

: INSTRUCTIONS TO CANDIDATES :

THIS BOOKLET CONTAINS 100 QUESTIONS OF 1 MARK EACH IN 23 PAGES.

PLEASE CHECK THE QUESTION-SET BEFORE USE. IF ANY DEFECTS ARE NOTICED, PLEASE BRING IT TO THE NOTICE OF THE INVIGILATOR.

1. Read the instructions carefully before using the OMR answer sheet provided.
2. Fill in Part – A of the OMR answer sheet first, mentioning the Roll No. and other data as applicable in the place(s) indicated therein and darken the appropriate circles in blue or black ball point pen only.
3. While darkening the circle in Part – B of the OMR answer sheet, use blue or black ball point pen only. No correction fluid, eraser or any correction in the OMR answer sheet will be acceptable.
4. Do not write any name/surname or put any symbol, sign, slogan, prayer or any mark of identification in Part – B of the OMR answer sheet. **Any such act is liable to render the answer sheet unfit for evaluation.**
5. Do not use any other form except the OMR answer sheet provided along with the question-set.
6. Do not tamper with the bar code or any other portion of the OMR answer sheet.
7. Candidates may use the blank sheet attached to these instructions for doing the rough work, if needed.
8. Do not attach any additional sheet or paper to the OMR answer sheet.
9. Return the OMR answer sheet **only** to the Invigilator before leaving the Examination Hall.
10. Candidates may take with them the respective question-sets after the examination is over.
11. Mobile Phone or any Communication Devices is not allowed inside the Examination Hall. The candidates are strictly advised **not to carry** any Mobile Phone or Communication Devices with them into the Examination Hall. Any candidate who is in **possession of Mobile Phone or Communication Devices** inside the Examination Hall is liable to be debarred from the valuation of his/her answer paper.
12. Violation of these instructions shall **entail disqualification of the candidate.**
13. There is negative marking of 0.25 mark for each wrong answer.

ACS(Prelim) – 2015 – Set – 1

GA

Time : $1\frac{1}{2}$ Hours

Full Marks : 100

Each question carries 1 mark.

There is negative marking of 0.25 mark for each wrong answer.

Answer **all** questions, choosing the correct **one** from the alternatives suggested and darken the appropriate circle using **BLUE or BLACK BALL POINT PEN**.

1. Which of the following is not due to surface tension ?
 - (1) Icebergs floating on sea water
 - (2) Tears of wine forming on the glass
 - (3) Water beading on a leaf
 - (4) Water dripping from a tap
 - (5) Water striders stay atop the liquid
2. Which is used to increase or decrease voltage of alternating current in electric power applications ?
 - (1) Amplifier
 - (2) Capacitor
 - (3) Circuit breaker
 - (4) Conductor
 - (5) Transformer
3. What is meant by 'Torque' ?
 - (1) The change in velocity per unit time
 - (2) The rate at which certain work is done
 - (3) The resistance to change in state of motion
 - (4) The change in position of an object with respect to time
 - (5) The twisting force that tends to cause rotation
4. What is the approximate velocity of light (in vacuum) in centimeters per second ?
 - (1) 3×10^6
 - (2) 3×10^8
 - (3) 3×10^{10}
 - (4) 3×10^{12}
 - (5) 3×10^{14}

5. Which of the following pairs of rays is electromagnetic in nature ?

- (1) Alpha rays and Beta rays
- (2) Alpha rays and Gamma rays
- (3) Beta rays and Gamma rays
- (4) Cathode rays and X-rays
- (5) Gamma rays and X-rays

6. Which is the unit of electric conductance, electric susceptance and electric admittance ?

- (1) Coulomb
- (2) Joule
- (3) Henry
- (4) Hertz
- (5) Siemens

7. Which of the following is not a metalloid ?

- (1) Antimony
- (2) Arsenic
- (3) Bismuth
- (4) Boron
- (5) Silicon

8. Match the substances in Column – A with their uses in Column – B and find the correct answer set :

- | Column – A | Column – B |
|-------------------------|------------------------|
| (A) Graphite | (i) Dry Cell |
| (B) Magnesium Sulphate | (ii) Photography |
| (C) Sodium thiosulphate | (iii) Purgative |
| (D) Zeolite | (iv) Safety matches |
| | (v) Water purification |

	(A)	(B)	(C)	(D)
1	i	iii	ii	iv
2	i	iii	iv	v
3	i	iv	ii	v
4	iv	iii	ii	v
5	i	iii	ii	v

9. Which of the following acids is an important component of tamarind ?

- (1) Ascorbic acid
- (2) Carboxylic acid
- (3) Citric acid
- (4) Oxalic acid
- (5) Tartaric acid

10. What is responsible for tears to come out of the eyes while cutting onions ?

- (1) Presence of amino acid in the cell
- (2) Presence of carbon in the cell
- (3) Presence of fat in the cell
- (4) Presence of starch in the cell
- (5) Presence of sulfur in the cell

11. Which of the following is used as a 'rat poison' ?
- (1) Zinc chloride
 - (2) Zinc cyanide
 - (3) Zinc nitrate
 - (4) Zinc phosphide
 - (5) Zinc sulfide
12. Why is glycol added to aviation gasoline ?
- (1) To increase efficiency of petrol
 - (2) To maintain liquid state of petrol
 - (3) To prevent freezing of petrol
 - (4) To reduce consumption of petrol
 - (5) To reduce evaporation of petrol
13. From which oil is the extra mild soap, often known as the 'Castile soap', manufactured ?
- (1) Coconut oil
 - (2) Laurel oil
 - (3) Olive oil
 - (4) Sal seed oil
 - (5) Palm kernel oil
14. To which of the following structures in the human body is the appendix attached ?
- (1) Caecum
 - (2) Colon
 - (3) Gall bladder
 - (4) Ileum
 - (5) Stomach
15. Which of the following glands in the human body coexists with "Adam's Apple" ?
- (1) Adrenal
 - (2) Pineal
 - (3) Pituitary
 - (4) Thymus
 - (5) Thyroid
16. To diagnose which disease is the BMD test carried out ?
- (1) Asthma
 - (2) Diabetes
 - (3) Hepatitis
 - (4) Malaria
 - (5) Osteoporosis

17. By which of the following techniques can a large number of identical plants be obtained within a short span of time ?
- (1) Hydroponics method
 - (2) Plantation of stem cuttings
 - (3) Recombinant DNA technique
 - (4) Showing large number of seeds of single plant
 - (5) Tissue culture technique
18. Which of the following bacteria play key roles in carbon and nitrogen cycles of biosphere ?
- (1) Acidobacteria
 - (2) Actinobacteria
 - (3) Cyanobacteria
 - (4) Fusobacteria
 - (5) Proteobacteria
19. With which of the following movements to promote biodiversity conservation is the environmental activist, Vandana Shiva associated ?
- (1) Appiko Movement
 - (2) Chipko Movement
 - (3) Jungle Bachao Andolan
 - (4) Navdanya Movement
 - (5) Save Silent Valley Movement
20. Following are the pairs of research institutes under the Indian Council of Forestry Research and Education (ICFRE) and their locations. Identify the incorrect pair :
- (1) Himalayan Forest Research Institute (HFRI) — Shimla
 - (2) Institute of Forest Bio-diversity (IFB) — Ranchi
 - (3) Institute of Forest Genetics and Tree Breeding (IFGTB) — Coimbatore
 - (4) Rain Forest Research Institute (RFRI) — Jorhat
 - (5) Tropical Forest Research Institute (TFRI) — Jabalpur
21. What is "Recycle Bin" in the MS Windows environment ?
- (1) The folder in which deleted files are stored
 - (2) The folder in which obsolete files are stored
 - (3) The folder in which program files are stored
 - (4) The folder in which security files are stored
 - (5) The folder in which temporary files are stored

22. Which of the following is not an 'Internet search engine' but a 'Web Browser' ?
- (1) Amazon
 - (2) Bing
 - (3) Google
 - (4) Mozilla Firefox
 - (5) Yahoo
23. Which is the file that has been recorded in the disc at the time of manufacture and cannot be erased or changed by the user ?
- (1) Memory-only
 - (2) Once-only
 - (3) Read-only
 - (4) Run-only
 - (5) Write-only
24. Which of the following is not present within the drop-down menu, when the icon 'AutoSum' is clicked in an Excel worksheet ?
- (1) Average
 - (2) Max
 - (3) Mid
 - (4) Min
 - (5) Sum
25. What happens when the 'Ctrl+= ' key is used in the Microsoft Word Program ?
- (1) It creates a subscript
 - (2) It creates superscript
 - (3) It decreases the font size
 - (4) It increases the font size
 - (5) It strikes through the text
26. Which of the following solar photovoltaic plants in India has become operational in June, 2015 ?
- (1) ACME Solar Project
 - (2) Azure Solar Project
 - (3) Charanka Solar Park
 - (4) Sakri Solar Plant
 - (5) Wellspun Solar MP Project
27. Who has won the Wimbledon Tennis Men's title in the recently concluded tournament in July, 2015 ?
- (1) Dustin Brown
 - (2) Novak Djokovic
 - (3) Rafael Nadal
 - (4) Roger Federer
 - (5) Stan Wawrinka

28. Which Indian artist has been conferred with the highest French civilian honour, "Commandeur de la Legion d' Honneur" in July, 2015 ?
- (1) Manjit Bawa
 - (2) Maya Burman
 - (3) Prafulla Dahanukar
 - (4) Syed Haider Raza
 - (5) Wajid Khan
29. The Legislative Assembly of which state has passed the "Guarantee of Public Services Bill, 2015" on 14th July, 2015 ?
- (1) Gujarat
 - (2) Karnataka
 - (3) Madhya Pradesh
 - (4) Maharashtra
 - (5) Tamil Nadu
30. In which month of 2015 was the official 'Wholesale Price Index' in India the lowest among the months as per the latest Ministry of Commerce and Industry report ?
- (1) February
 - (2) March
 - (3) April
 - (4) May
 - (5) June
31. Which missile system has been inducted into Indian Air Force on 10th July, 2015 ?
- (1) Agni III
 - (2) Akash
 - (3) BrahMos
 - (4) Dhanush
 - (5) Nirbhay
32. In which country is the "New Development Bank" that was formed on 15th July, 2015 by the BRICS nations has its headquarters ?
- (1) Brazil
 - (2) China
 - (3) India
 - (4) Russia
 - (5) South Africa
33. Which is the tallest of the architectural structures in the world ?
- (1) Abraj Al Bait
 - (2) Burj Khalifa
 - (3) Tokyo Skytree
 - (4) Petronas Tower
 - (5) Willis Tower

34. For which of the following books has Sri Viswanath Tripathy been selected to receive the 28th Mootidevi Award for the year 2014 ?
- (1) Deshke Is Daur Main
 - (2) Nagatlai Ka Gaon
 - (3) Jaisa Kaha Saka
 - (4) Ped Ka Hath
 - (5) Vyomkesh Darvesh
35. Which of the following districts in Odisha does not come under "Very Highly Prone" category to Tropical Cyclones as per the latest India Meteorological Department release in July, 2015 ?
- (1) Balasore
 - (2) Bhadrak
 - (3) Ganjam
 - (4) Jagatsinghpur
 - (5) Kendrapada
36. The veteran film personality from South India, M. S. Swaminathan has passed away off late on 14th July, 2015. What was he ?
- (1) A Film Actor
 - (2) A Film Director
 - (3) A Music Director
 - (4) A Playback Singer
 - (5) A Poet and Lyricist
37. Which of the following statements about the newly formed NITI Aayog is not correct ?
- (1) It is an advisory body, or a think-tank
 - (2) It has no power to allocate funds
 - (3) It has no power to impose policies
 - (4) It has a Deputy Chairperson and a Member Secretary
 - (5) Its Governing Council has Chief Ministers and Lt. Governors as members
38. Which "Bhog" of Lord Jagannath is not offered near the 'Ratnabedi' ?
- (1) Bada Simhara Bhoga
 - (2) Gopal Vallabh Bhoga
 - (3) Madhyanha Dhupa
 - (4) Sakala Dhupa
 - (5) Sandhya Dhupa
39. Who is the author of the book "India Shastra", released in 2015 ?
- (1) Amitabh Ghosh
 - (2) Anu Agrawal
 - (3) Madhuri Banerjee
 - (4) Navoneel Chakraborty
 - (5) Shashi Tharoor

40. Who has translated most of the poems of T. S. Eliot into Odia ?
- (1) Guruprasad Mohanty
 - (2) Gyanendra Verma
 - (3) Ramakanta Rath
 - (4) Mayadhara Mansingh
 - (5) Sachi Routray
41. To which of the following classical dance forms does the famous dancer Krishnakshi Kashyap belong ?
- (1) Kathak
 - (2) Kuchipudi
 - (3) Manipuri
 - (4) Mohiniyattam
 - (5) Sattriya
42. Which ship-building factory in India is equipped to build ships of more than 1,00,000 DWT size ?
- (1) Cochin Shipyard Ltd.
 - (2) Goa Shipyard Ltd.
 - (3) Hindustan Shipyard Ltd.
 - (4) Hooghly Dock and Port Engineers Ltd.
 - (5) Mazgaon Dock Shipbuilders Ltd.
43. Which of the following is not a characteristic of Palaeolithic Age in India ?
- (1) Man learned to live a settled life during this period
 - (2) Man used to lead his life in groups to ensure safety from wild animals
 - (3) Most of the tools of this period were made of stone
 - (4) People of this period mostly lived in rock shelters or thatched roof huts
 - (5) The Homo sapiens or the modern man emerged in this age
44. Which of the following Jain 'Tirthankaras' was a female as believed by the Svetambara Jains ?
- (1) Mallinatha
 - (2) Naminatha
 - (3) Neminatha
 - (4) Shantinatha
 - (5) Sumatinatha
45. Which war was fought between Nadir Shah and the Moghul ruler Muhammad Shah ?
- (1) Battle of Chandawar
 - (2) Battle of Chanderi
 - (3) Battle of Ghagra
 - (4) Battle of Karnal
 - (5) Battle of Khanwa

46. Which of the following is an ancient Indian treatise on statecraft, economic policy and military strategy ?
- (1) Arthashastra
 - (2) Atharvaveda
 - (3) Mahabharata
 - (4) Manusmriti
 - (5) Rajatarangini
47. Which of the following dynasties of South India was founded by Mayurasharma ?
- (1) Chera
 - (2) Chola
 - (3) Kadamba
 - (4) Pallava
 - (5) Pandya
48. Which fort was the capital of the Maratha King Chhatrapati Shivaji, where he was crowned in 1674 ?
- (1) Pratapgad Fort
 - (2) Purandhar Fort
 - (3) Raigad Fort
 - (4) Sindhudurg Fort
 - (5) Sivneri Fort
49. Which of the Europeans were the first to establish their colony in India ?
- (1) Danish
 - (2) Dutch
 - (3) English
 - (4) French
 - (5) Portuguese
50. Which of the following Acts in the British India is better known as the Pitt's India Act ?
- (1) East India Company Act of 1772
 - (2) East India Company Act of 1784
 - (3) East India Company Act of 1793
 - (4) East India Company Act of 1813
 - (5) Regulating Act of 1773
51. Tilka Manjhi led the first ever tribal revolt against the local landlords and British Government in 1771. To which tribal community did he belong ?
- (1) Bhumij
 - (2) Chero
 - (3) Munda
 - (4) Oraon
 - (5) Santhal

52. Who among the following revolutionaries from Ghens Zamindar family in western Odisha was deported to Andaman Cellular Jail for a life imprisonment ?

- (1) Bairi Singh
- (2) Hate Singh
- (3) Kunjel Singh
- (4) Madho Singh
- (5) Narayan Singh

53. Which freedom fighter had written the book on the Indian rebellion of 1857 titled "The History of the War of Indian Independence" ?

- (1) M. P. Tirumal Acharya
- (2) Madame Bhikaji Cama
- (3) Subramanya Bharathi
- (4) V. V. Subramaniam Aiyar
- (5) Vinayak Damodar Savarkar

54. Match the names of revolutionaries in Column – A with the associated revolutionary activity in Column – B and find the correct answer set :

Column – A **Column – B**

- | | | |
|---------------------|------|------------|
| (A) Aurobindo Ghosh | (i) | Alipur |
| | | Bombing |
| (B) Bhagat Singh | (ii) | Chittagong |
| | | Arms Raid |

Column – A **Column – B**

- | | | |
|--------------------|-------|------------|
| (C) Muzaffar Ahmad | (iii) | Kakori |
| | | Conspiracy |
| (D) Ram Prasad | (iv) | Lahore |
| Bismil | | Conspiracy |
| | (v) | Meerut |
| | | Conspiracy |

	(A)	(B)	(C)	(D)
1	i	iv	ii	iii
2	i	iv	v	ii
3	i	v	ii	iii
4	i	iv	v	iii
5	v	iv	ii	iii

55. Which of the following pairs of ethnic people and their geographical territory is incorrectly matched ?

- (1) Bedouins – Central Asian Desert
- (2) Maasais – African Great Lakes Area
- (3) Samoyeds – Tundra Region
- (4) Semangs – Malaysian Plateau
- (5) Pygmies – Congo Basin

56. Through which of the following states of India the standard meridian of India does not pass through ?

- (1) Andhra Pradesh
- (2) Chhattisgarh
- (3) Jharkhand
- (4) Madhya Pradesh
- (5) Odisha

57. With which of the following states in India does Bangladesh share the longest part of its International boundary ?
- (1) Assam
 - (2) Meghalaya
 - (3) Tripura
 - (4) Mizoram
 - (5) West Bengal
58. Where do the Vindhya Range and the Maikal Hills meet ?
- (1) Amarkantak
 - (2) Champaner
 - (3) Kaimur
 - (4) Rewa
 - (5) Panna
59. Which of the following streams does not belong to the Mahanadi drainage system ?
- (1) The Bhargabi
 - (2) The Daya
 - (3) The Kuakhai
 - (4) The Kushabhadra
 - (5) The Salia
60. Which one of the following pairs of lakes and associated areas is not correctly matched ?
- (1) The Suraj Tal — Lahaul and Spiti Valley
 - (2) The Pangong Tso — Ladakh Plateau
 - (3) The Tso Moriri — Eastern Himalayas
 - (4) The Wular — Kashmir Valley
 - (5) The Bhimtal — Kumaon Himalayas
61. Which of the following west flowing rivers in India does not drain into the Gulf of Khambat ?
- (1) The Mahe
 - (2) The Mandovi
 - (3) The Narmada
 - (4) The Sabarmati
 - (5) The Tapti
62. In which state of India is the yield rate of sugarcane the highest ?
- (1) Haryana
 - (2) Karnataka
 - (3) Maharashtra
 - (4) Tamil Nadu
 - (5) Uttar Pradesh

63. Which of the following stretches is not common between the "North-South-East-West Corridors" and the "Golden Quadrilateral" highways in India ?

- (1) Akbarpur — Kanpur
- (2) Bengaluru — Krishnagiri
- (3) Delhi — Agra
- (4) Kochi — Salem
- (5) Udaipur — Chittorgarh

64. Match the minerals in Column – A with the corresponding mines in Column – B and find the correct answer set :

Column – A

Column – B

- | | |
|--------------|--------------------|
| (A) Bauxite | (i) Bailadila |
| (B) Copper | (ii) Khetri |
| (C) Gold | (iii) Kodarma |
| (D) Iron Ore | (iv) Kolar |
| (E) Mica | (v) Neyveli |
| | (vi) Panchapatmali |

	(A)	(B)	(C)	(D)	(E)
1	vi	v	iv	i	iii
2	vi	ii	iv	i	iii
3	v	ii	iv	i	iii
4	vi	ii	v	i	iii
5	vi	ii	iv	v	i

65. Which hydel project in Odisha has the highest hydro-power generating capacity ?

- (1) Balimela
- (2) Hirakud
- (3) Rengali
- (4) Upper Kolab
- (5) Upper Indravati

66. On which island is the "Salim Ali Bird Sanctuary" located ?

- (1) Chorao
- (2) Divar
- (3) Kawayi
- (4) Munroe
- (5) Vashee

67. Which Article of the Indian Constitution prescribes that all proceedings in the Supreme Court shall be in English language ?

- (1) Article 343
- (2) Article 345
- (3) Article 348
- (4) Article 349
- (5) Article 350

68. The dominant thrust of which constitutional amendment in India was to reduce the role of the courts ?
- (1) 41st
 - (2) 42nd
 - (3) 43rd
 - (4) 44th
 - (5) 45th
69. Who among the following was elected unopposed to the post of President of India ?
- (1) A. P. J. Abdul Kalam
 - (2) Fakhruddin Ali Ahmad
 - (3) Neelam Sanjiva Reddy
 - (4) Sarvepalli Radhakrishnan
 - (5) Zakir Hussain
70. Which one of the following is largest of the Lok Sabha constituencies (area-wise) in India ?
- (1) Arunachal East
 - (2) Barmer
 - (3) Kachchh
 - (4) Kangra
 - (5) Ladakh
71. Which of the following posts in India is merely statutory but not constitutional ?
- (1) Attorney General of India
 - (2) Chairman of National Green Tribunal
 - (3) Chairman of Union Public Service Commission
 - (4) Comptroller and Auditor General of India
 - (5) Solicitor General of India
72. T. H. Green was the exponent of :
- (1) Historical theory of rights
 - (2) Idealistic theory of rights
 - (3) Legal theory of rights
 - (4) Social welfare theory of rights
 - (5) Theory of natural rights
73. Which of the following does the 'Pradhan Mantri Gramodaya Yojana' aim at ?
- (1) Alleviating poverty through micro-enterprise
 - (2) Ensuring employment guarantee to rural people
 - (3) Generating employment in the rural areas
 - (4) Meeting rural needs like rural roads, primary education, housing, drinking water and health care etc.
 - (5) Strengthening the Panchayati Raj System in rural areas

74. What does 'Fiscal Deficit' mean in the Union Budget ?
- (1) Budgetary deficit plus the net borrowings of the Government
 - (2) Net increase in Union Government's borrowings from the Reserve Bank of India
 - (3) Primary deficit minus capital deficit
 - (4) The difference between current expenditure and current revenue
 - (5) The sum of monetised deficit and budgetary deficit
75. Which of the following industries in India were worst affected because of the partition in 1947 ?
- (1) Cement and Engineering
 - (2) Cement and Paper
 - (3) Cotton and Jute
 - (4) Cotton and Sugar
 - (5) Iron and Paper
76. Which of the following does not happen in the event of price-rise ?
- (1) Adverse effect on balance of payments
 - (2) Adverse effect on the economic conditions of fixed-income groups
 - (3) Adverse effect on speculation
 - (4) Generation of black money
 - (5) Debtors benefit at the expense of creditors
77. From which of the following sources is the collection of Central Revenue the highest in India ?
- (1) Corporate tax
 - (2) Customs duty
 - (3) Excise duty
 - (4) Other taxes
 - (5) Personal income tax
78. Which of the following statements about 'Stamp Duties' is correct ?
- (1) Levied and collected by the Central Government
 - (2) Levied by Central Government but collected and appropriated by the State Governments
 - (3) Levied and collected by the Central Government but shared with the State Governments
 - (4) Levied and collected by the Local Bodies
 - (5) Levied and collected by the State Governments

79. Which one among the following states in India characterises with the highest gender disparity as per 2011 Census ?

- (1) Bihar
- (2) Gujarat
- (3) Haryana
- (4) Punjab
- (5) Uttar Pradesh

80. Find the missing number in the following series :

4, 10, _____, 82, 244, 730.

- (1) 24
- (2) 28
- (3) 77
- (4) 162
- (5) 218

81. The calendar for which of the following years shall be same as the current year, 2015 ?

- (1) 2024
- (2) 2025
- (3) 2026
- (4) 2027
- (5) 2028

82. What is the angle between the hour hand and the minute hand of a clock at 40 minutes past 3 O'clock ?

- (1) 120°
- (2) 125°
- (3) 130°
- (4) 135°
- (5) 140°

83. Six friends — P, Q, R, S, T and U are sitting around a hexagonal table looking at the centre of the table. P is second to the left of U. Q is the neighbour of R and S. T is second to the left of S.

Which of the following statements is incorrect ?

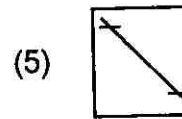
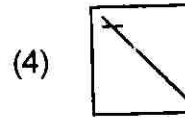
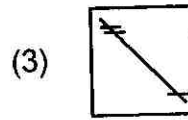
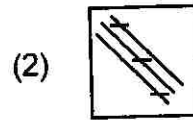
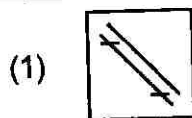
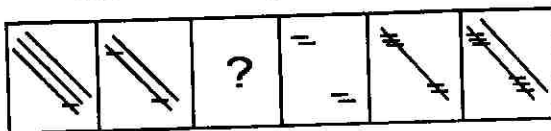
- (1) P is the fourth person to the left of Q
- (2) Q and S are neighbourers of U
- (3) Q is sitting opposite to T
- (4) S is sitting opposite to P
- (5) T and R are neighbourers of P

84. Six players — Anand, Deba, Kartik, Nirmal, Pramod and Shankar are standing in a playground, all facing South. Study the following facts and find the person standing to the South-West of the person left of Kartik :

- (a) Kartik is at a distance of 40 meters to the right of Anand
- (b) Deba is at a distance of 60 meters to the North of Kartik and 40 meters to the East of Shankar
- (c) Nirmal is at a distance of 25 meters to the left of Anand
- (d) Pramod is at a distance of 90 meters to the South of Deba

- (1) Anand
- (2) Deba
- (3) Nirmal
- (4) Pramod
- (5) Shankar

85. Which figure shall replace the '?' in the series of figures given below ?



86. Looking at the portrait of a man, Madhab said, "His mother is the wife of my father's son. Brothers and sisters I have none". At whose portrait was Madhab looking ?

- (1) His brother-in-law
- (2) His cousin
- (3) His nephew
- (4) His son
- (5) His uncle

87. In a coded language the word 'TAMILNADU' is written as ALDALDALD. How will the word 'TELENGANA' be written in the same language ?

- (1) ENEENEENE
- (2) ENNENNENN
- (3) LGALGALGA
- (4) TEATEATEA
- (5) TETEATEAT

88. If n is a natural number, then $n(n + 1)(n + 2)$ is always divisible by :
- (1) 5
 (2) 6
 (3) 7
 (4) 8
 (5) 9
89. Find the value of the following term when $a + b = c$:
- $$\{(a + 8)^2 + (b + 8)^2 + (c - 8)^2\} - (a^2 + b^2 + c^2).$$
- (1) 176
 (2) 184
 (3) 188
 (4) 192
 (5) 200
90. A college has admitted 40% additional number of students during the current year than the previous year. Due to government stipulation, girls have been exempted from fees this year, and hence the college has enhanced the fees of the boys by 25% to equalise the total fee collection with last year. What is the ratio of boys and girls this year ?
- (1) 2 : 1
 (2) 3 : 1
- (3) 3 : 2
 (4) 3 : 4
 (5) 4 : 3
91. A dealer allows 16% discount to the retailer on the printed price of an electrical appliance and still makes a profit of 5%. The retailer sales the same to the customer for Rs. 540 at a discount of 10% on printed price. What is the cost price of the appliance for the dealer ?
- (1) 479
 (2) 480
 (3) 490
 (4) 504
 (5) 510
92. Given the value of $x = 0.2163$, choose the correct value of the following equation from the given options :
- $$3x + \sqrt{4x^2 - 4x + 1}$$
- (1) 0.2163
 (2) 0.4326
 (3) 1.0815
 (4) 1.2163
 (5) 1.4326

93. An amount of Rs. 2,720 is divided among Bijaya, Naba and Deba such that Bijaya gets $\frac{2}{3}$ of what Naba gets, while Naba gets $\frac{1}{4}$ of what Deba gets. How much does Naba get ?

- (1) Rs. 160
- (2) Rs. 320
- (3) Rs. 480
- (4) Rs. 800
- (5) Rs. 1,920

94. The length and breadth of a rectangular park are in the ratio of 3 : 2. If a cyclist moving with a speed of 12 km/hour along the perimeter of the park completes a round in 8 minutes, then find the area of the park in m^2 :

- (1) 112800
- (2) 142000
- (3) 142500
- (4) 153600
- (5) 162400

95. There are two sections, A and B, of a class. If 15 pupils will be sent from Section A to Section B, then the number in both the sections will be equal. If 20 pupils will be sent from

Section B to Section A, the number in Section A will become double of that of Section B. What is the actual strength of Section A ?

- (1) 80
- (2) 90
- (3) 100
- (4) 120
- (5) 140

Direction (Q. Nos. 96 to 100) : Answer the following questions using the data given in the table below.

Number of units (in Crores) sold by six different companies over the years : 2008-2013.

Company \ Year	2008	2009	2010	2011	2012	2013
M	26.51	28.48	36.60	38.02	80.00	107.02
N	27.53	32.80	31.38	43.01	76.00	175.13
O	19.02	43.70	40.12	45.22	66.49	156.61
P	25.11	56.60	25.00	35.14	78.24	112.44
Q	22.54	53.20	37.00	48.93	95.10	111.83
R	17.03	31.04	30.00	42.24	72.17	192.01

96. In which year is the percentage increase / decrease in the number of units sold from the previous year for company Q the lowest ?

- (1) 2009
- (2) 2010
- (3) 2011
- (4) 2012
- (5) 2013

97. What is the percentage of the number of units sold by company M in the year 2012 to the total number of units sold by all the companies together in that year ?
- (1) 14.21
 - (2) 16.24
 - (3) 16.71
 - (4) 17.09
 - (5) 20.32
98. Which company has sold the maximum number of units over the six years ?
- (1) M
 - (2) N
 - (3) O
 - (4) Q
 - (5) R
99. Which year has been a year of retardation in sales of most of the companies ?
- (1) 2009
 - (2) 2010
 - (3) 2011
 - (4) 2012
 - (5) 2013
100. Which company does show a continued growth in its sales over the years ?
- (1) M
 - (2) N
 - (3) O
 - (4) P
 - (5) R

