7 percent :
- (A) Rs. 600 (B) Rs. 300
(C) Rs. 543 (D) Rs. 320
149. If the radius of a circle is 14 cm, then find the difference between circumference and diameter of circle :
- (A) 30 cm (B) 20 cm
(C) 60 cm (D) 50 cm
150. Two taps A and B can fill a cistern in 16 min and 24 min respectively. How much after opening the both taps, the tap B should be turned off, so that the cistern may take 12 min to fill ?
- (A) 5 min (B) 10 min
(C) 6 min (D) 8 min

