

OPENMAT – XLII
Entrance Test for Management Programmes 2017
September, 2017

Total No. of Questions : 200

Time : 180 Minutes

- All questions are **compulsory**.
- Use of calculator is **not** allowed. Rough work may be done in the space provided at the end of the Test Booklet.
- The Test Booklet has the following **four** tests :

Test – I General Awareness

No. of Questions 30

Test – II English Language

No. of Questions 50

Test – III Quantitative Aptitude

No. of Questions 50

Test – IV Reasoning

No. of Questions 70

Read the instructions given on the OMR Response Sheet carefully before you start.

**How to fill up the information on the OMR Response Sheet
(Examination Answer Sheet)**

1. Write your complete Enrolment No. in 9 digits. This should correspond to the enrolment number indicated by you on the OMR Response Sheet. Also write your correct name, address with pin code in the space provided. Put your signatures on the OMR Response Sheet with date. Ensure that the Invigilator in your examination hall also puts his signatures with date on the OMR Response Sheet at the space provided.
2. On the OMR Response Sheet student's particulars are to be filled in by pen. However use HB pencil for writing the Enrolment No. and Examination Centre Code as well as for blackening the circle bearing the correct answer number against the serial number of the question.
3. Do not make any stray remarks on this sheet.
4. Write correct information in numerical digits in Enrolment No. and Examination Centre Code Columns. The corresponding circle should be dark enough and should be filled in completely.
5. Each question is followed by four probable answers which are numbered 1, 2, 3 & 4. You should select and show only one answer to each question considered by you as the most appropriate or the correct answer. Select the most appropriate answer. Then by using HB pencil, blacken the circle bearing the correct answer number against the serial number of the question. If you find that answer to any question is none of the four alternatives given under the question, you should darken the circle with '0'.
6. If you wish to change your answer, ERASE completely the already darkened circle by using a good quality eraser and then blacken the circle bearing your revised answer number. If incorrect answer is not erased completely, smudges will be left on the erased circle and the question will be read as having two answers and will be ignored for giving any credit.
7. No credit will be given if more than one answer is given for one question. Therefore, you should select the most appropriate answer.
8. You should not spend too much time on any one question. If you find any particular question difficult, leave it and go to the next. If you have time left after answering all the questions, you may go back to the unanswered ones. There is no negative marking for wrong answers.

GENERAL INSTRUCTIONS

1. No cell phones, calculators, books, slide-rules, notebooks or written notes, etc. will be allowed inside the examination hall.
2. You should follow the instructions given by the Centre Superintendent and by the Invigilator at the examination venue. If you violate the instructions, you will be disqualified.
3. Any candidate found copying or receiving or giving assistance in the examination will be disqualified.
4. The Test Booklet and the OMR Response Sheet (Answer Sheet) would be supplied to you by the Invigilators. After the examination is over, you should hand over the OMR Response Sheet to the Invigilator before leaving the examination hall. Any candidate who does not return the OMR Response Sheet will be disqualified and the University may take further action against him/her.
5. All rough work is to be done on the test booklet itself and not on any other paper. Scrap paper is not permitted. For arriving at answers you may work in the margins, make some markings or underline in the test booklet itself.
6. The University reserves the right to cancel scores of any candidate who impersonates or uses/adopts other malpractices or uses any unfair means. The examination is conducted under uniform conditions. The University would also follow a procedure to verify the validity of scores of all examinees uniformly. If there is substantial indication that your performance is not genuine, the University may cancel your score.
7. In the event of your qualifying the Entrance Test, the hall ticket should be enclosed with your admission form while submitting it to the University for seeking admission in Management Programmes along with your testimonials and programme fee. Admission forms received without hall ticket in original will be summarily rejected.

TEST I
GENERAL AWARENESS

1. At which of the following places do both Alaknanda and Bhagirathi rivers unite ?
 - (1) Haridwar
 - (2) Devprayag
 - (3) Dehradun
 - (4) Rudraprayag

2. Which of the following particles are constituents of the nucleus ?
 - (1) Protons and Electrons
 - (2) Neutrons and Electrons
 - (3) Protons and Neutrons
 - (4) Neutrons and Positrons

3. Animals devoid of respiratory, excretory and circulatory organs are
 - (1) Tapeworms
 - (2) Sponges
 - (3) Threadworms
 - (4) Liver fluke

4. The specific function of light energy in the process of photosynthesis is to
 - (1) Activate chlorophyll
 - (2) Split water
 - (3) Reduce carbon dioxide
 - (4) Synthesize glucose

5. Which of the following items is *not* included in the Current Account of India's Balance of Payments ?
 - (1) Non-monetary gold movements
 - (2) Short-term commercial borrowings
 - (3) Investment income
 - (4) Transfer payments

6. The "*Adi Granth*" was compiled by
 - (1) Guru Ram Das
 - (2) Guru Tegh Bahadur
 - (3) Guru Arjan Dev
 - (4) Guru Amar Das

7. Among the following persons, who does **not** belong to the class of the other three ?
- (1) Amir Khusrau (2) Nizamuddin Auliya
(3) Bakhtiyar Kaki (4) Fariduddin Ganjshakar
8. Who of the following was **not** a member of the Drafting Committee of the Constitution of India ?
- (1) K.M. Munshi (2) Alladi Krishnaswami Iyer
(3) N. Gopalaswami Ayyangar (4) Sardar Patel
9. If the Speaker of the Lok Sabha wants to resign, she/he is required to send her/his resignation letter to the
- (1) President of India (2) Prime Minister
(3) Deputy Speaker (4) Minister for Parliamentary Affairs
10. The power to increase the number of Judges in the Supreme Court of India is vested with the
- (1) President of India (2) Parliament
(3) Chief Justice of India (4) Law Commission
11. The latitudes that pass through Sikkim also pass through
- (1) Rajasthan (2) Punjab
(3) Haryana (4) Madhya Pradesh
12. Kimberley is famous for
- (1) Silver mines (2) Gold mines
(3) Manganese mines (4) Diamond mines
13. 'Mahabhasya', the most outstanding work in the field of grammar was written by
- (1) Panini (2) Patanjali
(3) Sarvavarman (4) Asvaghosha
14. Bardoli Satyagraha was launched against
- (1) Unjustified hike in land revenue by the authorities
(2) Oppression of thekedars in charge of revenue collection
(3) Refusal to grant remission in land revenue by the authorities despite a drought
(4) The systems of summary evictions and renewal fees

15. What is the purpose of the 'Sahaj' scheme launched by the Government of India ?
- (1) Online booking of Rail Tickets
 - (2) Online filing of Income Tax returns
 - (3) Online booking of LPG cylinders
 - (4) Online grievance redressal
16. Who of the following can become a part of the National Pension Scheme (NPS) ?
- (1) Central Government employees
 - (2) State Government employees
 - (3) Employees of private organisations
 - (4) All of the above
17. Which of the following States of India was declared as the First Organic State of India ?
- | | |
|-----------------|------------|
| (1) Uttarakhand | (2) Kerala |
| (3) Mizoram | (4) Sikkim |
18. With which of the following regions did the Harappans have trade contacts ?
- | | |
|------------------|------------------|
| (1) Mesopotamia | (2) Central Asia |
| (3) Persian Gulf | (4) Afghanistan |
19. The continent with the highest number of countries is
- | | |
|------------|-------------------|
| (1) Asia | (2) Africa |
| (3) Europe | (4) North America |
20. The Speaker of the first Lok Sabha was
- | | |
|---------------------|-----------------------------|
| (1) G.V. Mavalankar | (2) Ananthasayanam Ayyangar |
| (3) Baliram Bhagat | (4) Dr. S. Radhakrishnan |
21. Which country won the SAFF Women's Football Championship, 2016 ?
- | | |
|--------------|----------------|
| (1) Pakistan | (2) India |
| (3) Nepal | (4) Bangladesh |
22. 'Good Governance Day' is observed on
- | | |
|-------------------------------|-----------------------------|
| (1) 1 st May | (2) 6 th July |
| (3) 25 th December | (4) 14 th August |

23. Which of the following is an OPEC country ?
- (1) Russia (2) China
(3) Brazil (4) Nigeria
24. Which of the following parliamentary constituencies has become India's first to have Health Insurance for All ?
- (1) Vijayawada (2) Warangal
(3) Ahmedabad (4) Aurangabad
25. Who is the author of the book "*Beyond the Last Blue Mountain : A Life of J.R.D. Tata* ?
- (1) R.M. Lala (2) Gita Subramanyam
(3) C.S. Lakshmi (4) Elena Ferrante
26. Which one of the following won the Golden Peacock Award for Corporate Governance, 2016 ?
- (1) GAIL (India) Ltd. (2) Food Corporation of India
(3) Bharat Heavy Electricals Ltd. (4) Steel Authority of India Ltd.
27. 'Farm Tourism' scheme has been started by which of the following States ?
- (1) Rajasthan (2) Punjab
(3) Haryana (4) Kerala
28. The winner of the Nobel Prize in Literature, 2016 is
- (1) Patrick Modiano (2) Bob Dylan
(3) William Faulkner (4) John Steinbeck
29. Who was appointed as the 9th Secretary General of the United Nations ?
- (1) Anibal Silva (2) Antonio Vitali
(3) António Guterres (4) Matthew Rycroft
30. The first Municipal Corporation to be set up in India was
- (1) Delhi Municipal Corporation
(2) Madras Municipal Corporation
(3) Bombay Municipal Corporation
(4) Calcutta Municipal Corporation

TEST II
ENGLISH LANGUAGE

Directions for questions number 31 to 45 : The section consists of two passages followed by questions based on the contents of the passage. Answer the questions following each passage on the basis of what is stated or implied in the passage.

Passage I

Which animal tills, 'purifies' and fertilizes the enormous masses of soil for us, and rejuvenates our agricultural lands after incessant use has sapped their productivity ? This animal has no limbs, no teeth, no backbone. It is but a tiny loathsome creature, often used as a symbol for spinelessness. This creature is the earthworm that works so silently and unobtrusively at our feet that we have taken very long to realize its real worth and bestow over it the attention it deserves.

While we are scaling the heavens with the miracles of modern technology — the satellites and the spacelabs, we have also been compelled to look right under our feet for the super 'tractor' which is capable of conserving and activating our earth as naturally and as safely as no other device is able to do. Scientists the world over are now busy harnessing the natural abilities of the earthworm in reviving the agricultural fields and cleansing the ever-increasing loads of waste that are piled over the earth every day.

Earthworms devour soil. As the soil passes through the worm's guts, it gets naturally processed by the enzymes and micro-organisms present in the guts. The resulting castings, which may loosely be called 'digested soil', are richer in utilizable nutrients, enzymes and microflora. It has been shown that earthworm castings contain up to twice as much available nitrogen, seven times as much available phosphorus, and eleven times as much available potassium as the surrounding soil. Bacterial growth is also greatly stimulated which helps in the creation of soil - supporting humus. Most important, in this process, the excessive acidity or alkalinity of the soil gets reduced and is brought close to the pH of fertile soil. The constant burrowing of the earthworms opens up the fertile soil to let it 'breathe' air and absorb water much deeper than it otherwise would. In loose soils, the earthworms push their anterior portions in crevices and then bore in slowly, forcing away the obstacles. When confronted with compact and tough soil layers, the earthworms just eat their way through. The worms can burrow very deep into the soil, some species can go to depths which are much beyond the reach of plant roots. From such depths, the worms bring up life-sustaining minerals for use of the plants. No wonder then, that the introduction of a large number of earthworms into agricultural lands has been shown to double the yield of wheat, quadruple the yield of grass and multiply the clover yields ten times.

- 31.** The significant contribution of the earthworm has been overlooked by humans because it
- (1) is a spineless creature
 - (2) does its work quietly
 - (3) is an odd creature
 - (4) is small in size
- 32.** Scientists are now turning their attention to the earthworm because it
- (1) refines our fields where we grow our crops
 - (2) is a miracle of modern technology
 - (3) helps the soil to breathe and store water
 - (4) revives the soil and cleans the waste in the field
- 33.** The soil which has been worked upon by earthworms is richer due to the fact that
- (1) earthworms devour the soil
 - (2) the soil has no need of artificial pesticides
 - (3) the soil gets naturally enriched by the digestive process of the earthworms
 - (4) humus is created
- 34.** The constant burrowing by the earthworm permits all the processes *except*
- (1) Reduces the excessive acidity or alkalinity of the soil
 - (2) Allows the soil to absorb much more water than would be normally possible
 - (3) Enriched minerals are brought up for plant use
 - (4) Allows the soil to breathe air
- 35.** The main objective of the passage is to
- (1) give the history of the earthworm
 - (2) discuss the physical features of the earthworm
 - (3) discuss the digestive system of the earthworm
 - (4) describe the usefulness of the earthworm to soil
- 36.** The style of the passage is
- (1) Descriptive
 - (2) Persuasive
 - (3) Argumentative
 - (4) Narrative
- 37.** The phrase 'scaling the heaven ... miracles of modern technology' suggests
- (1) Human beings are making great strides in technology
 - (2) We are living in the age of technology
 - (3) Human beings have placed technological inventions in the sky
 - (4) Miracles are happening due to the grace of heaven

Passage II

Every position grants you with a certain authority. In my experience, men and women leverage their influence and power differently. While most men take to power at work easily and are quick to leverage it, women tend to hold back, till authority is clearly shared with them. Leadership attributes that are seen positively in a man can be perceived negatively if exhibited by a woman. An ambitious, outspoken, driven and focused man is considered powerful. Men, more vocal in boardrooms, are seen as result oriented and stronger. A woman who demonstrates similar behaviours, may be viewed as aggressive or self-centred, as this behaviour challenges the preconceived expectations and the nurturing character one expects from women.

Given this reaction, women choose to play a relatively more facilitative role, to avoid any negative perceptions. In my experience, it is advantageous for women to recognise this early and adopt an integrated style of leadership. Being inclusive and yet being rightfully assertive can garner a positive response and propel them forward. Women therefore need to leverage their strengths of collaboration, patience and resilience, which also come naturally to them, to find a balance in their overall leadership style, depending on their environment.

Leaders are expected to be decisive and action oriented. Men tend to take risks with less hesitation. Decision-making for men is often driven analytically with some experiential learning thrown in. Women, on the other hand, rely a lot more on intuition and on the opinion of others. Being more inclusive may sometimes fuel perceptions of indecisiveness, when they are rightfully focused on consensus building. A woman's style is more subtle relative to a man but it is in no way different in terms of quality of decision-making — she connects more coherently and sensitively, taking a balanced view of the situation.

How power is used is influenced by how people negotiate or influence — men in positions of power place a higher premium on their professional competence, negotiating better for opportunities and rewards. Women leaders understand their power but more often than not, understate it. They rely more on the personal equity and not always on the power of the role. Negotiations and commanding a role is both about leading the team towards goals and winning minds. Women tend to calibrate themselves with far more dexterity while being firm, decisive and tough in negotiations as they tend to keep the impact of the message in mind at all times.

Internal and external connectivity are invaluable in enhancing one's influence that may lead to more powerful engagements. Networking is an area where one finds men far more proactive, as it is another way to yield more influence. It is a domain I find where women consciously step back, either viewing it negatively or simply choosing not to engage, focusing instead on just getting the work done, or investing free time in personal priorities. Women should leverage their innate strengths in building relationships and collaborating to build strong networks, and in turn their own personal brand. This will make them more conscious of what is transpiring in the environment around them and better equipped to position themselves and their organisations strongly. Ultimately, a successful professional imbibes constructive qualities applied to context without trampling on their own styles. It is possible to have a balance on one's way to achieving success.

- 38.** The primary focus of the article is
- (1) the differential behaviour of men and women at the workplace
 - (2) empowering women at the workplace
 - (3) suggesting that women tend to be underdogs
 - (4) berating women's style of working
- 39.** All the aspects of women are mentioned in the passage *except*
- (1) women do not like positions of authority and power
 - (2) women tend to be more encouraging and inclusive
 - (3) women are naturally more patient and flexible
 - (4) women are as decisive as men
- 40.** The tone of the passage is
- (1) critical of the functioning of women at the workplace
 - (2) subtly unappreciative of men's over-assertive behaviour at the workplace
 - (3) subtly advising women to be more effective at the workplace
 - (4) factually stating the different behaviour of men and women at the workplace
- 41.** The title of the passage could be
- (1) The Nurturing Woman
 - (2) Empowering Women
 - (3) Leadership is Not for Women
 - (4) Men are from Mars and Women are from Venus
- 42.** According to the writer, the primary qualities of a leader should be
- (1) to take decisions and have the ability to implement them
 - (2) to be risk-takers and aggressive
 - (3) to be vocal and assertive
 - (4) to collaborate with others patiently
- 43.** The behaviour which is acceptable for women is different than that for men because
- (1) Men are traditional leaders and have already acquired appropriate behaviour
 - (2) Women are considered to be housewives and mothers
 - (3) Perceptions for women are different than that for men
 - (4) Women are more facilitative and culture oriented

44. The sentence “Ultimately, a successful professional imbibes constructive qualities applied to context without trampling on their own styles”, suggests

- (1) women should not be ashamed of their innate styles
- (2) women should shamelessly replicate the successful style of men
- (3) women should constructively use any style which fits the context
- (4) women should adapt their inborn strength in a given situation

45. The style of the passage is

- (1) Persuasive
- (2) Factual
- (3) Argumentative
- (4) Narrative

Directions for questions number 46 to 50 : Each of these questions consists of a word in capital letters followed by four alternative words or phrases. From among the alternatives, choose the word/phrase most nearly similar in meaning to the word in capital letters in each case.

46. INDEFATIGABLE

- (1) Untiring
- (2) Accusation
- (3) Apathetic
- (4) Unclear

47. ANTIPATHY

- (1) Unstimulating
- (2) Hostility
- (3) Rapport
- (4) Dismay

48. CIRCUMSPECT

- (1) Wary
- (2) Resourceful
- (3) Spherical
- (4) Twisting

49. OMNISCIENT

- (1) Imminent
- (2) Back-breaking
- (3) All-knowing
- (4) All-devouring

50. CORPULENT

- (1) Faithful
- (2) Reformatory
- (3) Obese
- (4) Erosive

Directions for questions number 51 to 55 : Each of these questions consists of a word in capital letters followed by four alternative words or phrases. From among the alternatives, choose the word/phrase most nearly opposite in meaning to the word in capital letters in each case.

51. ABERRANT

- (1) Incredulous
- (2) Euphoric
- (3) Customary
- (4) Lax

52. INSCRIBE

- (1) Appropriate
- (2) Supplant
- (3) Erase
- (4) Invalidate

53. AGNOSTIC

- (1) Unfaithful
- (2) Heathen
- (3) Mundane
- (4) Believer

54. MALEDICTION

- (1) Blessing
- (2) Termination
- (3) Degradation
- (4) Happiness

55. OMNIPOTENT

- (1) Infallible
- (2) Eclectic
- (3) Feeble
- (4) Ridiculous

Directions for questions number 56 to 60 : Each of these questions consists of a sentence with two blanks, followed by four alternative words or set of words. In each case, select the word / set of words for each blank that best fits the meaning of the sentence as a whole.

- 56.** A balance sheet may change from one year to the next if, for example, a company sells one of its factories, if it _____ more money from its shareholders, if it repays some debt to the bank, or if it builds up its inventory of _____ goods.
- (1) asks, completed
 - (2) raises, finished
 - (3) requires, controlled
 - (4) earns, perfected
- 57.** Adoption of _____ fiscal consolidation programmes by the larger EU nations will _____ the fear of further economic crisis.
- (1) credible, reduce
 - (2) conceivable, abate
 - (3) plausible, curtail
 - (4) tenable, minimize
- 58.** The activists objected to the _____ use of chemicals which were harming the soil and _____ the water.
- (1) ineffective, destroying
 - (2) uncontrolled, contaminating
 - (3) illegal, spoiling
 - (4) continuous, poisoning
- 59.** Cholesterol has long been identified as a silent killer because the patient has no _____ of danger freely _____ his system.
- (1) idea, infecting
 - (2) thought, attacking
 - (3) notion, ravishing
 - (4) information, invading
- 60.** Some people have the _____ for learning foreign languages but have no _____ in speaking any.
- (1) mania, urge
 - (2) aptitude, interest
 - (3) propensity, fondness
 - (4) capacity, ability

Directions for questions number 61 to 65 : Identify that part of the sentence which is incorrect.

61. (1) These intelligent machines (2) are destroying (3) our ability (4) of thinking.
62. (1) What a huge house it is; (2) I have painted it (3) since morning and it is (4) not even half finished.
63. (1) I have just now received (2) your letter and I have understood (3) that you will be coming (4) to Delhi next week.
64. (1) Would you please (2) send me (3) more informations (4) about the accommodation ?
65. (1) My new job (2) takes me (3) almost to every part (4) of the world.

Directions for questions number 66 to 70 : Complete the sentences with the correct option.

66. She smiled as if she _____ me before.
(1) had seen (2) has seen
(3) saw (4) having seen
67. If he _____ me now, he will repent.
(1) will disturb (2) disturbs
(3) would disturb (4) disturb
68. The train _____ half an hour before I reached the station.
(1) had left (2) will leave
(3) left (4) has left
69. It was certain that they _____ the train if they had started in time.
(1) caught (2) will catch
(3) would catch (4) would have caught
70. You have to leave your shoes _____ the door when you enter the house.
(1) in (2) over
(3) to (4) by

Directions for questions number 71 to 75 : In all these questions, either a part or the whole of the sentence is underlined. The sentence is followed by four ways of writing the underlined part. Select the alternative which represents the correct way of writing the underlined part as per Standard English.

71. Our improving reputation as a knowledge power is threatened by our weak primary school structure.
- (1) Our increasing reputation as a knowledge power
 - (2) Our overpowering reputation as a knowledge power
 - (3) Our impeding reputation as a knowledge power
 - (4) Our surging reputation as a knowledge power
72. Today this is a totally different world than we have seen in the last decade.
- (1) from what we have seen
 - (2) from what we seen
 - (3) than what we seen
 - (4) then we have seen
73. I am not too eager to go to this play because it did not get good reviews.
- (1) Because of its poor reviews, I am not too eager to go to this play.
 - (2) Having reviews, I am not too eager to go to this play.
 - (3) I am not too eager to go to this play because the critics did not give good reviews.
 - (4) I am not too eager to go to this play because of its poor reviews.
74. When one eats in this restaurant, you often find that the prices are high and that the food is poorly prepared.
- (1) When you eat in this restaurant, one often find
 - (2) As you eat in this restaurant, you often find
 - (3) If you eat in this restaurant, you often find
 - (4) When one ate in this restaurant, he often found
75. Many middle class individuals find that they cannot obtain good medical attention, despite they need it badly.
- (1) despite they badly need it
 - (2) in spite of they need it badly
 - (3) despite needing it badly
 - (4) therefore, they need it badly

Directions for questions number 76 to 80 : Each of these questions consists of an idiom, followed by four alternative words or phrases. Select the word or phrase which gives the closest meaning of the idiom in each case.

76. Be the devil's advocate

- (1) To present a counter argument
- (2) To judge something as bad
- (3) To plead for a bad person
- (4) To help someone who has an evil nature

77. Piece of cake

- (1) To celebrate an event
- (2) To slice things neatly
- (3) To enjoy something sweet
- (4) To see a task as easy or simple

78. Jump on the bandwagon

- (1) To retreat before a superior force
- (2) To join a popular trend
- (3) To practise jumping for a match
- (4) To practise music for a band performance

79. To bite off a little more than you can chew

- (1) To abandon a task
- (2) To save someone by intervening
- (3) To eat in a greedy manner
- (4) To take on a task which is way too big

80. To fly in the face of

- (1) To completely oppose what seems sensible
- (2) To run away from danger
- (3) To fly even when the weather is bad
- (4) To totally ignore someone by going away

TEST III

QUANTITATIVE APTITUDE

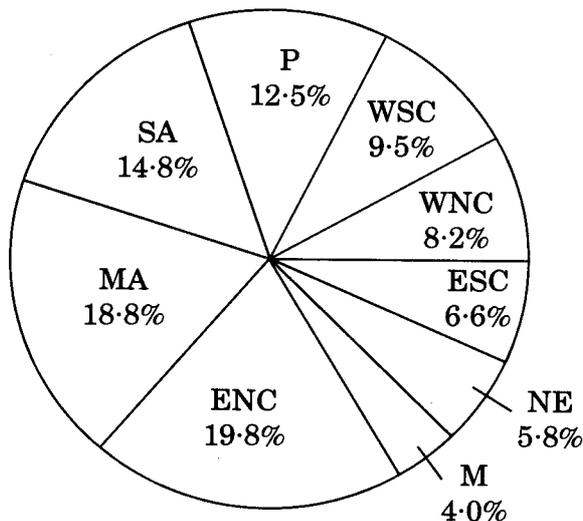
81. A store usually sells a certain item at a 40% profit. One week the store has a sale, during which the item is sold for 10% less than the usual price. During the sale, what is the percent profit that the store makes on each of these items ?
- (1) 4% (2) 14%
(3) 26% (4) 30%
82. What is 0.05 percent of 6.5 ?
- (1) 0.00325 (2) 0.013
(3) 0.325 (4) 1.30
83. If 8 men can chop down 28 trees in one day, how many trees can 20 men chop down in one day ?
- (1) 28 trees (2) 160 trees
(3) 70 trees (4) 100 trees
84. In a certain class, 40% of the students are girls, and 20% of the girls wear glasses. What percent of the children in the class are girls who wear glasses ?
- (1) 6% (2) 8%
(3) 20% (4) 60%
85. A man borrows ₹ 360. If he pays it back in 12 monthly installments of ₹ 31.50, what is his interest rate ?
- (1) 1.5% (2) 4.5%
(3) 10% (4) 5%
86. In the formula $e = hf$ if e is doubled and f is halved, what happens to the value of h ?
- (1) h remains the same (2) h is doubled
(3) h is divided by 4 (4) h is multiplied by 4
87. If coconuts are twice as expensive as bananas, and bananas are one-third as expensive as grapefruits, what is the ratio of the price of one coconut to one grapefruit ?
- (1) 2 : 3 (2) 3 : 2
(3) 6 : 1 (4) 1 : 6
88. A man walks down the road for half an hour at an average speed of 3 miles per hour. He waits 10 minutes for a bus, which brings him back to his starting point at 3:15. If the man began his walk at 2:25 the same afternoon, what was the average speed of the bus ?
- (1) 3 miles per hour (2) 4.5 miles per hour
(3) 6 miles per hour (4) 9 miles per hour

89. A man spent exactly ₹ 2.50 on 3p, 6p and 10p stamps. If he bought ten 3p stamps and twice as many 6p stamps as 10p stamps, how many 10p stamps did he buy ?
- (1) 5 (2) 10
(3) 12 (4) 15
90. Billu can hammer 20 nails in 6 minutes. Gopi can do the same job in only 5 minutes. How long will it take them to finish if Billu hammers the first 5 nails, then Gopi hammers for 3 minutes, then Billu finishes the job ?
- (1) 4.6 minutes (2) 5.0 minutes
(3) 5.4 minutes (4) 5.8 minutes
91. A 30% solution of barium chloride is mixed with 10 grams of water to form a 20% solution. How many grams of the original solution did we start with ?
- (1) 10 (2) 15
(3) 20 (4) 25
92. John walks 10 miles at an average rate of 2 miles per hour and returns on a bicycle at an average rate of 10 miles per hour. How long (to the nearest hour) does the entire trip take him ?
- (1) 3 hours (2) 4 hours
(3) 5 hours (4) 6 hours
93. At ₹ 30 per yard, what is the price of 96 inches of ribbon ?
- (1) ₹ 72 (2) ₹ 75
(3) ₹ 80 (4) ₹ 84
94. A man travels for 6 hours at a rate of 50 miles per hour. His return trip takes him $7\frac{1}{2}$ hours. What is his average speed for the whole trip ?
- (1) 44.4 miles per hour (2) 45.0 miles per hour
(3) 46.8 miles per hour (4) 48.2 miles per hour
95. If the area of the base of a rectangular solid is tripled, what is the percent increase in its volume ?
- (1) 200% (2) 300%
(3) 600% (4) 800%
96. The ratio of the area of a circle to the radius of the circle is
- (1) 2π (2) π^2
(3) $4\pi^2$ (4) Variable
97. A wheel travels 33 yards in 15 revolutions. What is its diameter ? (Assume $\pi = \frac{22}{7}$)
- (1) 0.70 feet (2) 1.05 feet
(3) 1.40 feet (4) 2.10 feet

98. A circular garden, twenty feet in diameter, is surrounded by a path three feet wide. What is the area of the path ?
- (1) 9π square feet (2) 51π square feet
 (3) 60π square feet (4) 69π square feet
99. The ratio of the area of a square to the square of its diagonal is which of the following ?
- (1) 2 : 1 (2) 1 : 1
 (3) $1 : \sqrt{2}$ (4) 1 : 2
100. Two wheels have diameters of 12 inches and 18 inches, respectively. Both wheels roll along parallel straight lines at the same linear speed until the large wheel has revolved 72 times. At this point, how many times has the small wheel revolved ?
- (1) 32 (2) 48
 (3) 72 (4) 108

Questions 101 – 105 are based on the following pie chart :

POPULATION BY REGION, 2015

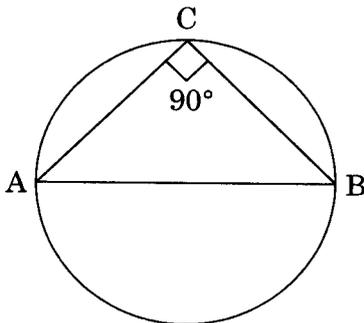


Total 191.3 million = 100%

101. Which region was the most populated region in 2015 ?
- (1) ENC (2) MA
 (3) SA (4) P
102. What part of the entire population lived in the M region ?
- (1) $\frac{1}{10}$ (2) $\frac{1}{30}$
 (3) $\frac{1}{50}$ (4) $\frac{1}{25}$
103. What was the approximate population in the P region ?
- (1) 20 million (2) 24 million
 (3) 30 million (4) 28 million

104. Approximately how many more people lived in the MA region than in the SA region ?
 (1) 4.0 million (2) 7.7 million
 (3) 5.2 million (4) 9.3 million
105. What was the total population in all the regions combined ?
 (1) 73.3 million (2) 100.0 million
 (3) 191.3 million (4) 126.8 million
106. A track is in the form of a ring, whose inner circumference is 352 metres and the outer circumference is 396 metres. The width of the track is
 (1) 44 metres (2) 14 metres
 (3) 22 metres (4) 7 metres
107. Pipe A can fill a tank in 10 hours. Pipe B can fill the same tank in 15 hours. Pipe C can empty the full tank in 20 hours. Pipes A, B and C are opened alternatively for one hour each. If A is opened first, then how many hours will they take to fill the empty tank ?
 (1) 25 hours (2) 26 hours
 (3) $24\frac{2}{3}$ hours (4) 24 hours
108. Three glasses of equal volumes are $\frac{1}{2}$, $\frac{2}{3}$ and $\frac{3}{4}$ full of milk respectively. The remaining portion of all the glasses is filled up with water. The mixture in the three glasses is poured into a container. The ratio of milk and water in the container is
 (1) 23 : 12 (2) 23 : 13
 (3) 23 : 14 (4) 23 : 15
109. A and B are two numbers which are in the ratio 2 : 3. If 3 is added to both of the numbers, then their ratio becomes 3 : 4. Find the sum of A and B.
 (1) 11 (2) 14
 (3) 15 (4) 20
110. A, B and C are partners in a business. Their shares are in the proportion of $\frac{1}{3} : \frac{1}{4} : \frac{1}{5}$. A withdraws half of his capital after 15 months and after another 15 months, a profit of ₹ 4,340 is divided. The share of C is
 (1) ₹ 1,550 (2) ₹ 1,360
 (3) ₹ 1,240 (4) ₹ 1,245
111. How many times in a day are the hands of a clock at right angles ?
 (1) 22 (2) 24
 (3) 44 (4) 48
112. If $\frac{1}{8}$ of a pencil is black, $\frac{1}{2}$ of the remaining is white and the remaining $3\frac{1}{2}$ cm is blue, find the total length of the pencil.
 (1) 6 cm (2) 8 cm
 (3) 10 cm (4) 7 cm

113. A number consists of 3 digits whose sum is 10. The middle digit is equal to the sum of the other two and the number will be increased by 99 if its digits are reversed. The number is
- (1) 145 (2) 253
(3) 370 (4) 352
114. If 20 men can build a 56 m long wall in 6 days, what length of a similar wall can be built by 35 men in 3 days ?
- (1) 38 m (2) 40 m
(3) 43 m (4) 49 m
115. A boat goes 50 km upstream in 10 hours and a distance of 40 km downstream in 9 hours. The speed of the boat in standing water is
- (1) 4.9 kmph (2) 5.2 kmph
(3) 4.5 kmph (4) 4.72 kmph
116. The cost of a diamond varies directly as the square of its weight. Once, this diamond broke into four pieces with weights in the ratio 1 : 2 : 3 : 4. When the pieces were sold, the merchant got ₹ 70,000 less. Find the original price of the diamond.
- (1) ₹ 1.4 lakh (2) ₹ 2.0 lakh
(3) ₹ 1.0 lakh (4) ₹ 2.1 lakh
117. A cube of side 12 cm is painted red on all the faces and then cut into smaller cubes, each of side 3 cm. What is the total number of smaller cubes having none of their faces painted ?
- (1) 16 (2) 8
(3) 12 (4) 24
118. The figure shows a circle of diameter AB and radius 6.5 cm. If chord CA is 5 cm long, find the area of triangle ABC.



- (1) 60 sq.cm (2) 30 sq.cm
(3) 40 sq.cm (4) 52 sq.cm

119. In a locality, two-thirds of the people have cable TV, one-fifth have VCR, and one-tenth have both. What is the fraction of people having either cable TV or VCR ?

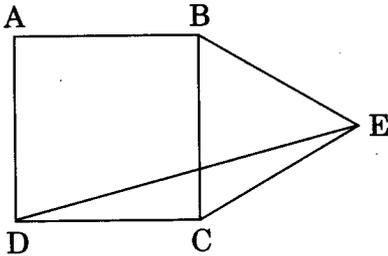
(1) $\frac{19}{30}$

(2) $\frac{3}{5}$

(3) $\frac{17}{30}$

(4) $\frac{23}{30}$

120. If ABCD is a square and BCE is an equilateral triangle, what is the measure of the angle DEC ?



(1) 15°

(2) 30°

(3) 20°

(4) 45°

121. I bought 5 pens, 7 pencils and 4 erasers. Rajan bought 6 pens, 8 erasers and 14 pencils for an amount which was half more than what I had paid. What percent of the total amount paid by me was paid for the pens ?

(1) 37.5%

(2) 62.5%

(3) 50%

(4) 52.5%

122. The distance between A and B is 72 km. Two men started walking from A and B at the same time towards each other. The person who started from A travelled uniformly with an average speed of 4 kmph, while the other man travelled with varying speeds as follows : In the first hour his speed was 2 kmph, in the second hour it was 2.5 kmph, in the third hour it was 3 kmph, and so on. When will they meet each other ?

(1) 7 hours

(2) 10 hours

(3) 3.35 km from A

(4) Midway between A and B

123. A man travels from A to B at a speed of x kmph. He then rests at B for x hours. He then travels from B to C at a speed of $2x$ kmph and rests at C for $2x$ hours. He moves further to D at a speed twice as that between B and C. He thus reaches D in 16 hours. If distances A - B, B - C, C - D are all equal to 12 km, the time for which he rested at B could be

(1) 3 hours

(2) 6 hours

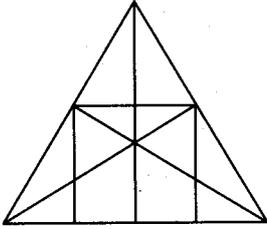
(3) 2 hours

(4) 4 hours

- 124.** Instead of a metre scale, a cloth merchant uses a 120 cm scale while buying, but uses an 80 cm scale while selling the same cloth. If he offers a discount of 20% on cash payment, what is his overall percent profit ?
- (1) 20% (2) 25%
(3) 40% (4) 15%
- 125.** A man has nine friends, four boys and five girls. In how many ways can he invite them, if there have to be exactly three girls in the invitees ?
- (1) 320 (2) 160
(3) 80 (4) 200
- 126.** The annual increase in population of a town is 5%. If the present population is 1,60,000, then the population after 4 years will be
- (1) 1,94,481 (2) 1,78,641
(3) 1,92,000 (4) 1,65,000
- 127.** A boat goes 6 km an hour in still water, but it takes thrice as much time in going the same distance against the current. The speed of the current (in km/hour) is
- (1) 4 (2) 5
(3) 3 (4) 2
- 128.** In what time will a train 100 metres long cross an electric pole, if its speed be 144 km/hour ?
- (1) 2.5 seconds (2) 5 seconds
(3) 12.5 seconds (4) 3 seconds
- 129.** A wall of 100 metres can be built by 7 men or 10 women in 10 days. How many days will 14 men and 20 women take to build a wall of 600 metres ?
- (1) 15 (2) 20
(3) 25 (4) 30
- 130.** A can do a piece of work in 60 days. He works for 15 days and then B alone finishes the remaining work in 30 days. The two together can finish the work in
- (1) 24 days (2) 25 days
(3) 30 days (4) 32 days

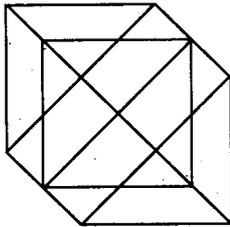
TEST IV
REASONING

131. What is the number of straight lines and the number of triangles in the given figure ?



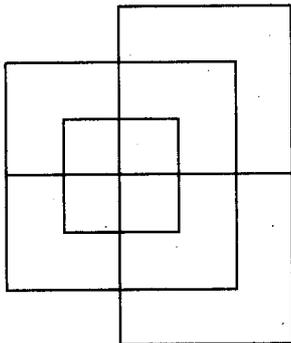
- (1) 10 straight lines and 34 triangles
- (2) 9 straight lines and 34 triangles
- (3) 9 straight lines and 36 triangles
- (4) 10 straight lines and 36 triangles

132. Find the number of triangles in the given figure.



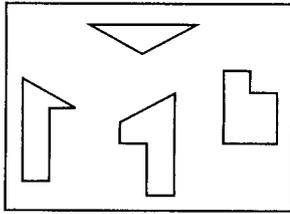
- | | |
|--------|--------|
| (1) 18 | (2) 20 |
| (3) 24 | (4) 27 |

133. Find the minimum number of straight lines required to make the given figure.

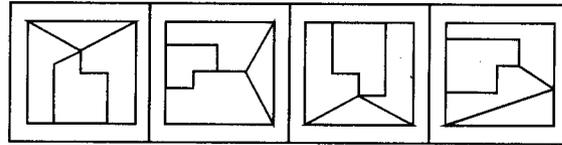


- | | |
|--------|--------|
| (1) 13 | (2) 15 |
| (3) 17 | (4) 19 |

143. Find out which of the figures (1), (2), (3) and (4) can be formed from the pieces given in figure (X).



(X)



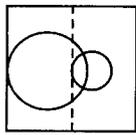
(1)

(2)

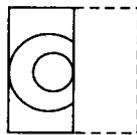
(3)

(4)

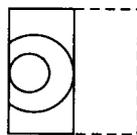
144. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.



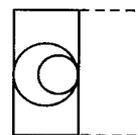
(X)



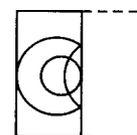
(1)



(2)

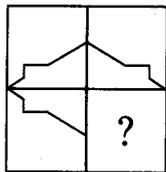


(3)



(4)

145. Identify the figure that completes the pattern.



(X)



(1)



(2)

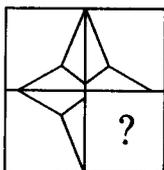


(3)



(4)

146. Identify the figure that completes the pattern.



(X)



(1)



(2)



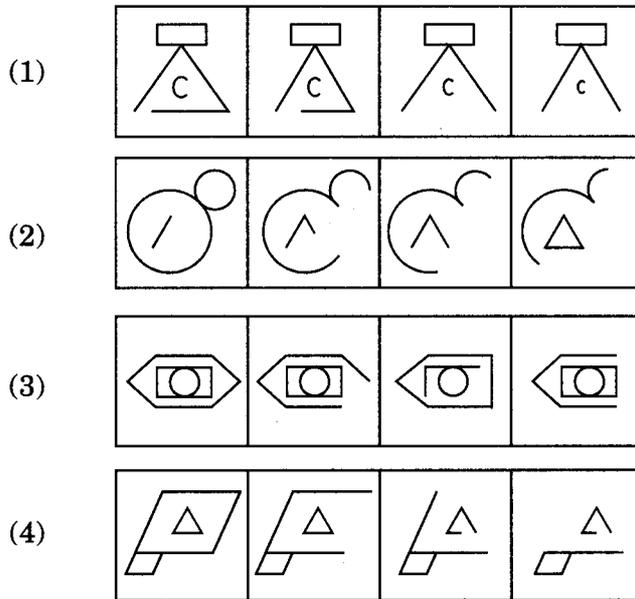
(3)



(4)

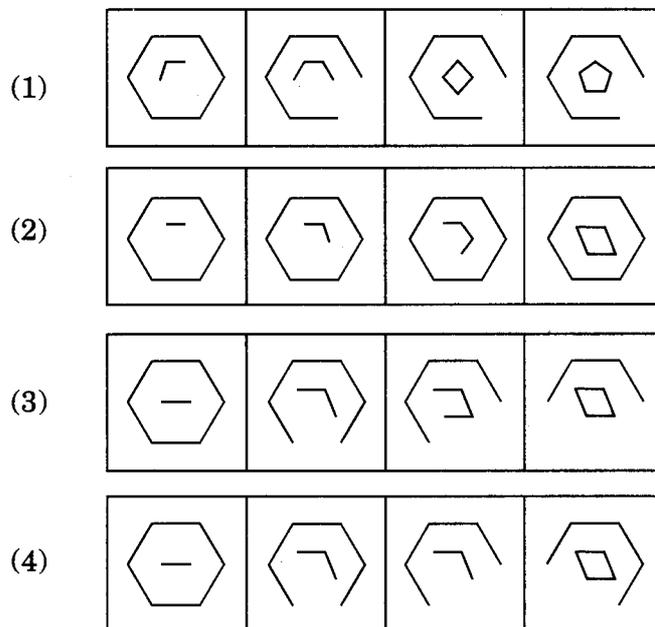
147. Choose the set of figures which follows the given rule.

Rule : Closed figures become more and more open and open figures become more and more closed.



148. Choose the set of figures which follows the given rule.

Rule : Closed figures losing their sides and open figures gaining their sides.



- 154.** No national productivity measures are available for underground industries that may exist but remain unreported. On the other hand, at least some industries that are run entirely by self-employed industrialists are included in national productivity measures.

From the information given above, it can be validly concluded that

- (1) there are at least some industries run entirely by self-employed industrialists that are underground industries.
- (2) no industries that are run entirely by self-employed industrialists operate underground.
- (3) there are at least some industries other than those run entirely by self-employed industrialists that are underground industries.
- (4) there are at least some industries run entirely by self-employed industrialists that are not underground industries.

- 155.** Complete the following sequence :

12, 77, 252, ?

- | | |
|---------|---------|
| (1) 352 | (2) 621 |
| (3) 418 | (4) 576 |

- 156.** Complete the following sequence :

ab ec id me ?

- | | |
|--------|--------|
| (1) qg | (2) re |
| (3) st | (4) qf |

- 157.** I. All the offices on the 9th floor have wall-to-wall carpeting.
II. No wall-to-wall carpeting is pink.
III. None of the offices on the 9th floor has pink wall-to-wall carpeting.

If the first two statements are true, the third statement is

- | | |
|---------------|-----------------------|
| (1) True | (2) False |
| (3) Uncertain | (4) None of the above |

- 158.** I. During the past year, Josh saw more movies than Stephen.
II. Stephen saw fewer movies than Darren.
III. Darren saw more movies than Josh.

If the first two statements are true, the third statement is

- | | |
|---------------|-----------------------|
| (1) True | (2) False |
| (3) Uncertain | (4) None of the above |

- 159.** I. Apartments in the Riverdale Manor cost less than apartments in The Gaslight Commons.
II. Apartments in the Livingston Gate cost more than apartments in The Gaslight Commons.
III. Of the three apartment buildings, the Livingston Gate costs the most.

If the first two statements are true, the third statement is

- | | |
|---------------|-----------------------|
| (1) True | (2) False |
| (3) Uncertain | (4) None of the above |

160. Should India create a huge oil reserve in order to face some difficult situations in the future ?

Arguments :

- I. No. There is no need to block huge amounts of foreign exchange and keep the money idle.
- II. Yes. This will help India withstand shocks of sudden rise in oil prices due to unforeseen circumstances.

- (1) Only I is true
- (2) Only II is true
- (3) Either I or II is true
- (4) Neither I nor II is true

161. Should there be only a uniform rate of income tax irrespective of the level of income ?

Arguments :

- I. Yes. This will substantially reduce the work of the officials of the income tax department.
- II. No. This will reduce government tax collection to a large extent.

- (1) Only argument I is strong
- (2) Only argument II is strong
- (3) Neither I nor II is strong
- (4) Both I and II are strong

162. If you are an engineer, we have a challenging job for you.

Assumptions :

- I. We need an engineer.
- II. You are an engineer.

- (1) Only I is true
- (2) Only II is true
- (3) Either I or II is true
- (4) Neither I nor II is true

163. Banks should always check financial status before lending money to a client.

Assumptions :

- I. Checking before lending would give a true picture of the client's financial status.
- II. Clients sometimes may not present the correct picture of their ability to repay loan amount to the bank.

- (1) Only assumption I is implicit
- (2) Only assumption II is implicit
- (3) Either I or II is implicit
- (4) Both I and II are implicit

164. All snakes are trees. Some trees are roads. All roads are mountains.

Conclusions :

I. Some mountains are snakes.

II. Some roads are snakes.

III. Some mountains are trees.

(1) Only I follows

(2) Only II follows

(3) Only III follows

(4) Both I and II follow

165. Some hills are rivers. Some rivers are deserts. All deserts are roads.

Conclusions :

I. Some roads are rivers.

II. Some roads are hills.

III. Some deserts are hills.

(1) None follows

(2) Only I follows

(3) Only I and II follow

(4) All follow

166. There is an unprecedented increase in migration of villagers to urban areas as repeated crop failure has put them into precarious financial situation.

Courses of Action :

I. The villagers should be provided with an alternate source of income in their villages which will make them stay put.

II. The migrated villagers should be provided with jobs in the urban areas to help them survive.

(1) Only I follows

(2) Only II follows

(3) Neither I nor II follows

(4) Both I and II follow

167. It is reported that though Vitamin E present in fresh fruits and vegetables is beneficial for the human body, capsules of Vitamin E do not have the same effect on the human body.

Courses of Action :

I. The sale of capsules of Vitamin E should be banned.

II. People should be encouraged to take fresh fruits and vegetables to meet the body's requirement of Vitamin E.

(1) Only I follows

(2) Only II follows

(3) Neither I nor II follows

(4) Both I and II follow

- 168.** Emerson said that the poet was landlord, sealord, airlord. The flight of imagination made the poet master of land, sea and air. But a poet's dream of yesterday becomes today an actual achievement and a reality for all men. Even those who invented, improved and perfected the aeroplane could hardly have dreamt of the possibility of flight into outer space.
The passage best supports the statement that
- (1) all imaginations become a reality some day.
 - (2) what man imagined has never been impossible; he has always turned it into a reality through his conception of ideas and sheer hard labour.
 - (3) seemingly impossible imaginations make one a good poet.
 - (4) man has reached the climax of technological development with his exploration into outer space.
- 169.** How many pairs of letters are there in the word "CASTRAPHONE" which have as many letters between them in the word as in the alphabet ?
- (1) 2
 - (2) 3
 - (3) 4
 - (4) 5
- 170.** If the first and second letters in the word "DEPRESSION" were interchange^d, also the third and the fourth letters, the fifth and the sixth letters and so on, which of the following would be the seventh letter from the right ?
- (1) R
 - (2) O
 - (3) S
 - (4) P
- 171.** 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 be three persons ahead of C and 21 persons behind A, what could be the minimum number of persons in the queue ?
- (1) 41
 - (2) 40
 - (3) 28
 - (4) 27
- 172.** The following question consists of two words each that have a certain relationship to each other, followed by a lettered pairs of words. Select the lettered pair that has the same relationship as the original pair of words.
Proscenium : Stage
- (1) Lamp : Table
 - (2) Linen : Bed
 - (3) Portico : House
 - (4) Compass : Needle
- 173.** 34 is related to 12 in the same way as 59 is related to
- (1) 45
 - (2) 38
 - (3) 26
 - (4) 14
- 174.** 8 is related to 81 in the same way as 27 is related to 256. Therefore 64 is related to
- (1) 225
 - (2) 425
 - (3) 525
 - (4) 625

175. There is a certain relation between two given words on one side of :: and one word is given on another side of :: while another word is to be found from the given alternatives, having the same relation with this word as the given pair has.
Select the best alternative.
Chromite : Chromium :: Ilmenite : ?
- (1) Cobalt (2) Titanium
(3) Limestone (4) Manganese
176. In three coloured boxes — Red, Green and Blue, 108 balls are placed. There are twice as many balls in the green and red boxes combined as there are in the blue box and twice as many in the blue box as there are in the red box. How many balls are there in the green box ?
- (1) 18 (2) 36
(3) 45 (4) 54
177. Ayush was born two years after his father's marriage. His mother is five years younger than his father but 20 years older than Ayush who is 10 years old. At what age did the father get married ?
- (1) 23 years (2) 25 years
(3) 33 years (4) 35 years
178. In a class of 60 students, the number of boys and girls participating in the annual sports is in the ratio 3 : 2 respectively. The number of girls not participating in the sports is 5 more than the number of boys not participating in the sports. If the number of boys participating in the sports is 15, then how many girls are there in the class ?
- (1) 20 (2) 25
(3) 30 (4) Data inadequate
179. A, B, C, D and E play a game of cards. A says to B, "If you give me 3 cards, you will have as many as I have at this moment while if D takes 5 cards from you, he will have as many as E has." A and C together have twice as many cards as E has. B and D together also have the same number of cards as A and C taken together. If together they have 150 cards, how many cards has C got ?
- (1) 28 (2) 29
(3) 31 (4) 35
180. In a certain office, $\frac{1}{3}$ of the workers are women, $\frac{1}{2}$ of the women are married and $\frac{1}{3}$ of the married women have children. If $\frac{3}{4}$ of the men are married and $\frac{2}{3}$ of the married men have children, what part of the workers are without children ?
- (1) $\frac{5}{18}$ (2) $\frac{4}{9}$
(3) $\frac{11}{18}$ (4) $\frac{17}{36}$

Directions for questions number 181 to 183 : For the Assertion (A) and Reason (R) below, choose the correct alternative.

181. Assertion (A) : Simla is colder than Delhi.

Reason (R) : Simla is at a higher altitude as compared to Delhi.

- (1) Both A and R are true and R is the correct explanation of A
- (2) Both A and R are true but R is **not** the correct explanation of A
- (3) A is true but R is false
- (4) A is false but R is true

182. Assertion (A) : Eskimos reside in igloos.

Reason (R) : No other material except snow is available.

- (1) Both A and R are true and R is the correct explanation of A
- (2) Both A and R are true but R is **not** the correct explanation of A
- (3) A is true but R is false
- (4) A is false but R is true

183. Assertion (A) : Most of the Himalayan rivers are perennial.

Reason (R) : They are fed by melting snow.

- (1) Both A and R are true and R is the correct explanation of A
- (2) Both A and R are true but R is **not** the correct explanation of A
- (3) A is true but R is false
- (4) A is false but R is true

184. Pointing out to a lady, a girl said, "She is the daughter-in-law of the grandmother of my father's only son." How is the lady related to the girl ?

- | | |
|-------------------|-------------------------|
| (1) Sister-in-law | (2) Mother |
| (3) Aunt | (4) Can't be determined |

185. P is the brother of Q and R. S is R's mother. T is P's father. Which of the following statements **cannot** be definitely true ?

- | | |
|---------------------|---------------------|
| (1) T is Q's father | (2) S is P's mother |
| (3) P is S's son | (4) Q is T's son |

186. A family consists of six members P, Q, R, S, T and U. There are two married couples. Q is a doctor and the father of T. U is the grandfather of R and is a contractor. S is the grandmother of T and is a housewife. There is one doctor, one contractor, one nurse, one housewife and two students in the family. Which of the following is definitely a group of male members ?

- | | |
|---------|---------|
| (1) QU | (2) QUT |
| (3) QUP | (4) UT |

187. Choose the number which is different from others in the group ?

- (1) 183 (2) 137
(3) 121 (4) 231

188. In a certain code language, '134' means 'good and tasty'; '478' means 'see good pictures' and '729' means 'pictures are faint'. Which of the following digits stands for 'see' ?

- (1) 9 (2) 2
(3) 1 (4) 8

189. In a certain code language,

- I. 'pit na som' means 'bring me water'
II. 'na jo tod' means 'water is life'
III. 'tub od pit' means 'give me toy'
IV. 'jo lin kot' means 'life and death'

Which of the following represents 'is' in that language ?

- (1) jo (2) na
(3) tod (4) lin

190. If $Z = 52$ and $ACT = 48$, then BAT will be equal to

- (1) 39 (2) 41
(3) 44 (4) 46

191. When is Manohar's birthday this year ?

- I. It is between January 13 and 15, January 13 being Wednesday.
II. It is not on Friday.

- (1) The data in statement I alone are sufficient to answer the question.
(2) The data in statement II alone are sufficient to answer the question.
(3) The data either in I or II alone are sufficient to answer the question.
(4) The data even in both the statements together are not sufficient to answer the question.

192. Manoj, Prabhakar, Mash and Kamal are four friends. Who among them is the heaviest ?

- I. Prabhakar is heavier than Manoj and Kamal but lighter than Akash.
II. Manoj is lighter than Prabhakar and Mash but heavier than Kamal.

- (1) The data in statement I alone are sufficient to answer the question.
(2) The data in statement II alone are sufficient to answer the question.
(3) The data either in I or II alone are sufficient to answer the question.
(4) The data in both the statements together are needed.

193. Two cars start from the opposite places of a main road, 150 km apart. First car runs for 25 km and takes a right turn and then runs 15 km. It then turns left and runs for another 25 km and then takes the direction back to reach the main road. In the meantime, due to a minor breakdown the other car has run only 35 km along the main road. What would be the distance between the two cars at this point ?

- (1) 65 km (2) 75 km
 (3) 80 km (4) 85 km

194. Rasik walked 20 m towards north. Then he turned right and walks 30 m. Then he turns right and walks 35 m. Then he turns left and walks 15 m. Finally he turns left and walks 15 m. In which direction and how many metres is he from the starting position now ?

- (1) 15 m West (2) 30 m East
 (3) 30 m West (4) 45 m East

195. In the following question, a matrix of certain numbers is given. These numbers follow a certain trend, row-wise or column-wise. Find out this trend and choose the missing number accordingly.

1	7	9
2	14	?
3	105	117

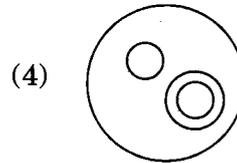
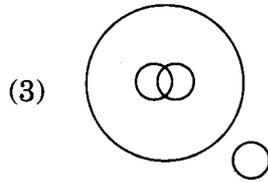
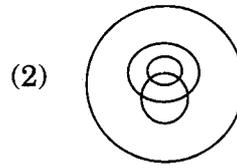
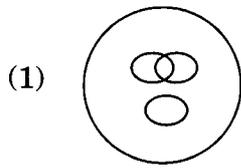
- (1) 26 (2) 20
 (3) 16 (4) 12

196. In the following question, a matrix of certain characters is given. These characters follow a certain trend, row-wise or column-wise. Find out this trend and choose the missing character accordingly.

A	D	H
F	I	M
?	N	R

- (1) K (2) N
 (3) O (4) P

197. In a dinner party both fish and meat were served. Some took only fish and some only meat. There were some vegetarians who did not accept either. The rest accepted both fish and meat. Which of the following Venn diagrams correctly reflects this situation ?



198. In a group of buffaloes and ducks the number of legs are 24 more than twice the number of heads. What is the number of buffaloes in the group ?

(1) 6

(2) 18

(3) 12

(4) 24

199. How many such digits are there in the number 7346285 which are as far away from the beginning of the number, as they will be when arranged in ascending order within the number ?

(1) None

(2) One

(3) Two

(4) Three

200. In a class of 180, where girls are twice the number of boys, Rupesh (a boy), ranked 34th from the top. If there are 18 girls ahead of Rupesh, how many boys are after him in rank ?

(1) 45

(2) 44

(3) 60

(4) Cannot be determined