

IBSAT 2017 Model Paper - 2 Question Paper

Time Allowed :3 Hours	Maximum Marks :100	Total Questions : 140
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General Instructions

Read the following instructions very carefully and strictly follow them:

1. The test paper contains 140 Multiple Choice Questions (MCQs) for a total of 140 marks.
2. **There will be Negative Marking for Multiple Choice Questions (MCQs).** For every wrong answer 0.25 marks will be deducted.
3. Candidates have to indicate the most appropriate answer by darkening one of the four responses provided, with only **BLACK/BLUE BALL POINT PEN** in the OMR Response Sheet.

Example: For the question, “Where is the Taj Mahal located?”

a) Kolkata b) Agra c) Bhopal d) Delhi

Right Method

a • c d

Wrong Methods

a ⊗ c d a ✓ c d a ○ c d

4. Answering the question by any method other than the method mentioned above shall be considered wrong answer.
5. More than one response to a question shall be counted as wrong answer.
6. The candidate shall not write anything on the OMR Response Sheet other than the details required and, in the spaces, provided for.
7. After the examination is over, the candidate can carry the Question Booklet along with candidate's copy of the OMR Response Sheet. Candidate will hand over the original OMR Response Sheet to the invigilator.
8. Electronic gadgets like mobile phones, digital watch, pagers and calculators etc. are strictly not permitted inside the Test Centre/Hall.

Section I
Verbal Ability

Directions: In the following questions, each word is followed by five options. Choose the option which is the closest synonym of the given words. While choosing your answer, keep in mind the finer distinctions in the meaning and usage of certain words.

1. FURTIVE

- (A) Spicy
 - (B) Secretive
 - (C) Palpable
 - (D) Fruitful
 - (E) Alien
-

2. INSIDIOUS

- (A) Tasteless
 - (B) Treacherous
 - (C) Secure
 - (D) Formal
 - (E) Vigilant
-

3. APLOMB

- (A) Poise
 - (B) Solitude
 - (C) Panacea
 - (D) Alertness
 - (E) Greed
-

4. WOE

- (A) Homage
- (B) Evidence
- (C) Chaos
- (D) Deluge

(E) Sorrow

5. EMULATE

- (A) Appear
 - (B) Impose
 - (C) Imitate
 - (D) Operate
 - (E) Collect
-

Directions: In the following questions, each word is followed by five options. Choose the option which is the closest antonym of the given words. While choosing your answer, keep in mind the finer distinctions in the meaning and usage of certain words.

6. FABRICATE

- (A) Aggravate
 - (B) Establish
 - (C) Destroy
 - (D) Foster
 - (E) Electrify
-

7. HEED

- (A) Hope
 - (B) Ignore
 - (C) Overtake
 - (D) Nurture
 - (E) Pacify
-

8. APPROBATION

- (A) Disguise
- (B) Corruption

- (C) Treachery
 - (D) Permanent
 - (E) Disapproval
-

9. MIRTH

- (A) Serenity
 - (B) Triumph
 - (C) Gloom
 - (D) Newness
 - (E) Gaiety
-

10. CELESTIAL

- (A) Sacred
 - (B) Hazardous
 - (C) Unhealthy
 - (D) Earthly
 - (E) Glorious
-

Directions: In the following questions, the first two words are related in a particular manner. You have to choose a word from the options so that a new pair of words is formed where the relation is the same as that of the first pair of words. You are required to consider the secondary meaning of certain words while choosing an answer.

11. Pack : Wolves :: Shoal :

- (A) Locusts
 - (B) Fish
 - (C) Chicken
 - (D) Books
 - (E) Passengers
-

12. Unbiased : Judge :: Articulate :

- (A) Orator
 - (B) Soldier
 - (C) Celebrity
 - (D) Clown
 - (E) Novice
-

13. Classify : Taxonomist :: Bargain :

- (A) Sojourner
 - (B) Minstrel
 - (C) Juggler
 - (D) Visitor
 - (E) Haggler
-

14. Vindicator : Revenge :: Epicurean :

- (A) Sorrow
 - (B) Fright
 - (C) Hesitation
 - (D) Pleasure
 - (E) Depression
-

15. Hammer : Nail :: Scissors :

- (A) Screw
 - (B) Pearl
 - (C) Paper
 - (D) Shape
 - (E) Design
-

IV. Directions: Fill in the blanks with the words that best fit the meaning of the sentence as a whole.

16. Indian policies should _____ on social justice and on inclusive growth and development, which in the long term will provide greater _____ for all its people.

- (A) depend ... safety
 - (B) focus ... security
 - (C) count ... confidence
 - (D) direct ... protection
 - (E) build ... delight
-

17. Research should be done on rainwater _____ and treatment of wastewater so that it might be recycled and made _____.

- (A) harvesting ... potable
 - (B) preserving ... available
 - (C) controlling ... possible
 - (D) maintaining ... edible
 - (E) collecting ... accessible
-

18. A team without a good and simple _____ system is like trying to _____ a car without a steering wheel.

- (A) guiding ... move
 - (B) convincing ... push
 - (C) working ... drive
 - (D) developmental ... pull
 - (E) leading ... propel
-

19. The _____ cell phone is a wonderful invention of technology, making our lives _____ and happy.

- (A) popular ... blissful
 - (B) modern ... stressful
 - (C) portable ... pleasant
 - (D) ubiquitous ... comfortable
 - (E) effective ... joyful
-

20. As he _____ to the dais, the crowd went _____ trying to get a closer look of him.

- (A) went ... noisy
 - (B) walked ... happy
 - (C) climbed ... fearful
 - (D) strode ... berserk
 - (E) moved ... crazy
-

V. Directions: In the following questions, each sentence is divided into four parts (a), (b), (c) and (d). Find out which part of the sentence contains an error. If there is no error, mark your answer as (e).

21. While the Indian Constitution guarantees / equality for women, / legal protection have little effect / in the face of prevailing culture. / No error

- (a) While the Indian Constitution guarantees
 - (b) equality for women,
 - (c) legal protection have little effect
 - (d) in the face of prevailing culture.
 - (e) No error
-

22. The detective says / that there is no chance / for finding the person / who wrote these letters. / No error

- (a) The detective says
 - (b) that there is no chance
 - (c) for finding the person
 - (d) who wrote these letters.
 - (e) No error
-

23. He had scarcely / sat down / than there was a / knock at the door. / No error

- (a) He had scarcely
 - (b) sat down
 - (c) than there was a
 - (d) knock at the door
 - (e) No error
-

24. The laboratory of Physics is / not only equipped with / state-of-the-art instruments / but also with outstanding Physicists. / No error

- (a) The laboratory of Physics is
- (b) not only equipped with
- (c) state-of-the-art instruments
- (d) but also with outstanding Physicists
- (e) No error

25. Finishing his breakfast, / he started working / on the long / pending hours. / No error

- (a) Finishing his breakfast
- (b) he started working
- (c) on the long
- (d) pending hours
- (e) No error

Directions: In each of the following questions, a part of the given sentence has been underlined as this part may have an error. The first option is the same as the underlined part in the given sentence. Choose this option if you think that the underlined part has no error. Otherwise, choose the option that rectifies the error in the underlined part of the given sentence.

26. Practically, any parts of banana tree is useful to man.

- (A) any parts
- (B) most part
- (C) every part
- (D) all part
- (E) each parts

27. More and more people are becoming dependent on its nuclear families to provide them whatever support they require.

- (A) are becoming dependent on its
- (B) are becoming dependent on their

- (C) are become dependent on their
- (D) have been becoming dependent on their
- (E) are become dependent on its

28. French planes are more superior than Italian planes.

- (A) more superior than
- (B) most superior than
- (C) superior than
- (D) superior to
- (E) more than superior

29. A handful of pebble in the bottoms of a flowerpot will help drainage.

- (A) handful of pebble in the bottoms
- (B) handfuls of pebbles at the bottom
- (C) handful with pebbles in the bottom
- (D) pebble of handful in the bottom
- (E) handful of pebbles in the bottom

**30. Mercury in the environment in its organic form can
lead to health disastrous consequences.**

- (A) lead to health disastrous consequences
- (B) lead to disastrous health consequences
- (C) led to disastrous health consequences
- (D) leading to health consequences disastrous
- (E) lead to consequences health disastrous

Directions: In the following questions, different parts of a sentence/passage have been jumbled. Choose the option that represents the best sequence to make the sentence/passage coherent and meaningful. Ignore punctuation marks.

- 31. P:** This is only possible by means of a complete revolution in our thinking.
Q: We have to get over the transitional period and become a modern, industrial state.
R: We must spread scientific thinking on a massive scale.

S: Encourage people to give up superstitions and backward feudal ideas.

- (A) SQPS
- (B) QPSR
- (C) SPQR
- (D) QPRS
- (E) QRPS

32. P: They should also update their competence to guide their subordinates.

Q: New processes, machines, instruments, gauges, systems and gadgets.

R: This would be possible only if they keep in regular touch with.

S: Managers must lead by example; they should not be averse to giving a hand in manual work, if required.

- (A) PSRQ
- (B) RPQS
- (C) SPRQ
- (D) SRPQ
- (E) PRSQ

33. P: The most authentic aspect of the Indian democratic system is that it is based on a highly credible electoral process

Q: This has allowed millions of Indians to feel empowered and in control of their own destinies

R: Most Indians, regardless of their economic status, retain faith in the electoral system and believe that politicians and parties are ultimately accountable to them

S: Which has ensured that political power remains in the hands of elected representatives of the people

- (A) PRSQ
- (B) RSPQ
- (C) RPQS
- (D) RQSP
- (E) PSQR

34. P: Are canned and almost all the rest are frozen

Q: They contain lots of dietary fibre and protein

R: But, most importantly, they taste of the freshness of winter

S: More than half the peas sold in the world

- (A) SPQR
- (B) QRSP
- (C) PSRQ
- (D) RQSP
- (E) PRSQ

35. P: They found a comfortable life here in a country that was gifted by nature

Q: Before the advent of modern industry, there were agricultural societies

R: Hence, for thousands of years, people kept pouring into India

S: India was a veritable paradise for such societies because it has level and fertile land, hundreds of rivers, forests, and is rich in natural resources

- (A) PSQR
- (B) RSQP
- (C) QSRP
- (D) QSPR
- (E) SPQR

VIII. Directions: Choose a suitable one-word substitute for the given phrase from the options under each question.

36. Someone who has been admitted to membership in a scholarly field.

- (A) Scholar
- (B) Researcher
- (C) Academician
- (D) Savant
- (E) Pollster

37. The belief that arranging the home or office in a particular way will bring good or bad luck.

- (A) Eugenics
- (B) Antiquary

- (C) Geomancy
- (D) Soothsaying
- (E) Astrology

38. A collector and student of postage stamps.

- (A) Philatelist
- (B) Firedrake
- (C) Lunatic
- (D) Freelancer
- (E) Phillumenist

39. The science of soil management and crop production.

- (A) Geology
- (B) Philology
- (C) Kinesics
- (D) Agronomy
- (E) Gemology

40. Payment made to a person in a position of trust to corrupt his judgment.

- (A) Enticement
- (B) Snare
- (C) Epigram
- (D) Fraud
- (E) Bribe

IX. Directions: Choose the option that best expresses the meaning of the given idiom/phrase.

41. The group called a meeting to finally *clear the air*.

- (A) Call off discussion
- (B) Offer a solution

- (C) Negotiate a bond
 - (D) Decide the agenda
 - (E) Dispel differences
-

42. The dispute regarding the granting of bonus to workers *came to a head* this week.

- (A) Settled amicably
 - (B) Took a better turn
 - (C) Resulted in violence
 - (D) Reached a crisis
 - (E) Yielded better results
-

43. He always advises his brother to *keep his nose clean*.

- (A) Stay out of trouble
 - (B) Be polite
 - (C) Act smart
 - (D) Update himself
 - (E) Behave decently
-

44. The results of the poll have started coming in but our party chief will be on tenterhooks until the last result comes in.

- (A) In high spirits
 - (B) In a depressed mood
 - (C) In a state of agitated suspense
 - (D) In an exalted stage
 - (E) In a state of resignation
-

45. She has been betrayed by her own flesh and blood.

- (A) Neighbors
- (B) Close relatives
- (C) Acquaintances

- (D) Colleagues
- (E) Students

X. Directions: Replace the number with the word(s) that best fit(s) the meaning of the passage as a whole.

Indian institutions prefer students to be ----- (46) listeners. Our education system, barring a few exceptions, encourages a hierarchical relationship between teacher and student. The former controls knowledge and the latter is expected to submissively accept what is handed down. The argumentative Indian thrives despite the system. This may look like an / a ----- (47) because a competitive political democracy like India should have facilitated an educational system that is cool about arguments and dissent. Or, is the ----- (48) in the education system a reflection of a flaw in our democratic culture?

We have regular elections and our political space teems with parties subscribing to a ----- (49) of ideologies. But is this space sufficiently democratic so that people get the leaders they deserve? A range of identities such as family, clan, caste, religion influences our choice of leaders more than their understanding of public policy. Beneath ----- (50) of democracy, the old social order, where caste was privileged over merit, has survived, though in a weaker form.

46. Replace the number with the word(s) that best fit(s) the meaning of the passage as a whole.

- (A) Talkative
- (B) Contemplative
- (C) Obedient
- (D) Distracted
- (E) Cursory

47. Replace the number with the word(s) that best fit(s) the meaning of the passage as a whole.

- (A) Anomaly
- (B) Amusement
- (C) Enigma
- (D) Cavalcade
- (E) Catastrophe

48. Replace the number with the word(s) that best fit(s) the meaning of the passage as a whole.

- (A) Vacuum
- (B) Twist
- (C) Lacuna
- (D) Effect
- (E) Triviality

49. Replace the number with the word(s) that best fit(s) the meaning of the passage as a whole.

The children were mesmerized by the _____ of colors in the sky after the storm.

- (A) Cluster
- (B) Rainbow
- (C) Parade
- (D) Horde
- (E) Chain

50. Replace the number with the word(s) that best fit(s) the meaning of the passage as a whole.

- (A) Trappings
- (B) Futility
- (C) Concoction
- (D) Treatise
- (E) Modality

Section - II

Reading Comprehension

Directions: Each passage is followed by questions based on its content. Answer the questions on the basis of what is directly stated in each of the passages or can be inferred from it.

There are millions of children in India, who cannot, for a variety of reasons, be protected by their parents and adult family. They maybe dead, or alcoholic, or violent and abusive, or in jail, or lost, or have abandoned their child. The parents may also be themselves destitute, homeless, gravely ill or disabled, and therefore unable to care for their children without support. The child, who has no home or settled place or abode and any ostensible means of subsistence maybe at risk in other ways as well: due to riots, natural disasters, war and militant conflict; disabilities and incurable terminal ailments, with no one who can support or look after the

child; when a child is grossly abused or tortured; is inducted into drug abuse or trafficking; child marriage and child labor. In all such situations, it is the State, which is both morally and legally responsible to protect, nurture and raise each child.

However, at present, the State in India invests miniscule resources in child protection. India today is a youthful nation: 19 percent of the children in the world live within its boundaries, and more than one-third of the population is below 18 years. Accounting for the largest number of children in work, and the second largest number of children affected by HIV, India arguably has the highest number of children facing exploitation and neglect in the world. But the investment on child protection was a shocking 0.034 per cent of the budget.

Traditionally, public authorities have tried to accomplish their duty of protecting children who are at risk mainly by locking away large numbers of these children in State-run, closed institutions for many years until the child grows to adulthood, and soon after the child comes of age by abruptly discharging the child without any further support into the larger society. Private and religious charities also sometimes run orphanages for such children, but they are usually run on similar custodial principles of raising the child in confined and overly disciplined environments. For children who conflict with the law, there are statutory 'special homes' to which they are usually confined in conditions similar to jails. For many years, these children also shared adult jails, and many illegally continue to do so.

It is both absurd and heartless for children to be locked up only because they have no one to protect them. It is argued that this is done for the sake of the child: if the child was free in the community, the State would be unable to protect the child from abuse, and therefore she is locked up for her own good. This is quite illogical. The State must find ways to protect the child who is in need of care in ways that respect the child's right to a happy and free childhood, while at the same time ensuring her protection, and her rights to food, education, health care, recreation, love and security.

51. According to the passage, 'special homes' are statutorily run for:

- (A) Children who are gravely ill or disabled
- (B) Orphans and children affected by natural disasters and riots
- (C) Children with incurable terminal ailments
- (D) Destitute children and children who are addicted to drugs
- (E) Juvenile delinquents

52. It is evident from the passage that all these institutions are devoid of:

- (A) Requisite facilities
- (B) Minimum infrastructure
- (C) Safety arrangements
- (D) Love and affection

(E) Community interaction

53. It becomes an obligation for the State to take moral and legal responsibility in the case of children

- (a) Who are badly abused
 - (b) Whose parents are seriously ill
 - (c) Who are orphaned or abandoned
 - (d) Whose parents are destitute and homeless
 - (e) All the above
-

54. Pick out the statement, which is true.

- (a) India accounts for the largest number of children engaged in work
 - (b) The author feels that it is quite reasonable to keep the neglected children in jails to ensure their safety
 - (c) Orphanages run by private charities do not enforce strict discipline on the inmates
 - (d) A huge amount in the Indian budget is reserved for child protection
 - (e) Compared to the rest of the countries in the world, India has the least number of children, who are affected by HIV
-

55. Pick out the word which is a close synonym of ‘ostensible’ as used in the passage.

- (A) Apprehensive
 - (B) Rigid
 - (C) Contemptible
 - (D) Apparent
 - (E) Unreal
-

56. It may be inferred from the passage that it is the right of every child to have a/an

- (A) Luxurious life
- (B) Special identity in the society
- (C) Individual status
- (D) Happy and free childhood
- (E) Free access to higher education

57. What have been the State authorities doing all these years?

- (A) They have been strictly supervising the State-run homes and similar charitable organizations which give shelter to homeless children
- (B) They have been keeping huge numbers of neglected children in State-run homes and would suddenly send them out into the society as soon as they become adults
- (C) They have been trying to bring reformation in the minds of children who display socially unacceptable behavior
- (D) They have been running schools with the prime motto of sending out young offenders as changed persons
- (E) They have been providing state-of-the-art facilities in order to attract more such children to these homes

58. What is the central theme of this passage?

- (A) It recommends that State-run institutions should be run on the same lines and follow the model of religious charities
- (B) It makes a comparative study about State-run homes and orphanages run by private organizations
- (C) It draws conclusions on a study based on ‘children’s jails’
- (D) It critically analyses the deplorable conditions in State-run homes
- (E) It focuses on the child, who is in need of State support

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and more than one-third of the population is below 18 years. Accounting for the largest number of children in work, and the second largest number of children affected by HIV, India arguably has the highest number of children facing exploitation and neglect in the world. But the investment on child protection was a shocking 0.034 per cent of the budget.

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59. Which of the following pairs have synonymous words?

- (A) Commitment and Promotion
- (B) Inequality and Racism
- (C) Fervour and Independence
- (D) Gesture and Acknowledgment
- (E) Foundation and Bedrock

60. Choose the statement that is true about Soyinka in the context of the passage.

- (A) He is a strong supporter of Africa's glorious past
- (B) He was kept in solitary confinement for more than a decade
- (C) He is the nominated member of UNESCO
- (D) He was expelled from his country for his rebellious nature
- (E) He has lived a purposeful life

61. According to the author's opinion, all the following words describe Soyinka except that he is a/the:

- (A) Frank social critic
 - (B) Champion of human rights
 - (C) Political activist
 - (D) Megalomaniac
 - (E) Conscience of Africa
-

62. Which of the following words aptly substitutes the phrase ‘a pathological ego-tist’ as used in the passage?

- (A) Critic
 - (B) Megalomaniac
 - (C) Ambassador
 - (D) Dictator
 - (E) Crusader
-

63. Pick out the synonym of ‘hilarious’ as used in the passage.

- (A) Amusing
 - (B) Deadly
 - (C) Awful
 - (D) Boisterous
 - (E) Pleasing
-

64. UNESCO made Soyinka its Goodwill Ambassador

- (A) As a recognition for his unwavering social commitment
 - (B) In order to acknowledge his exemplary literary skills
 - (C) For promoting African culture and human rights
 - (D) To honor him for his patriotic fervor
 - (E) Because he propagated African culture, literature and art
-

65. Soyinka’s popular work, Opera Wonyosi, throws light on the

- (A) Rich traditions and ritual practices of Nigerian society
- (B) Evils and signs of decadence in Nigerian society

- (C) Varied and rich cultural past of Nigeria
 - (D) Evils and structures of racism that existed in Nigeria
 - (E) Vibrant nature of African culture and human rights
-

66. What is the passage about?

- (A) It is a tribute on Wole Soyinka
 - (B) It is a review of his literary works
 - (C) It is his autobiography
 - (D) It is about his life in prison
 - (E) It is his Nobel Prize acceptance speech
-

Directions: Each passage is followed by questions based on its content. Answer the questions on the basis of what is directly stated in each of the passages or can be inferred from it.

Forty years after man first set foot on the moon, the United States has dispatched two unmanned lunar spacecraft to earth's natural satellite to pave the way for humans to return there. The search for deposits of water is high on the agenda of the Lunar Reconnaissance Orbiter (LRO) and the Lunar Crater Observation and Sensing Satellite (LCROSS). India's Chandrayaan-1 probe, too, may well join the quest. 'Discovering water on the moon would be like finding a gold mine,' said U.S. space agency NASA in a recent press document. It estimates that getting a bottle of water to the moon would run to about \$ 50,000 at current launch costs. Therefore, the ability to extract water locally would be immensely useful if humans want to establish bases on the celestial body.

It is believed that water could have been brought to the moon by comets and meteorites that have crashed on its surface over billions of years. Likewise, hydrogen ions streaming out from the sun might have combined with oxygen from chemical compounds in the lunar soil and turned into water. The question is whether all this water has boiled off in the face of the moon's scorching daytime temperatures and its low gravitational hold.

In a paper published in 1961, three scientists at the California Institute of Technology, put forward the idea that water 'may well be present in appreciable quantities in shaded areas in the form of ice'. The paper appeared in the Journal of Geophysical Research around the same time President John F. Kennedy committed the U.S, to landing a man on the moon. Some thirty years later, two U.S. space probes that went to the moon, Clementine and Lunar Prospector, provided evidence that water might persist as patches of ice mixed with soil at the bottom of craters at the poles. Sunlight never reaches the bottom of some craters at the lunar poles, which therefore remain at temperatures far below the freezing point of water. So these would be ideal locations for trapping water ice on the moon. But the evidence has been disputed and scientists continue to argue vigorously about whether or not earth's nearest neighbour holds

any water.

The LRO and the LCROSS were launched from Cape Canaveral in Florida. The two spacecraft, along with Chandrayaan-1, will undoubtedly throw a great deal of new light on the issue. Once the spacecraft is commissioned, a slew of instruments on it will look for signs of water ice and hydrogen in different ways. The LCROSS and the spent upper stage of the Atlas rocket that launched the two spacecraft have swung past the moon for the first time. NASA plans to send the empty upper stage, weighing over 2,000 kg, hurtling into a crater near the lunar south pole at a speed of about 9,000 km per hour.

67. How is the moon referred to in the passage?

- (A) (I) and (II) above
 - (B) (II) and (III) above
 - (C) (II) and (IV) above
 - (D) (II), (III) and (IV) above
 - (E) All (I), (II), (III) and (IV) above
-

68. Why is it necessary to extract water locally on the moon?

- (A) To carry on further research
 - (B) It is highly expensive to carry a bottle of water to the moon
 - (C) It would be greatly useful to humans if they want to set up bases on the moon
 - (D) It will become easy for the astronauts to stay there for a longer time
 - (E) It reduces the burden of carrying water for the astronauts
-

69. The main objective of sending the LRO and the LCROSS to the moon is to

- (A) Pave the way for the humans to return from the moon
 - (B) Find out if sunlight ever reaches some craters at the lunar poles
 - (C) Carry on complete research about the moon
 - (D) Establish bases on the celestial body
 - (E) Search for deposits of water
-

70. In the phrase, ‘slew of instruments’, the word ‘slew’ means

- (A) A large number
- (B) The assembled components

- (C) The automated components
 - (D) A restricted number
 - (E) An assortment
-

71. It can be inferred from the passage that the moon's:

- (A) Upper crust contains hydrogen
 - (B) Daytime temperatures are very high
 - (C) Lunar soil can hardly hold water
 - (D) Surface is covered with ice
 - (E) Gravitational hold is very high
-

72. Choose the statement that is true in the context of the passage.

- (A) Sunlight never reaches the surface of the moon
 - (B) Oxygen does not exist in any form on the moon
 - (C) It is not yet proved whether the moon holds any water or not
 - (D) The LRO and the LCROSS were launched in 1961
 - (E) There are gold mines on the moon
-

73. What is the belief about the existence of water on the moon?

- (A) It exists in the form of ice
 - (B) It is brought by comets and meteorites
 - (C) It is formed through chemical reaction
 - (D) It is present in considerable quantities in shaded areas
 - (E) All the above
-

74. What is the apt title of the passage?

- (A) Weather Conditions on the Moon
- (B) Searching for Water on the Moon
- (C) Moon – A Gold Mine for Many
- (D) India's Chandrayaan-1 Mission

75. What would be the best place for trapping the ice water on the moon?

- (A) Near the poles
 - (B) In shaded areas
 - (C) From any part of the moon
 - (D) Bottom of craters at the poles
-

Directions: Each passage is followed by questions based on its content. Answer the questions on the basis of what is directly stated in each of the passages or can be inferred from it.

‘When were you in Morocco?’ a globetrotter friend excitedly asked me. ‘Never been there, I’m keen to visit it, though,’ I sallied. ‘This is Morocco,’ he said emphatically, pointing to an image on the monitor. ‘This is Punjab,’ I countered. ‘It’s the Grand Mosque of Marakesh,’ he stressed. ‘It’s the Moorish Mosque in Kapurthala,’ I smiled. Our rebuttal session got a tad extended leaving my friend utterly flummoxed and I thought of bailing him out. ‘You’ve been partially accurate all along. The mosque is a replica.’ He was astounded. So are a host of others initially when they see the images of Kapurthala, an erstwhile royal province defined by its architectural grandeur. Their surprise springs not from the verity that a facsimile structure exists, but from the knowledge that it stands in Punjab!

The feisty agrarian land of Punjab has always been shy in boasting about its built heritage, instead letting its overenthusiastic bhangra and scrumptious tandoori chicken do most of the talking. Nonetheless, it does have stunning edifices dotting its landscape and is quite an indulgence for the history-digger. Amongst them all, Kapurthala is definitely the crowning glory. Its lineage dates back to founder, Jassa Singh Ahluwalia, an astute warrior, who played a pivotal role in crushing numerous invasions to become the first leader who consolidated large parts of Punjab. In a way, Jassa Singh laid the path for Punjab’s most exceptional monarch, Maharaja Ranjit Singh, to establish an impregnable Sikh empire years later.

However, Kapurthala owes its structural legacy to Maharaja Jagatjit Singh. A widely-travelled royal, his voyages allowed him to see exceptional architecture and he chose the blueprint of some of the finest in the world to adorn his State with. That’s how Kapurthala got the Moorish Mosque. Recreated by the French architect, Manteaux, on the pattern of the Koutoubia or Grand Mosque of Marakesh, Morocco’s signature structure, it was erected in 1930 at a cost of ‘ 4 lakh. Far removed from the Indo-Islamic, marble-domed mosques found around the country, it has instead a brick-work facade, no dome, a flat roofed entrance and, uniquely, a single cuboidal minaret.

What appealed instantly were the joyous colors that reflected a Mediterranean ambience. I was gripped by a rose pink wall meeting a lemon one round the corner, mustard-colored arches, glazed dark turquoise ridged tiles capping a hexagonal dome or the touch of green in its minaret. The intricate, brick-filigreed minaret is further adorned with a spire which is three copper balls in reducing size, signifying the traditional style of the Almohads, a dynasty that originated in 1121 A.D. with Ibn Tumart, a Berber tribe member of the Atlas Mountains; and by 1149 A.D., it had established its control over Marakesh. The Grand Mosque was built between 1184 and 1199 A.D. Centuries later, the Moorish Mosque in Punjab stood as a splendid link in the six degrees of separation from a passage of history that played out in distant Africa.

Today's Kapurthala has a reticent charm. In addition to this slice of Morocco, the town is dotted with other European replicas too. I observed a bit of France in the Jagatjit Palace, a close reproduction of the Palace of Versailles, that is now the Sainik School. A touch of Greece came across in the Jagatjit Club that's designed on the lines of the Acropolis. A bevy of places that completed the impressive line-up were the IndoSaracenic Jhagar Singh War Memorial; Elysee Palace that's now MGN Public School; the Islamic-patterned former Durbar Hall which at present serves as the District Court; and the Randhir College that was set up in 1856 and named after a former ruler.

76. Pick out the antonym of 'impregnable' as used in the passage.

- (A) Vulnerable
- (B) Courageous
- (C) Senile
- (D) Strong
- (E) Safe

77. A host of author's friends were surprised to know:

- (A) That the author visited Morocco and the Grand Mosque of Marakesh
- (B) That Kapurthala, an erstwhile royal province, has the Grand Mosque of Marakesh
- (C) That the Grand Mosque of Marakesh is a replica of the Moorish Mosque that stands in Kapurthala
- (D) That an exact copy of the Grand Mosque of Marakesh stands in Punjab
- (E) That Punjab is much more than bhangra and tandoori chicken

78. The passage opens with a/an

- (A) Reproach
- (B) Denigration

- (C) Refutation
 - (D) Approval
 - (E) Tiff
-

79. How did Kapurthala get the Moorish Mosque?

- (A) Jassa Singh Ahluwalia got it constructed on the lines of Elysee Palace
 - (B) The French architect, Manteaux, built it as a replica of the Acropolis
 - (C) Ibn Tumart, a Berber tribe member of the Atlas Mountains, constructed it as a close reproduction of the Palace of Versailles
 - (D) Maharaja Ranjit Singh added a special charm to Kapurthala by building the Mosque as a fine representation of Indo-islamic culture
 - (E) Maharaja Jagatjit Singh's admiration for the architectural wonders made him bring blueprints of some of the finest in the world to adorn the State with
-

80. According to the author, Punjab is shy of boasting about

- (A) Its rich cultural diversity
 - (B) Its architectural marvels
 - (C) Its agrarian wealth
 - (D) Its traditional bhangra dance
 - (E) Its typical dish tandoori chicken
-

Section - III
Quantitative Aptitude

81. If p, q, r and s are four positive integers such that $pqr s = 1$, what is the minimum value of

$$(2 + p)(3 + q)(4 + r)(5 + s)?$$

- (1) 1
 - (2) 12
 - (3) 120
 - (4) 240
 - (5) 360
-

82. Anush has fifteen coins and five boxes labeled A, B, C, D and E. He drops coins into all the boxes such that, each box has at least one coin and no two boxes have the same number of coins. Later, he found that B contains more coins than E and C contains the least number of coins when compared to A and D. If B contains twice the number of coins in E, then which of the following is necessarily true?

- (1) C has an even number of coins
- (2) C has an odd number of coins
- (3) A has an odd number of coins
- (4) A has an even number of coins
- (5) D has more coins than A

83. Let a, b, c be distinct digits. Consider a two-digit number 'ab' and a three-digit number 'ccb', both defined under the usual decimal number system. If $(ab)^2 = ccb$ and $ccb < 300$, then the value of b is

- (A) 0
- (B) 1
- (C) 2
- (D) 5
- (E) 6

84. A group of 630 children is arranged in rows for a photograph session. Each row contains three children less than the row in front of it. Which of the below mentioned number of rows is not possible?

- (A) 3
- (B) 4
- (C) 5
- (D) 6
- (E) 7

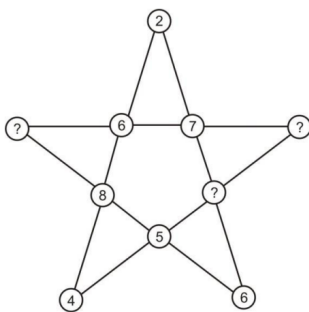
85. A shipping clerk has 6 boxes of different but unknown weights, each weighing less than 100 kg. The clerk weighs the boxes in pairs. The weights thus obtained are 106, 109, 110, 112, 114, 115, 116, 118, 119, 120, 121, 122, 123, 124, and 126 kg, respectively. What is the weight of the heaviest box?

- (A) 68 kg
- (B) 67 kg
- (C) 66 kg
- (D) 65 kg
- (E) 64 kg

86. Consider the set $S = 1, 2, 3, \dots, 10001$. How many arithmetic progressions with at least 3 elements can be formed from the elements of S that start with 1 and end with 1000?

- (A) 6
- (B) 7
- (C) 8
- (D) 12
- (E) 13

87. A boy has some coins with some value on them. He arranges the coins in the form of a star as shown below such that the sums of the numbers in the four circles along any line segment of the star are all equal. What is the sum of the missing numbers?



- (A) 10
- (B) 12
- (C) 13
- (D) 14
- (E) 15

88. A rectangular floor is fully covered with square tiles of identical size. The tiles on the edges are white and the tiles in the interiors are black. The number of white tiles is same as the number of black tiles. Which of the following can be the

possible number of tiles along one edge of the floor?

- (A) 10
 - (B) 12
 - (C) 13
 - (D) 14
 - (E) 15
-

89. When a two-digit number is divided by the sum of its digits, the quotient is 7 and the remainder is 6. If one of the digits of the number is three, then what is the difference of the digits?

- (A) 2
 - (B) 3
 - (C) 4
 - (D) 5
 - (E) 6
-

90. The sum of four consecutive two-digit odd numbers, when divided by 10, becomes a perfect square. Which of the following can possibly be one of these four numbers?

- (1) 21
 - (2) 25
 - (3) 41
 - (4) 67
 - (5) 73
-

91. A trader marks an article $4x\%$ above the cost. He gives a discount of $(x + 3)\%$ and gets a profit of $(2x - 3)\%$. If he gives a discount of $\frac{2x}{3}\%$, what would be his gain percent?

- (1) 26.5%
 - (2) 42.6%
 - (3) 56.2%
 - (4) 60.4%
 - (5) 68.8%
-

92. An equilateral triangle BPC is drawn inside a square ABCD. What is the value of the angle APD?

- (1) 75
- (2) 90
- (3) 120
- (4) 135
- (5) 150

93. There are two solid pyramids, each having 8 edges of length 8 cm each. These two pyramids are moulded to form a hexagonal pyramid with length of each side as 8 cm. What is the slant height of the new pyramid?

- (A) $\frac{8}{3}\sqrt{\frac{35}{3}}$ units
- (B) $8\sqrt{\frac{35}{3}}$ units
- (C) $2\sqrt{\frac{35}{3}}$ units
- (D) $3\sqrt{35}$ units
- (E) $8\sqrt{35}$ units

94. There are 8 tasks and 8 persons. Task 1 cannot be assigned either to person 1 or to person 2 or to person 8; task 2 must be assigned to either person 3 or person 4 or person 5. Every person is to be assigned one task. In how many ways can the tasks be assigned?

- (A) 3360
- (B) 5040
- (C) 6720
- (D) 8640
- (E) 20160

95. If $f(x, y) = 2x^2 + 3xy - 3y^2 + 3$, then what is the value of $f(f(3, 2), f(-2, -1))$?

- (A) 1257
- (B) 1527
- (C) 1787
- (D) 1997

96. When the digits of the number 14 are reversed, the number increases by 27. How many other two-digit numbers increase by 27 when their digits are reversed?

- (A) 5
 - (B) 6
 - (C) 7
 - (D) 8
 - (E) 9
-

97. Two pipes A and B would fill a cistern in 30 and 40 minutes respectively. Both pipes are opened. Determine the time the first pipe can be turned off so that the cistern may be just filled in 20 minutes.

- (A) After 10 minutes
 - (B) After 15 minutes
 - (C) After 20 minutes
 - (D) After 22 minutes
 - (E) After 25 minutes
-

98. Mr. Avinash manufactures and sells a single product at a fixed price in a niche market. The selling price of each unit is 30. On the other hand, the cost, in rupees, of producing x units is $240 + bx + cx^2$, where b and c are constants. Avinash noticed that doubling the daily production from 20 to 40 units results in an increase in the daily production cost by 66.66 percent. However, an increase in daily production from 40 to 60 units results in an increase of only 50 percent in the daily production cost. Assume that demand is unlimited and that Avinash can sell as much as he can produce. His objective is to maximize the profit. How many units should Mr. Avinash produce daily?

- (A) 70
 - (B) 100
 - (C) 130
 - (D) 150
 - (E) 180
-

99. Two identical circles intersect so that their centres, and the points at which they intersect, form a square of side 2 cm. What is the area of the portion that is common to both the circles?

- (A) $2(\pi - 2) \text{ cm}^2$
 - (B) $2(\pi - 1) \text{ cm}^2$
 - (C) $2\pi \text{ cm}^2$
 - (D) $(\pi - 2) \text{ cm}^2$
 - (E) $(\pi - 1) \text{ cm}^2$
-

100. What is the number of distinct terms in the expansion of $(x + y + z)^{25}$?

- (A) 25
 - (B) 50
 - (C) 125
 - (D) 325
 - (E) 351
-

101. There are five containers A, B, C, D and E each containing 1200 litres of water. The water is being pumped from one tank to another as follows:

From A to B at 30 litres/minute
From C to A at 60 litres/minute
From A to E at 20 litres/minute
From C to D at 50 litres/minute
From D to B at 80 litres/minute
From B to C at 60 litres/minute
From E to D at 10 litres/minute
From E to A at 10 litres/minute

Which tank gets emptied first?

- (1) A
 - (2) B
 - (3) C
 - (4) D
 - (5) E
-

102. In triangle DEF shown below, points A, B and C are taken on DE, DF and EF respectively such that $EC = AC$ and $CF = BC$. If angle D = 40 degrees, then what is angle ACB in degrees?

- (1) 140
- (2) 70
- (3) 100
- (4) 110
- (5) 120

103. Saga Internationals have conducted a chess competition between young boys and girls, wherein every individual has to play exactly one game with every other individual. It was found that in 66 games, both players were girls, and in 210 games, both were boys. Find the number of games in which one player was a boy and the other was a girl.

- (A) 210
- (B) 222
- (C) 252
- (D) 276
- (E) 290

104. A slab of ice 8 inches in length, 11 inches in breadth and 2 inches thick was melted and resolidified into the form of a rod of 8 inches diameter. The length of such a rod, in inches, is nearest to

- (A) 3.0
- (B) 3.5
- (C) 4.0
- (D) 4.5
- (E) 2.5

105. N is a positive integer where $10 < N < 501$. Let P and S denote the product of the digits of N and the sum of the digits of N respectively. The number of integers in the given range for which $P + S = N$ is

- (A) 81
- (B) 49

- (C) 29
 - (D) 16
 - (E) 9
-

106. A dry fruit seller purchased 3 kinds of nuts at the rate of 100/kg, 80/kg, and 60/kg. He then mixed them, respectively, in the ratio 3 : 4 : 5 by weight and sold the same to a customer at 50% profit. The price at which he sold to the customer is

- (A) 110
 - (B) 90
 - (C) 70
 - (D) 115
 - (E) 120
-

107. If $S = (1 \times 1!) + (2 \times 2!) + (3 \times 3!) + \cdots + (11 \times 11!)$, then $(S + 5)$ when divided by $12!$ leaves a remainder of

- (A) 0
 - (B) 1
 - (C) 4
 - (D) 6
 - (E) 7
-

108. Two positive integers differ by 5. The sum of their reciprocals is $\frac{9}{14}$. Then one of the numbers is:

- (A) 3
 - (B) 2
 - (C) 1
 - (D) 4
 - (E) 6
-

109. P, Q, S and R are points on the circumference of a circle of radius r , such that PQR is an equilateral triangle and PS is the diameter of the circle. What is the perimeter of the quadrilateral PQSR?

- (A) $4r$
 - (B) $2r\sqrt{3}$
 - (C) $2r(1 + \sqrt{3})$
 - (D) $4r\sqrt{3}$
 - (E) $4r(1 + \sqrt{3})$
-

110. Ujagar and Keshab attempted to solve a quadratic equation. Ujagar made a mistake in writing down the constant term. He ended up with the roots (4, 3). Keshab made a mistake in writing down the coefficient of x . He got the roots as (3, 2). What will be the exact roots of the original quadratic equation?

- (A) (6, 1)
 - (B) (-3, -4)
 - (C) (4, 3)
 - (D) (-4, -3)
 - (E) (5, -3)
-

Section - IV
Data Adequacy and Data Interpretation

Directions: Each question given below has a problem and two statements numbered (1) and (2) giving certain information. You have to decide if the information given in the statements is sufficient for answering the problem. Indicate your answer as:

111. A family consists of 6 members P, Q, R, S, T and U. How is P related to R?

Statement 1: U and T have two children R and S. Q is the spouse of R and P is the uncle of S.

Statement 2: R and Q have a daughter S. S is married to U, who is the son of P and T.

- (a) If the data in statement (1) alone is sufficient to answer the question
 - (b) If the data in statement (2) alone is sufficient to answer the question
 - (c) If the data in both the statements together are needed to answer the question
 - (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
 - (e) If neither statement (1) nor statement (2) suffices to answer the question
-

112. Mahesh and Ramesh are studying in the same class. How many students are there in their class if the difference in their ranks is 8?

Statement 1: Mahesh has equal number of students, who are above as well as below, in terms of rank.

Statement 2: The number of students above Ramesh's rank is equal to the number of students between Mahesh and Ramesh's ranks.

- (a) If the data in statement (1) alone is sufficient to answer the question
 - (b) If the data in statement (2) alone is sufficient to answer the question
 - (c) If the data in both the statements together are needed to answer the question
 - (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
 - (e) If neither statement (1) nor statement (2) suffices to answer the question
-

113. A, B, C, D who are married to P, Q, R, S are sitting opposite to each other. No one is sitting in front of his or her spouse. Who is sitting opposite to B?

Statement 1: A and C are married to Q and S respectively and R is sitting opposite to the only person between B and D.

Statement 2: C, B and P are sitting in corners. Q is sitting opposite to the only person between C and A.

- (a) If the data in statement (1) alone is sufficient to answer the question
 - (b) If the data in statement (2) alone is sufficient to answer the question
 - (c) If the data in both the statements together are needed to answer the question
 - (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
 - (e) If neither statement (1) nor statement (2) suffices to answer the question
-

114. Akash purchased a pair of jeans. What is its marked price?

Statement 1: After giving a discount of 15% on the marked price, the shopkeeper earns a profit of 10%.

Statement 2: The shopkeeper gets every pair of jeans from the market outlet for 600.

- (a) If the data in statement (1) alone is sufficient to answer the question
 - (b) If the data in statement (2) alone is sufficient to answer the question
 - (c) If the data in both the statements together are needed to answer the question
 - (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
 - (e) If neither statement (1) nor statement (2) suffices to answer the question
-

115. The average weight of Abhi and Deeru is 40 kg. What is the average weight of Abhi, Banu, Chaitu and Deeru?

Statement 1: Average weight of Abhi, Banu and Chaitu is 45 kg.

Statement 2: Average weight of Banu, Chaitu and Deeru is 40 kg.

- (a) If the data in statement (1) alone is sufficient to answer the question
 - (b) If the data in statement (2) alone is sufficient to answer the question
 - (c) If the data in both the statements together are needed to answer the question
 - (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
 - (e) If neither statement (1) nor statement (2) suffices to answer the question
-

116. If x is positive, is $\sqrt[4]{x} > \sqrt[3]{x}$?

Statement 1: $0.5 < x < 2$.

Statement 2: $12x^2 - 7x + 1 = 0$.

- (a) If the data in statement (1) alone is sufficient to answer the question
 - (b) If the data in statement (2) alone is sufficient to answer the question
 - (c) If the data in both the statements together are needed to answer the question
 - (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
 - (e) If neither statement (1) nor statement (2) suffices to answer the question
-

117. Amar, Bakshi and Chetan together invest 24,000 in a business. What is the profit share of Bakshi?

Statement 1: The ratio of investments of Amar, Bakshi and Chetan is 4 : 6 : 9.

Statement 2: Ratio of their profits is equal to the ratio of their investments.

- (a) If the data in statement (1) alone is sufficient to answer the question
 - (b) If the data in statement (2) alone is sufficient to answer the question
 - (c) If the data in both the statements together are needed to answer the question
 - (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
 - (e) If neither statement (1) nor statement (2) suffices to answer the question
-

118. 'a' and 'b' are two natural numbers. Is 'b' a perfect square?

Statement 1: 'b' is divisible by $(a + 1)^2$.

Statement 2: $b < 100$.

- (a) If the data in statement (1) alone is sufficient to answer the question
 - (b) If the data in statement (2) alone is sufficient to answer the question
 - (c) If the data in both the statements together are needed to answer the question
 - (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
 - (e) If neither statement (1) nor statement (2) suffices to answer the question
-

119. a , b , and c are three numbers selected from a set containing ten numbers 0 to 9. Is $(a + b + c)$ a multiple of 9?

Statement 1: Three-digit number abc is a multiple of 9.

Statement 2: $(a \times b) + c$ is a multiple of 9.

- (a) If the data in statement (1) alone is sufficient to answer the question
 - (b) If the data in statement (2) alone is sufficient to answer the question
 - (c) If the data in both the statements together are needed to answer the question
 - (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
 - (e) If neither statement (1) nor statement (2) suffices to answer the question
-

120. On a particular day, who came earlier, Anita or Vani?

Statement 1: Anita came not later than 2 PM on that day.

Statement 2: Vani came not earlier than 1 PM on that day.

- (a) If the data in statement (1) alone is sufficient to answer the question
 - (b) If the data in statement (2) alone is sufficient to answer the question
 - (c) If the data in both the statements together are needed to answer the question
 - (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
 - (e) If neither statement (1) nor statement (2) suffices to answer the question
-

121. A number is picked randomly from a given set of numbers. What is the probability that it is divisible by 3?

Statement 1: The set contains 10 consecutive integers.

Statement 2: The first number of the set is divisible by 3.

- (a) If the data in statement (1) alone is sufficient to answer the question
- (b) If the data in statement (2) alone is sufficient to answer the question

- (c) If the data in both the statements together are needed to answer the question
- (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
- (e) If neither statement (1) nor statement (2) suffices to answer the question

122. a, b and c are prime numbers. What is the value of $a \times b \times c$?

Statement 1: $a + b + c = 12$.

Statement 2: 6300 is divisible by $a \times b \times c$ and 1890 is divisible by $b \times c$.

- (a) If the data in statement (1) alone is sufficient to answer the question
- (b) If the data in statement (2) alone is sufficient to answer the question
- (c) If the data in both the statements together are needed to answer the question
- (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
- (e) If neither statement (1) nor statement (2) suffices to answer the question

121. A number is picked randomly from a given set of numbers. What is the probability that it is divisible by 3?

Statement 1: The set contains 10 consecutive integers.

Statement 2: The first number of the set is divisible by 3.

- (a) If the data in statement (1) alone is sufficient to answer the question
- (b) If the data in statement (2) alone is sufficient to answer the question
- (c) If the data in both the statements together are needed to answer the question
- (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
- (e) If neither statement (1) nor statement (2) suffices to answer the question

122. a, b and c are prime numbers. What is the value of $a \times b \times c$?

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- (a) If the data in statement (1) alone is sufficient to answer the question
- (b) If the data in statement (2) alone is sufficient to answer the question
- (c) If the data in both the statements together are needed to answer the question
- (d) If either statement (1) alone or statement (2) alone is sufficient to answer the question

(e) If neither statement (1) nor statement (2) suffices to answer the question

125. If a real estate agent received a commission of 10% of the selling price of a certain house, what was the selling price of the house?

Statement 1: The difference between the selling price and the real estate agent's commission is 630,000.

Statement 2: The selling price is 350% of the original purchase price of 200,000.

- (a) If the data in statement (1) alone is sufficient to answer the question
(b) If the data in statement (2) alone is sufficient to answer the question
(c) If the data in both the statements together are needed to answer the question
(d) If either statement (1) alone or statement (2) alone is sufficient to answer the question
(e) If neither statement (1) nor statement (2) suffices to answer the question

Directions: For the question numbers 126 to 130, a table and a pie graph are given. Study the data carefully and answer the following questions and choose the best answer from the five alternatives given below the question.

The following tables provide information regarding total marks and marks in individual subjects of five students. Maximum mark in each subject is 100 and passing mark is 40. All the students passed in each subject with integer value marks.

Students	Total marks	Subjects				
		A	B	C	D	E
Aman	350					
Alekhya	400		60		90	
Deepak	384					
Sowmya	430		86	94		88
Reshma	361	75	54			80
Total		402	302		430	

Additional information:

- Aman secured three different square number scores in three subjects and equal non-square marks in D and E. In addition, he scored the highest in subject A.
- Alekhya's highest score is 90 in subject D and she scored equal marks in C and E.
- Deepak scored the highest number (>95) in subject D which is 9 more than his score in subject A and his score in subject C is 14 more than his score in B. Except in A, remaining all scores are prime numbers.
- Reshma scored 10 more marks in subject D than in subject C.

126. What is Deepak's score in subject E?

- (a) 71
 - (b) 73
 - (c) 79
 - (d) 83
 - (e) 89
-

127. How many marks did Alekhya score in subject E?

- (a) 72
 - (b) 75
 - (c) 78
 - (d) 80
 - (e) 85
-

128. How many marks did Reshma secure in subject D?

- (a) 61
 - (b) 68
 - (c) 71
 - (d) 75
 - (e) 81
-

129. What is the difference between the marks scored in subject A by Reshma and Deepak?

- (a) 10
 - (b) 13
 - (c) 18
 - (d) 20
 - (e) 21
-

130. What is Aman's score in subject D?

- (a) 60
- (b) 68
- (c) 70
- (d) 78
- (e) 81

III. Directions: For the question numbers 131 to 135, a bar graph is given. Study the graph carefully and answer the following questions and choose the best answer from the five alternatives given below the question.

The following tables provide the statistics of football matches played by 8 teams A, B, C, D, E, F, G and H at three cities, X, Y and Z in a period of 5 years.

At city X							
S. No.	Team	Total matches	Matches Won	Matches Lost	Tie	Matches abandoned	Win %
1	A	307	195	102	3	7	65
2	B	155		58	2	5	
3	C	205	125	70	5	5	
4	D		110		0	0	68.75
5	E	139	85	50	1	3	
6	F	135	80	40	5	10	
7	G	111		29		11	65
8	H	83		58	2	3	25

At city Y							
S. No.	Team	Total matches	Matches Won	Matches Lost	Tie	Matches abandoned	Win %
1	A	102	69	30	1	2	69
2	B	82	44	36	0	2	
3	C		90			5	45
4	D	158		78	12	8	
5	E		180	120		1	60
6	F	86		26	4	6	
7	G	163	80	78	2	3	50
8	H	105		74	1		25

At city Z							
S. No.	Team	Total matches	Matches Won	Matches Lost	Tie	Matches abandoned	Win %
1	A	197	95	90	5	7	50
2	B	187		123	3	7	
3	C	161	40	117			25
4	D	126	50	74	1		
5	E		80	116	4	4	40
6	F	102		54	1		45
7	G	152	45		1	2	
8	H	92	18		1	2	

131. At which city has team B the highest winning percentage?

- (a) City X
- (b) City Y
- (c) City Z
- (d) At both City X and City Y
- (e) Cannot be determined

132. What is the total number of matches abandoned at city Z?

- (a) 24
- (b) 25
- (c) 26
- (d) 27
- (e) Cannot be determined

133. What is the approximate winning percentage of team A in all the matches they have played?

- (a) 51%
- (b) 61%
- (c) 66%
- (d) 71%
- (e) 74%

134. What is the approximate ratio of total number of matches won by eight teams in cities X and Y?

- (a) 285 : 199
- (b) 385 : 299
- (c) 35 : 27
- (d) 42 : 25
- (e) 299 : 265

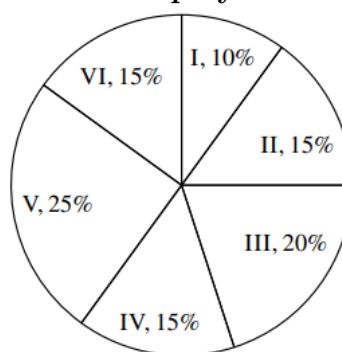
135. Out of the total matches played by team E at city Y, it won 180 matches. In how many number of matches was E in a tie position?

- (a) 4
- (b) 3
- (c) 2
- (d) 1
- (e) 0

Directions: For the question numbers 136 to 140, a graph is given. Study the graph carefully and answer the following questions and choose the best answer from the five alternatives given below the question.

In a company, there are 1200 employees working in six different departments. The table below gives the ratio of men and woman in each department and the pie chart describes the percentage distribution of employees in each department.

Department	Men to Women Ratio
I	3 : 2
II	4 : 1
III	2 : 3
IV	7 : 8
V	1 : 2
VI	5 : 4



136. What is the angle made by III department sector in the pie chart given?

- (a) 24°
- (b) 30°
- (c) 45°
- (d) 54°

(e) 72°

137. In which department are the men maximum?

- (a) I
 - (b) II
 - (c) III
 - (d) V
 - (e) VI
-

138. What is the total number of women in department II and III together?

- (a) 200
 - (b) 236
 - (c) 240
 - (d) 242
 - (e) 280
-

139. If 100 men and 50 women join department V, what is the ratio of men and women?

- (a) 1 : 1
 - (b) 1 : 2
 - (c) 2 : 1
 - (d) 3 : 4
 - (e) 4 : 5
-

140. What is the ratio of men in the department II to the women in the department V?

- (a) 18 : 25
- (b) 22 : 35
- (c) 32 : 45
- (d) 42 : 55

(e) 31 : 25
