All India Civil Services Coaching Centre
(Under the aegis of Government of Tamil Nadu)

TEST BOOKLET
General Studies: Paper II – CSAT

Time Allowed: 2 Hours   **Maximum Marks: 200**

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET

2. You have to enter your Name on the Test Booklet

3. This Test Book contains 80 items (questions). Each it comprises four responses (answers). You will select the response, which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response, which you consider the best. In any case, choose ONLY ONE response for each item.

4. You have to mark all your response ONLY on the separate sheet provided along with the Test Booklet.

5. All items Carry equal marks. There will be **penalty (negative marking)** for wrong answers marked by you in the Answer sheet.

6. There are four alternatives for the answers to every question. For each question for which a wrong answer has been given by the candidate, one third (⅓) of the marks assigned to that question will be deducted as penalty.

7. If a candidate gives more than one answer, it will be treated as a wrong answer even if one of the given answers happens to be correct and there will same penalty as above for that question.

8. If a question is left blank i.e., no answer is given by the candidate, there will be no penalty for that question.

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO

Time Allowed: 2 Hours   **Maximum Marks: 200**

Directions (Q. No. 1-3): Examine the information given below and answer the questions that follow.

Five males A, B, C, D and E and four females P, Q, R and S are to be divided into three debatingteams of three persons each. The teams are designated as the Saviours team, the Warriors team and the Kings team.

1. C, D and E must be the captains of their teams.
2. A and B cannot be in the same team.
3. P and E cannot be in the same team.
4. R must be on a team with either A or D or both.
5. R must be on the Saviours team.

1. **Which of the pairs of students could beon the same team as P? .**
    (a) A and D
    (b) D and E
    (c) D and S
    (d) Q and R

2. **Any of the following pairs of studentscould be on the Saviours team except**
    (a) A and E
    (b) C and D
    (c) D and P
    (d) D and S

3. **If E is the only male in his team, thenwhich of the following pairs could be the other members of his team?**
    (a) P and Q
    (b) R and S

    (c) R and Q
    (d) S and Q

4. **Mrs Joshi's expenditure and savings are in the ratio of 3 : 2. Her income increases by 10%. Her expenditure also increases by 20%. How much percent do her savings change?**
    (a) 7%
    (b) 6%
    (c) 10%
    (d) 11%

Passage 1

The former tenant of our house, a priest, had died in the back drawing-room. Air, musty from having been long enclosed, hung in all the rooms, and the waste room behind the kitchen was littered with old useless papers. Among these I found a few paper covered books, the pages of which were curled and damp : The abbot, by Walter Scott, the Devout Communicant, and The Memoirs of Vidocq. I liked the last best because its leaves were yellow. The wild garden behind the house contained a central apple-tree and a few straggling bushes, under one of which I found the late tenant's rusty bicycle-pump. He had been a very charitable priest; in his will he had left all his money to institutions and the furniture of his house to his sister.

5. **The author**
    (a) Was sad about the death of his tenant.
    (b) Was looking for a book in the room of the old priest.

(c) Felt suffocated inside the house due to the musty air in the rooms.

(d) Saw some useless papers in the waste room behind the kitchen.

6. Consider the following statements :
1. The tenant in the author's house was an avid reader.
2. According to the author the priest was aphilanthropic personality.
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

7. The priest
(a) Owned a bicycle-pump.
(b) Planted an apple tree.
(c) Hand no relatives.
(d) Was a reserved man.

Passage 2

Little Chandler's thoughts ever since lunch-time had been of his meeting with Gallaher, of Gallaher's invitation, and of the great city London where Gallaher lived. He was called Little Chandler because, though he was but slightly under the average stature, he gave one the idea of being a little man. His hands were white and small, his frame was fragile, his voice was quiet and his manners were refined. He took the greatest care of his fair silken hair and moustache, and used perfumediscreetly on his handkerchief. The half moons of his nails were perfect, and then he smiled you caught a glimpse of a row of childish white teeth.

8. Gallaher
(a) Had a very high social status.
(b) was a relative of Little Chandler's
(c) Liked little Chandler a lot.
(d) Invited Little Chandler.

9. Little Chandler

(a) Wondered about Gallaher's invitation.
(b) Had small and dark hands.
(c) Was a man with silken hair.
(d) Thought of himself as a small man.

10. Consider the following statements :
1. Little Chandler was secretive about his usage of perfume.
2. Little Chandler had a beautiful smile.
With reference to the above passage, which of the given statements is/are valid?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

11. ABC in a right angled triangle, rightangled at C and p is the length of the perpendicular from C on AB. If *a, b* and *c* are the length of the sides BC, CA and AB respectively, then

(a) $\dfrac{1}{p^2} = \dfrac{1}{b^2} - \dfrac{1}{a^2}$

(b) $\dfrac{1}{p^2} = \dfrac{1}{a^2} + \dfrac{1}{b^2}$

(c) $\dfrac{1}{p^2} + \dfrac{1}{a^2} = -\dfrac{1}{b^2}$

(d) $\dfrac{1}{p^2} = \dfrac{1}{a^2} - \dfrac{1}{b^2}$

Directions (12 & 13): Seven people C, D, E, F, G, H and I are to work in two factories, Factory A and Factory B. The factories need a minimum of three and a maximum of four workers for their new projects. But following rules have to be taken into account before the workers are put on their respective jobs.

Rule 1 : C and D cannot work together in the same factory.

Rule 2 : H and F have to work for the same factory.

Rule 3 : If D and E work for the same factory, then the factory must hire four employees.
Rule 4 : G has to work in factory B.
Rule 5 : Factory A may hire only four employees if D is one of those employees.

Answer the following questions based on the information given above:

12. **Which of the following is a possibleplacement of the employees?**
    (a) Factory A:D, E, C and I Factory B:F, G and H
    (b) Factory A:D, H, E and F Factory B:C, G and I
    (c) Factory A:C, E and FFactory B:D, G, H and I
    (d) Factory A:D, E and IFactory B:C, F, G and H

13. **If D works for Factory A, then which ofthe following statements must be false?**
    (a) E works in Factory A
    (b) I works in Factory A
    (c) H may not work for Factory A
    (d) F and I work for the same Factory

14. **The numbers are arranged accordingto a certain rule. Find the numberindicated by question mark.**

    9 ▲ 8 → 1

    6 ▲ 4 → 8

    10 ▲ 7 → ?

    (a) 15
    (b) 24
    (c) 27
    (d) 33

15. **Examine the information given below.**
    All the civil servants are loyal.
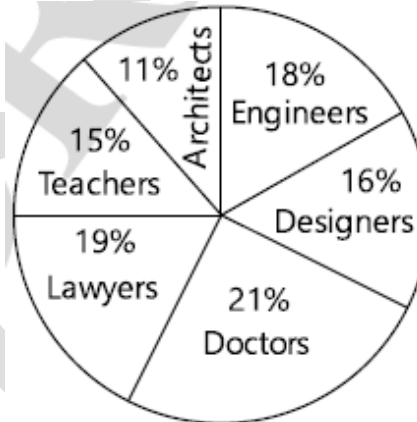
    All the loyalpersons are patriotic.

    Which of the following is not a valid conclusion regarding the above arguments?
    (a) All the civil servants are patriotic
    (b) All the patriotic are civil servants
    (c) Some patriotic are civil servants

(d) Some loyal persons are civil servants

Directions (16 to 18): The pie-chart depicts a survey conducted on 10500 people to findout various professionals in the town andtable depicts the percentage of female amongthem.

Total No. of Professionals = 10500

Percentage of females professionals	
Doctors	20%
Engineers	60%
Architects	40%
Teachers	80%
Lawyers	40%
Designers	35%

16. **What is the ratio of the male engineersand designers to the same-occupationfemale professionals in the town?**
    (a) 41 : 44
    (b) 55 : 53
    (c) 31 : 35
    (d) None of these

17. **What is the difference between the totalno. of male engineers and total no. offemale doctors in the town?**
    (a) 210
    (b) 315
    (c) 324
    (d) 630

AICSCC   **www.civilservicecoaching.com**   **044 - 24621909**
Page 3

18. What is the ratio of the number of malearchitects to the number of maleteachers in the town?
    (a) 11 : 5
    (b) 3 : 2
    (c) 5 : 11
    (d) 2 : 3
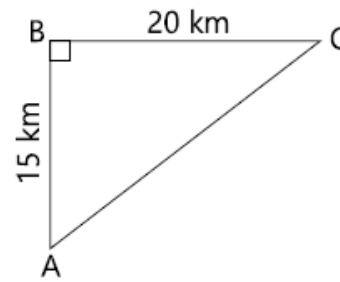
19. At what time between 4 and 5 O'clock,the hour and the minute hands will lieopposite to each other?
    (a) 4–50'–31''
    (b) 4–52'–51''
    (c) 4–53'–23''
    (d) 4–54'–33''

20. From GBPS, a renowned public schoolof Delhi, 300 students wrote the boardexaminations, out of which, 45% gotdistinction. If 40% of the girls gotdistinction, the number of boys, whowrote the examination, is (here, thenumber of boys, who got distinction is35 more than the number of girls whogot distinction)
    (a) 120
    (b) 150
    (c) 175
    (d) 125

21. Columbus is travelling along a righttriangle. He starts from A, goes to B, then to C. On the way back from C, he decides to traverse a circle touching all the vertices A, B and C. He completes a round and finally reaches A along AC. What is the total distance travelled by Columbus?

(a) $60 + 25\pi$ km
(b) $60 + 50\pi$ km
(c) $35 + 25\pi$ km
(d) None of these

22. Three pipes P, Q and R can separatelyfill a cistern in 4, 8 and 12 hours respectively, Another pipe S can empty the completely filed cistern in 40 hours. Which of the following arrangements will fill the empty cistern in less time than others?
    (a) Q alone is open
    (b) P and S are open
    (c) P, R and S are open
    (d) P, Q and S are open

23. Inside a square plot, a circular gardenis developed which exactly fits in the square plot and the diameter of the garden is equal to the side of the square plot which is 28 metres. What is the area of the space left out in the square plot after developing the garden?
    (a) 98 m²
    (b) 146 m²
    (c) 84 m²
    (d) 168 m²

Direction (24-26): In each of the followingquestions, two or more statements are to be considered true. Then based on those statements, one has to choose among the given conclusions/ options that logically follow from those statements. The answers can be any of these:
(a) Only Conclusion 1 follows logically.

(b) Only Conclusion 2 follows logically.

(c) Both Conclusion 1 and Conclusion 2 follow logically.

(d) Neither Conclusion 1 Nor Conclusion 2 follows logically.

24. *Statements:*

Some questions are not pleasant.
All unpleasant things need to be avoided.

Conclusions:

1. Some questions need to be avoided.
2. All questions need to be avoided.

25. *Statements:*

Pets have nets.
Pets eat what they get.

Conclusions:

1. All those who have nets eat what they get.
2. All those who eat what they get are pets.

26. *Statements:*

Most firemen are physically fit.
All firemen are brave.

Conclusions:

1. Most physically fit people are brave.
2. Most brave people are physically fit.

Directions (27-29) : Read the following passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

Passage – 3

There are few things in this world that fill me with

such wonder as the fact that a man can kill a whale. The scenes in a whaleman's life are varied and very stirring. Sometimes he is floating on the calm ocean, idling about the deck and whistling for a breeze, when all of a, sudden the loud cry is heard, ''There she blows!" and in a moment the boats are in the water, and he is engaged in all the toils of an exciting chase.

Then comes the battle with the great whale of the deep, with all its risks and dangers. Sometimes he isunfortunate, the decks are clean, he has nothing to do. At other times he is lucky, "cutting in" and "trying out" engage all his energies and attention. Frequently storms toss him on the angry sea, and show him, if he will but learn the lesson, how helpless a creature he is, and how thoroughly dependent at all times for life, safety, and success, upon the arm of God.

27. **Which of the following statement(s)follow(s) from the passage?**

1. Storms always make the whaleman realize that he is a helpless creature.

2. The whaleman is fortunate when he has nothing to do.

Select the correct answer using the codes given below:

(a) 1 only

(b) 2 only

(c) Both 1. and 2

(d) Neither 1 nor 2

28. **Which of the following statement(s)follow(s) from the passage?**

1. Whales are seen only in calm seas.

2. The whaleman survives only by chance.

Select the correct answer using the codes given below:

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

29. **The author**

1. is astonished by the fact that humans can kill whales.
2. thinks that God always protects the whaleman from danger.

Select the correct answer using the codes given below:

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

30. **If the number 42573* is completelydivisible by 72, then what will be minimum value of the *?**
    (a) 4
    (b) 5
    (c) 6
    (d) 7

Directions (31 to 33) : Read the information given below and answer the questions based on them.

1. There is a group of five persons A, B, C, D and E.
2. One of them is a Horticulturist, one is Physicist, one is Journalist one is an Industrialist and one is an Advocate.
3. Three of them A, C and the Advocate prefer tea to coffee and two of them — B and the Journalist prefer coffee to tea.
4. The Industrialist, D and A are friends of one another but two of them prefer coffee to tea.
5. The Horticulturist is C's brother.

31. **Who is an Industrialist?**
    (a) A
    (b) B
    (c) C
    (d) D

32. **Which of the following groups includea person who likes tea but is not an Advocate?**
    (a) ACE
    (b) BCE
    (c) DE

(d) None of these

33. **Who is the person who likes coffee butis not the Journalist?**
    (a) A
    (b) B
    (c) C
    (d) D

Directions (34 to 38): Read the following information to answer the given questions.

The Director of the institute has announced thatsix guest lectures on different areas like Leadership, Decision Making, Quality Circle, Motivation, Assessment Centre and Group Discussion are to be organised only one on each day from Monday to Sunday.

1. Motivation should be organised immediatelyafter Assessment Centre.
2. Quality Circle should be organised on Wednesday and should not be followed by Group Discussion.
3. Decision making should be organised on Friday and there should be a gap of two days between Leadership and Group Discussion.
4. One day there will be no lecture (Saturday is not that day), just before that day Group Discussion will be organised.

34. **Which of the following pairs of lectureswere organised on first and last day?**
    (a) Quality Circle and Motivation
    (b) Group Discussion and Quality Circle
    (c) Group Discussion and Decision Making
    (d) None of these

35. **How many lectures are organisedbetween Motivation and Quality Circle?**
    (a) One
    (b) Two
    (c) Three
    (d) Four

36. **Which day will the lecture on Leadership be organised?**
    (a) Tuesday
    (b) Wednesday
    (c) Friday
    (d) None of these

37. **On which day, there is no lecture?**
    (a) Sunday
    (b) Monday
    (c) Tuesday
    (d) Wednesday

38. **Which of the following information is not required for the above lecture arrangements?**
    (a) 1 only
    (b) 2 only
    (c) 3 and 4 only
    (d) All are required

Directions (Q. No. 39-47) : Read the following passages and answer the questions that follow each passage. Your answers to these questions should be based on the passages only.

Passage – 4

I and my chimney, two grey-headed old smokers, reside in the country. We are, I may say, old settlers here; particularly my old chimney, which settles more and more every day.

Though I always say, I AND MY CHIMNEY, as cardinal wolsey used to say, "I AND MY KING," yet this egoistic way of speaking, wherein I take precedence of my chimney, is hereby borne out by the facts; in everything, except the above phrase, my chimney taking precedence of me.

Within thirty feet of the turf-sided road, my chimney-a huge, corpulent old Harry VIII of a chimney—rises full in front of me and all my possessions. Standing well up a hillside, my chimney, like Lord Rosse's monster telescope,

swung vertical to hit the meridian moon, is the first object to greet the approaching traveler's eye, nor is it the last which the sun salutes. My chimney too, is before me in receiving the first-fruits of the seasons. The snow is on its head ere on my hat; and every spring, as in a hollow beech tree, the first swallows build their nests in it.

39. **The author**
    (a) is better than his chimney.
    (b) Is an egotist.
    (c) Precedes Cardinal wolsey.
    (d) Is a smoker.

40. **Which of the following statement/s is the author most likely to agree with?**
    1. The author gives more priority to his chimney than himself.
    2. The chimney serves as a home for birds.
    Select the answer using the codes given below:
    (a) 1 only
    (b) 2 only
    (c) Both 1 and 2
    (d) Neither 1 nor 2

41. **The author compares his chimney to Lord Rosse's monster telescope to**
    (a) Emphasize his chimney's enormity.
    (b) Create a sense of nostalgia
    (c) Tell about his friendship with Lord Rosse
    (d) None of the above.

Passage - 5

The National Watershed Development Project for Rained Area (NWDPRA), was initiated in the 1980's. Extensive changes were introduced in this major programme for the development of the rained agriculture during 1990-91. It was also decided that Central assistance for the implementation of the programme should be liberalised with 75 per cent of the amount to be given as grants to the States and 25 per cent as loans. The NWDPRA envisages that a micro

watershed will be taken up for development in every block having assured irrigation of less than 30 percent. In developing the micro watersheds, a holistic approach is to be adopted including, inter alia, the diverse producing systems, be that seasonal cropping, perennials like horticulture, forestry or animal husbandry activities. Use of vegetative barriers is the principal means to prevent soil erosion and to conserve moisture. Arable, non-arable lands as well as the drainage lines will be treated in an integrated manner. To the largest extent possible, the programmes contemplate enrolment of beneficiaries both in planning for development and execution of various activities. Extension support through local progressive farmers is another critical element. Training of all concerned has been emphasised.

42. **Consider the following statements :**
    1. Improvements have been made to the NWDPRA.
    2. There was a proposal for a lowered Central assistance for NWDPRA.
    As per the above passage, which of the given statements is/are valid?
    (a) 1 only
    (b) 2 only
    (c) Both 1 and 2
    (d) Neither 1 nor 2

43. **With reference to the above passage, consider the following assumptions :**
    1. Vegetative barriers are related to soil erosion and moisture conservation.
    2. A holistic approach will help in developing micro watersheds.
    Which of the given assumption is/are vali?
    (a) 1 only
    (b) 2 only
    (c) Both 1 and 2
    (d) Neither 1 nor 2

44. **Consider the following statements :**
    1. Rainfed agriculture development is a component of NWDPRA.

2. Support through local progressive farmers is important for NWDPRA.
As per the above passage, which of the given statements is/are valid?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Passage 6

A substantial proportion of specialist's posts even in the functioning Community Health Centres (CHCs) is vacant. Hence, these CHCs are unable to function as First Referral Units. In view of the serious implications of this lacuna in the establishment of referral system, as well as effective provision of health, MCH/FP care, there is an urgent need to rectify this. Improving the service conditions and providing a conducive environment are essential to ensure that specialists in CHCs do stay and provide the needed services. At the moment, there is no post of Public Health Specialist or Anaesthetist, in the CHCs. Services of Anaesthetist are vital because without an Anaesthetist, emergency/routine surgery in CHCs will not be possible. Efforts will be made to provide this critical manpower, if necessary on part time basis. As a long-term measure, sufficient number of in-service candidates may be trained in this speciality. It is vital to provide inter linkage between preventive, promotive and curative services in the CHCs so that health and family welfare programmes, disease surveillance and response mechanisms get strengthened. Until the specialists in public health get posted in CHCs, the existing specialists in these Centres who presently are mainly responsible for curative services, will have to be given Public Health orientation, training in Epidemiology and Health Management so that each one of them assumes the responsibility of looking after the Disease Control Programme. In their respective specialities e.g. Immunisation by paediatrician and FP by the obstetrician. This would also improve the linkages

between the CHC and the PHCs.

Passage-7

45. **With reference to the above passage, consider the following statements :**
    1. First Referral Units are an impediment in the functioning of CHC's.
    2. The establishment of the referral system is in need of improvements.
    Which of the given statements is/are valid?
    (a) 1 only
    (b) 2 only
    (c) Both 1 and 2
    (d) Neither 1 nor 2

46. **Consider the following statements :**
    1. Presence of Public Health Specialists is crucial to the improvement of the service conditions in CHCs.
    2. Some CHCs are unable to function as First referral units because of vacant posts of specialists.
    With reference to the above passage, which of the given statements is/are valid?
    (a) 1 only
    (b) 2 only
    (c) Both 1 and 2
    (d) Neither 1 nor 2

47. **Consider the following statements :**
    1. Anaesthetist's services are important for the execution of surgeries in CHCs.
    2. Specialists in CHCs are expected to handle multiple responsibilities.
    As per the above passage, which of the given statements is/are valid?
    (a) 1 only
    (b) 2 only
    (c) Both 1 and 2
    (d) Neither 1 nor 2

Directions (Q. No. 48-49) : Read the following passages and answer the questions that follow each passage. Your answers to these questions should be based on the passages only.

Reservation came with the caveat that its usefulness and validity would be examined every few years. However, since the inception of class basedquotas, the term has morphed to 'caste based' quotas. At one time, class may have been synonymous with caste. This is not the case any longer. But it doesn't suit any politician, or any government, to acknowledge this, since vote bank politics suggest that it is wise to keep communities, rather than classes, happy. There are other ways of appealing to the economically backward, after all. The thought behind reservation was that those who come from families which have been educated for generations have an unfair advantage over those who are first generation learners. There is some credence to this idea. But in exploiting the political mileage that this allowed, our parties have ensured that theprinciple is all but lost. When you have economically well-off communities, which have been educated for generations, fighting in the Supreme Court for the removal of the 'creamy layer' rider, you know that there is something very wrong about the approach we have taken to reservation.

48. **According to the passage which of thefollowing option is correct about reservation?**
    1. The provision for the validity of reservation is examined every few year.
    2. It is also termed as class based quotas.
    3. It is perpetuating due to vote bank politics.
    4. It is based on educational and economic backwardness
    (a) 1 only
    (b) 1 and 3 only
    (c) 2 and 4 only
    (d) All of the above

Many persons have been attracted towards smugglingdue to huge profits involved in this anti national activity. Some of them became millionaires overnights. India as a vast coastline both on the East and West Coast. It has been a heaven for smugglers who have been carrying on their activities with great impunity. There is no doubt that from time to time certain seizures were madeby the enforcement authorities, during raids and ambush but even allowing these losses, the smugglers made huge profits.
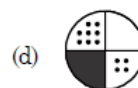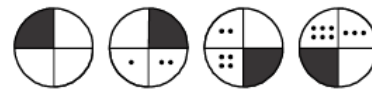
49. **The passage best supports thestatement that**
    (a) smuggling hampers the economic development of a nation
    (b) smuggling needs to be curbed
    (c) Authorities are taking strict measures to curb smuggling
    (d) smuggling is fast increasing in our country owing to the quick profit it entails.

50. **Three wheels making 6, 10, 15revolutions in a minute start with a certain point in their circumference downwards. After how long will they first come all together again in the same position?**
    (a) 5 seconds
    (b) 7 seconds
    (c) 9 seconds
    (d) 10 seconds

51. **In the following question, there issome relationship between the figures. From the answer figures, pick out the figure which most appropriately completes the series.**

Passage 9

Maria was very, very small person indeed but she had a very long nose and a very long chin. She talked a little though her nose, always soothingly : "Yes, my dear," and "No, my dear." She was always sent for when the women quarrelled over their tubs and always succeeded in making peace. One day the matron had said to her : "Maria, you are a veritable peace-maker!" And the sub matron and two of the Board ladies had heard the compliment. And Ginger Mooney was always saying what she wouldn't do to the dummy who had charge of the irons if it wasn't for Maria. She was so fond of Maria.

52. **Maria**
    (a) Was carefree gossip.
    (b) had an ugly nose.
    (c) was a gentle conversationalist.
    (d) was a small kid.

53. **The matron thought that**
    (a) Ginger Mooney was a brash woman.
    (b) Maria had a quality of being truthful.
    (c) The sub-matrons used to spy on her.
    (d) Maria was a true freconciler.

54. Consider the following statements :
1. The quarrelling women could never makespeace among themselves.
2. Ginger Mooney had a liking for Maria.

With reference to the above passage, which of the given statements is/are valid ?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Passage – 10

All this time Abe had kept on steadily with his reading whenever he had time, especially in the long winter evenings when he could ready by the firelight. Lamps and candles were luxuries no settler could afford, but the wood was plentiful, and it was easy to heap the fire high and make a splendid blaze.

He was careful, too, not to forget his writing, and he practiced writing his own name in the snow or with a charred stick on slabs of wood. His father was not always pleased to find every smooth surface of the house scrawled over with black marks, but he had a great respect for "learning," and when he found that Abe was teaching himself to write, he was quite proud of the boy. When spring came round and they were working together in the fields, Abe took a stick and began writing his name with great care in the soft earth.

55. Why was Abe's father proud of him?
1. Abe had not forgotten how to write.
2. Abe was teaching himself to write.

Select the correct answer using the codes given below :
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

56. Examine the following statements :
1. Abe used to read only during the evenings.

2. Fire was a luxury for all the settlers.
Select the correct answer using the codes given below :
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

57. Abe used to
1. work with his father in the fields sometimes.
2. `write his own name in the snow, on wood and in the earch.

Select the correct answer using the codes given below :
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

58. Define a $\otimes$ b = L.C.M. (a , b) + G.C.D. (a , b)and a $\oplus$ b = $a^b + b^a$.
What is the value of (1$\oplus$2) $\otimes$ (3 $\oplus$4)?
Here L.C.M. = least common multiple and G.C.D = greatest common divisor.
(a) 145
(b) 286
(c) 436
(d) 572

Directions (59-61): Read the following information to answer the questions given below it :

1. In a family of six persons, there are people from three generations. Each person has separate profession and also they like different colours. There are two couples in the family.
2. Rohan is a CA and his wife neither is a doctor nor likes green colour.
3. Engineer likes red colour and his wife is a teacher.
4. Mohini is mother-in-law of Sunita and she likes orange colour.
5. Vinod is grandfather of Tanmay and Tanmay, who is a principal, likes black colour.

6. Nanu is grand-daughter of Mohini and she likes blue colour. Nanu's mother likes white colour.

59. **What is the profession of Sunita?**
    (a) Engineer
    (b) Doctor
    (c) Teacher
    (d) Cannot be determined

60. **Which of the following is the correct pair of two couples?**
    (a) Mohini-Vinod and Rohan-Sunita
    (b) Vinod-Mohini and Rohan-Nanu
    (c) Rohan-Sunita and Tanmay-Nanu
    (d) Cannot be determined

61. **Which colour is liked by CA?**
    (a) Green
    (b) White
    (c) Either White or Green
    (d) Cannot be determined

62. **Two different numbers are randomly selected from the set {–3, –1, 0, 2, 4} and then multiplied together. What is the probability that the product of the two numbers chosen is 0?**
    (a) $\dfrac{1}{10}$
    (b) $\dfrac{1}{5}$
    (c) $\dfrac{3}{10}$
    (d) $\dfrac{2}{5}$

63. **Find out the number of zeroes at end of the product 15 × 16 × 18 × 25 × 35 × 24 × 20.**
    (a) 10
    (b) 8
    (c) 5
    (d) 12

64. **Three dealers A, B and C offer an article at the same list price. A allows a series of discount of 25% and 15%. B allows a series of discount of 10% and 30% while C offers a single discount of 36%. Then**
    (a) All the offers are the same
    (b) A's offer is the best
    (c) B's offer is the best
    (d) C's offer is the best

Directions (65-66) : In each question below is given some statements followed by some conclusions. You have to assume everything in the statement to be true, then consider the conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement.

65. *Statements:*

    All the executives are engineers.
    Some engineers are scientists.

    Conclusions:

    1. All the executives are scientists.
    2. Some executives are scientists.
    3. Some scientists are engineers.
    4. Some engineers are executives.
    (a) 3 and 4 only
    (b) All of these
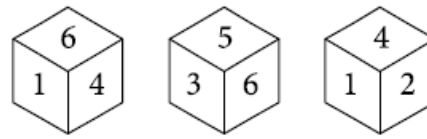   (c) 3 only
    (d) None of these

66. *Statements:*

    Some civil servants are politicians.
    Some politicians are honest.

    Conclusions :

    1. Some civil servants are honest.
    2. Some honest people are civil servants.
    3. All honest people are civil servants.
    (a) 1 and 3 only
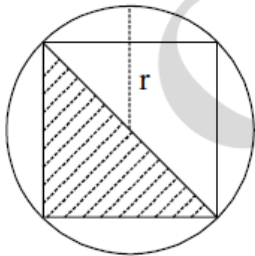
(b) 2 only
(c) All of the above
(d) None of the above

67. If it was Friday on 17th December, 1982what will be the day on 22nd December, 1984?
(a) Thursday
(b) Friday
(c) Saturday
(d) Sunday

68. How many numbers between 200 and300 are divisible by 9 such that all its digits are prime?
(a) 2
(b) 4
(c) 6
(d) 3

69. The radius of the circle in figure is r.What is the area of the shaded portion
(area of **a circle is** πr^2)

(a) $\frac{1}{2r^2}$
(b) $2r^2$
(c) $r^2 - r$
(d) r^2

70. Three positions of a cube are given.Based on these, find out which number is found opposite of number 2 in a given cube?

(a) 2
(b) 5
(c) 1
(d) 6

71. A man is standing on a railwayplatform which is 180 meters long. He observes that a train crosses the platform in 20 seconds but himself in 8 seconds. Find the length of the train and its speed?
(a) 120 m, 54 kmph
(b) 120 m, 120 kmph
(c) 54 m, 120 kmph
(d) 54 m, 54 kmph

72. A dealer marks his goods so as to make20% profit. But due to a fire in his warehouse, 5% of his goods are damaged, also 25% became soiled and hence, they had to be sold at half their cost. If he sells the remaining at the marked price, his net gain or loss is
(a) 2% gain
(b) 4% loss
(c) 3% gain
(d) 3.5% loss

73. A contractor undertook a task for 150days and employed 200 men on it. He find that only ¼ th of the work has been done in 50 days. How many more workers are required to complete the work in scheduled time?
(a) 100
(b) 200
(c) 300
(d) 150

74. The average temperature of Monday,Tuesday and Wednesday was 60°C. The average temperature of Tuesday, Wednesday and Thursday was 65°C. The temperature on

Thursday was 62°C. Find the temperature of Monday.
(a) 42°C
(b) 47°C
(c) 52°C
(d) 77°C

75. When simplified, the product

$$\left(1-\frac{1}{2}\right)\left(1-\frac{1}{3}\right)\left(1-\frac{1}{4}\right)\ldots\left(1-\frac{1}{n}\right) \text{ will be}$$

(a) $\dfrac{1}{n}$

(b) $\dfrac{2}{n}$

(c) $\dfrac{2(n-1)}{n}$

(d) $\dfrac{2}{n(n+1)}$

76. A square is of area 200 sq. m. A new square is formed in such a way that the length of its diagonal is √2 times the diagonal of the given square. Then the area of the new square formed is

(a) $200\sqrt{2}$ sq. m

(b) $400\sqrt{2}$ sq. m

(c) 400 sq. m

(d) 800 sq. m

77. If P $ Q means P is the brother of Q; P # Q means P is the mother of Q; P * Q means P is the daughter of Q. In A # B $ C * D, who is the father?
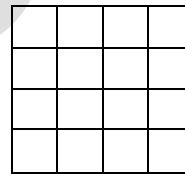(a) D
(b) B
(c) C
(d) Data inadequate

78. In a row of boys, Srinath is 7th from the left and Venkat is 12th from the right. If they interchange their positions, Srinath becomes 22nd from the left. How many boys are there in the row?
(a) 19
(b) 31
(c) 33
(d) 34

79. Ram deposited a certain sum of money in a post-office at 12% per annum for 4 years and deposited an equal amount in fixed deposit in a bank for 5 years at 15% per annum. If the difference in the interest from two sources is ₹ 1350, find the sum deposited in each case.
(a) ₹5000
(b) ₹15000
(c) ₹10000
(d) ₹2500

80. Calculate the number of squares in the given figure.

(a) 20
(b) 25
(c) 16
(d) 30