Academy for Civil Services

## PRELIMINARY QUESTIONS OF GS-II OCS -2018

Direction (Q. Nos. 1 to 10) : Read the following two passages and answer the questions that follow each passage. Your answer to these questions should be based on the passages only.

Passage - I
I was sitting next to Missy in my ninth-grade world history class when Mrs. Bartlett announced a new project. In groups, we were to create a newspaper around the culture we were studying.
On a piece of paper, we wrote the names of three friends we wanted in our group. After collecting all the requests, Mrs. B informed us that she would take into consideration the names we chose and would let us know the results the next day. I had no doubt I would get the group of my choice. There were only a handful of sociably decent people in the class, and Missy was one of them. I knew we had chosen each other.

The next day I anxiously awaited the class. After the bell rang, Missy and I stopped talking as Mrs. B called for our attention. She started to call out names. When she reached group three, Missy's name was called. So l'm in group three, I thought. The second, third and fourth members of the group were called. My name was not included. There had to be some mistake !

Then I heard it. The last group: "Mauro, Juliette, Rachel, Karina." I could feel the tears well in my eyes. How could that went down to her ankles, and the other girl who wore weird clothes. Oh, how badly I wanted to be with my friends.

I fought back tears as I walked up to Mrs. B. She looked at me and knew what I was there for. I was determined to convince her I should be in the "good" group. "Why... ?" I started.

She gently placed a harid on my shoulder. "I know what you want, Karina," she said, "but your group needs you. I need you to help them get a passing grade on this assignment. Only you can help them."

I was stunned. I was humbled. I was amazed. She had seen something in me I hadn'tseen.
"Will you help them?" she asked.
I stood straighter. "Yes," I replied. I could't believe it came out of my mouth, but it did. I had committed.

1. The new project was for:
(A) Launching a magazine
(B) Creating a newspaper for culture
(C) Announcing a new culture
(D) Creating a newspaper for fun
2. Missy was included in the group of :
(A) Mauro
(B) Karina
(C) Juliette
(D) None of them
3. Karina did not fike her group because:
(A) The girl could not speak English
(B) The boy was shabbily dressed
(C) She wanted to join Missy's group
(D) The other girl used to wear miniskirt
4. The teacher, Mrs. B put Karina in that particular group because Karina:
(A) Started crying
(B) Wanted to be in another group
(C) Was confused
(D) Could help the students in her group
5. Karina was stunned because .
(A) She was hurt
(B) Her teacher had identified her leadership potential
(C) She could not join the group of her choice
(D) She got a passing grade

## Passage - II

One miserable rainy night, a man named Mark decided to end his life. In his midfifties, Mark had never been married, had never experienced the joy of having children or spending holidays with his family. Both his parents had been dead for seven years. He had a sister but had lost contact with her. He held a menial job that left him unfulfilled. Wet and unhappy, he walked the streets, feeling as if there was nobody in the entire world that cared if he lived or died.

On that same soggy night, I was sitting in my room watching the rain hit my window. I was six years old; and my life revolved around my Star Wars action figure collection. I was dreaming of the day when I'd have earned enough money to add Darth Vader to my new collector's case. To help me make money, my father paid me to jog with him. Everyday, at seven o'clock, we jogged together.

And everyday, I was fifty cents closer to getting Darth Vader.

When I heard the doorbell ring, I jumped from my chair and raced out of my room to the top of the steps. My mother was already at the door.

Opening it, she found herself face-to-face with a very disheveled-looking man, with tears streaming down his face. My mother, overcome by pity, invited the man inside, and he sat with my parents in our living room.

Curious, I snuck downstairs so that I could get a better look. I couldn't understand what they were saying, but the sight of the rumpled man, holding his head in his hands and crying, made my chest ache. I raced back upstairs to my room and stuck my hand'into my money jar. Pulling out the Kennedy half-dollar I had earned that day, I ran back downstairs.

When I reached the door of the living room, I walked right in. The three adults looked at me in surprise as I quickly made my way over to the strianger. I put the half-dollar in his hand and told him that I wanted him to have it. Then I gave him a hug and turned and ran as fast as I could out of the room and back up the stairs. I felt embarrassed buthappy.
Downstairs, Mark sat quietly with his head bowed. Tears streamed down his face as he tightly clutched that coin. Finally looking up at my parents, he said, "It's just that I thought nobody cared. For the last twenty years, I have been so alone. That was the
first hug I have gotten in - I don't know how long. It's hard to believe that somebody cares.
6. Mark wanted to end his life because :
(A) He felt extremely dejected
(B) 'His parents had died
(C) He had only one sister
(D) He was jobless
7. That little boy was fond of :
(A) Watching rain
(B) Darth Vader figure
(C) Money
(D) Jogging
8. The visitor was a:
(A) Family friend
(B) Robber
(C) Needy person
(D) Neighbour
9. The little boy gave the visitor his:
(A) Monéy
(B) Food
(C) Toys
(D) Star War action figure
10. Why did Mark cry?
(A) He was in physical pain
(B) He had not eaten for days
(C) He was unmarried
(D) He was greeted with love and care
11. A leader has the ability to influence others through qualities such as personal $\qquad$ expertise, command of language, and the creation of mutual respect - all of which require strong interpersonal skills.
(A) aura
(B) charisma
(C) elan
(D) machismo
12. Interpersonal skills include the ability to $\qquad$ and manage the emotions, motivations, and behaviours of oneself and-other during social interactions or in a social-interactive context.
(A) feel
(B) read
(C) suss
(D) view
13. Those who have interpersonal skills are able to manage their behaviour during social interactions and align their goals to the goals of others during $\qquad$ activities.
(A) cohesive
(B) collaborative
(C) collocational
(D) concessive
14. They are able to empathize and are sensitive to the needs of others and to the forces that $\qquad$ the way that others feel and behave.
(A) bend
(B) mar
(C) mend
(D) shape
15. Modern teamwork often brings together individuals from diverse groups who may not share common norms, values, or $\qquad$ but who do offer unique expertise, insights, and perspectives.
(A) accommodations
(B) cubicles
(C) salaries
(D) vocabularies
16. E-mail, voice mail, audio conferencing and video conferencing, and the myriad other technologies that enable individuals to communicate with each other not only increase the ways in which individuals can interact but also require a heightened sensitivity to the $\qquad$ of interpersonal interactions.
(A) innuendos
(B) naivete
(C) nuances
(D) repartee
17. This idea is particularly true in the worlds of virtual learning and virtual communication, where one cannot yet use hand gestures, facial expressions, or body $\qquad$ to fully express ideas.
(A) language
(B) movement
(C) poses
(D) positions
18. The challenge is to $\qquad$ interpersonal skills not only in face-to-face interactions but in virtual interactions as well:
(A) perfect
(B) perform
(C) prodúce
(D) project
19. As the police saw the accident themselves, the driver avoided the
$\qquad$ of having to give a detailed report.
(A) need
(B) requirement
(C) indictment
(D) necessity
20. It's a complete waste of time
$\qquad$ over who was to blame, the main thing we have to do is decide what to do next.
(A) arguing
(B) discussing
(C) repeating
(D) considering
21. It was easy to realise why the machine had stopped working since it was a direct $\qquad$ of his failure to maintain it:
(A) Complement
(B) Concern
(C) Consequence
(D) Conviction
22. I am completely confused as to why she did it and so it's not $\qquad$ to imagine why other people are mystified, too.
(A) definite
(B) difficult
(C) debatable
(D) decided
23. I have great $\qquad$ for them at this time because I have had a similar experience.
(A) sincerity
(B) sympathy
(C) sorrow
(D) sadness
24. Many of the people in the crowd were visibly crying because they all
$\qquad$ with those who had lost relatives in the disaster.
(A) resented
(B) regretted
(C) rejoined
(D) sympathized
25. A tailor had a number of shirt pieces to cut from a roll of fabric. He cut each roll of equal length into 10 pieces. He cut at the rate of 45 cuts a minute. How many rolls would be cut in 24 minutes?
(A) 32 rolls
(B) 54 rolls
(C) 108 rolls
(D) 120 rolis
26. Today is Varun's birthday. One year after, from today he will be twice as old as he was 12 years ago. How old is Varun today?
(A) 20 years
(B) 22 years
(C) 25 years
(D) 27 years
27. Ayush was born two years after his father's marriage. His mother is five years younger than his father but 20 years older than Ayush who is 10 years old. At what age did the father get married?
(A) 23 years
(B) 25 years
(C) 33 years
(D) 35 years
28. In three coloured boxes - Red, Green and Blue, 108 balls are placed. There are twice as many balls in the green and red boxes combined as there are in the blue box and twice as many in the blue box as there are in the red box. How many balls are there in the green box?
(A) 18
(B) 36
(C) 45
(D) None of these
29. Ravi's brother is 3 years senior to him. His father was 28 years of age when his sister was born while his mother was 26 years of age when he was born. If his sister was 4 years of age when his brother was born, what were the ages of Ravi's father and mother respectively when his brother was born?
(A) 32 years, 23 years
(B) 32 years, 29 years
(C) 35 years, 29 years
(D) 35 years, 33 years
30. In a class of 60 students, the number of boys and girls participating in:the annual sports is in the ratio $3: 2$ respectively. The number of girls not . participating in the sports is 5 more than the number of boys not participating in the sports. If the number of boys participating in the sports is 15 , then how many girls are there in the class?
(A) 20
(B) 25
(C) 30
(D) Data inạdequate
31. If you write down all the numbers from 1 to 100, then how many times do you write 3 ?
(A) 11
(B) 18
(C) 20
(D) 21
32. Choose the missing term out of the given alternatives :

ADVENTURE, DVENTURE, DVENTUR, ?, VENTU.
(A) VENTURE
(B) VENTUR
(C) DVENT
(D) DVENTU
33. How many pairs of letters in the word 'CHAIRS' have as many letters between them in the word as in the alphabet?
(A) 2 .
(B) 3
(C) 1
(D) 4
34. Choose the missing term out of the given alternatives:
ejo, tyd, ins, xch, ?
(A) , miw
(B) nrw
(C) $n s x$
(D) nsw
35. In the following question, various terms of an alphanumerical series are given with one or more terms missing as shown by (?), Choose the missing term out of the given alternatives:

$$
3 F, 6 G, 111,18 L, ?
$$

(A) 27 Q
(B) 27 P
(C) 25 N
(D) 210
36. In the following question, various terms of an alphanumerical series are given with one or more terms missing as shown by (?). Choose the missing term out of the given alternatives:
BMO, EOQ, HQS, ?
(A) KSU
(B). SOV
(C) SOW
(D) LMN
37. In the following question, various terms of an alphianumerical series are given with one or more terms missing as shown by (?). Choose the missing term out of the given alternatives:

> P3C, R5F, T8I, V12L, ?
(A) X 17 M
(B) $\times 160$
(C) X 170
(D) Y 170
38. What will be the next term in the following series?

BKS, DJT, FIU, HHV, $\qquad$
(A) IJX
(B) IGX
(C) JGW
(D) JGU
39. In the following question, various terms of an alphabet series are given with one or more terms missing as shown by (?). Choose the missing term out of the given alternatives :
$A, B, N, C, D, O, E, F, P, ?, ?, ?$
(A) G. H, Q
(B) $\mathrm{J}, \mathrm{K}, \mathrm{L}$
(C) $\mathrm{G}, \mathrm{H}, \mathrm{J}$
(D) $\mathrm{G}, \mathrm{H}, \mathrm{I}$

Direction (Q. Nos. 40 to 44): The following line graph gives the ratio of the amounts of imports by a company to the amount of exports from that company over the period from 1995 to 2001.

Ratio of Value of Imports to Exports by a Company Over the Years:

40. If the imports in 1998 was Rs. 250 crores and the total exports in the years 1998 and 1999 together was Rs: 500 crores, then the imports in 1999 was :
(A) Rs. 250 crores
(B) Rs. 300 crores
(C) Rs. 357 crores
(D) Rs. 420 crores
41. The imports were minimum proportionate to the exports of the company in the year :
(A) 1995
(B) 1996
(C) 1997
(D). 2000
42. What was the percentage increase in imports from 1997 to 1998 ?
(A): 72
(B) 56
(C) 28
(D) Data inadequate
43. If the imports of the company in 1996 was Rs. 272 crores, the exports from the company in 1996 was :
(A) Rs. 370 crores
(B) Rs. 320 crores
(C) Rs. 280 crores
(D) Rs. 275 crores
44. In how many of the given years were the exports more than the imports ?
(A) 1
(B) 2
(C) 3
(D) 4

Direction (Q. Nos. 45 to 48) : A School has four Sections - A, B, C, D of Class IX students. The results of half yearly and annual examinations are shown in the table given below.

| Result | No. of students |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Section-A | Section-B | Section-C | Section - D |
| Students failed in both the Exams. | 28 | 23 | 17 | 27 |
| Students failed in Half-yearly but passed in Annual Exams. | 14 | 12 | 8 | 13 |
| Students passed in Half-yearly but failed in Annual Exams. | 6 | 17 | 9 | 15 |
| Students passed in both the Exams. | 64 | 55 | 46 | 76 |

45. If the number of students passing an examination be considered a criteria for comparison of difficulty level of two examinations, which of the following statements is true in this context?
(A) Half yearly examinations were more difficult.
(B) Annual examinations were more difficult.
(C) Both the examinations had almost the same difficulty level.
(D) The two examinations cannot be compared for difficulty level.
46. How many students are there in Class IX in the school?
(A) 336
(B) 189
(C) 335
(D) 430
47. Which Section has the maximum pass percentage in at least one of the two examinations?
(A) A Section
(B) B Section
(C) C Section
(D) D Section.
48. Which section has the maximum success rate in annual examination?
(A) A Section
(B) B Section
(C) C Section
(D) D Section
49. Find out the two signs to be interchanged for making following equation correct :
$5+3 \times 8-12 \div 4=3$
(A) + and -
(B) - and $\tilde{A}$
(C) . + and $x$
(D) $+\operatorname{and} \tilde{A}$
50. Find out the wrong term in the series:
$2,5,10,50,500,5000$
(A) 5000
(B) 500
(C) 10
(D) 50
51. Find the missing number in the series :

$$
1,2,3,10, ?, 9802
$$

(A) 99
(B) 199
(C) 299
(D) 999
52. Find the wrong number in the series:
$3,8,15,24,34,48,63$
(A) 15
(B) 24
(C) 34
(D) 48
53. Choose the missing terms out of the given alternatives:
$Z, S, W, O, T, K, Q, G, ? ?$
(A) $\mathrm{N}, \mathrm{D}$
(B) $\mathrm{N}, \mathrm{C}$
(C) $\mathrm{O}, \mathrm{D}$
(D) $0, \mathrm{C}$
54. In the following question, various terms of an alphanumerical series are given with one or more terms missing as shown by (?). Choose the missing term out of the given alternatives:
$2 \mathrm{Z5}, 7 \mathrm{Y} 7,14 \mathrm{X} 9,23 \mathrm{~W} 11,34 \mathrm{~V} 13$,?
(A) $47 \cup 15$
(B) 47 V 14
(C) $45 \cup 15$
(D) 27 U 24
55. Choose the missing term out of the given alternatives :

ATTRIBUTION: TTRIBUTIO, RIBUTIO; IBUTI
(A) IBU
(B) UT:
(C) BUT
(D) UTI
56. In the following question a letterseries is given, in which some letters are missing: The missing letters are given in the proper sequence as one of the alternatives. Choose the correct alternative:
ba_ba_bac_acb_cbac
(A) bbca
(B) ccba
(C) cbac
(D) aacb
57. Choose the missing term out of the given alternatives:

DHL, PTX $B F J$ ?
(A) KOS
(B) NRV
(C) CGK
(D) OK
58. In the following question, various terms of an alphabet series are given with one or more terms missing as shown by (?). Choose the missing term out of the given alternatives :

$$
A Z, G T, M N, ?, Y B
$$

(A) $T S$
(B) SH
(C) KF
(D) $R X$
59. The two trains are running in same direction at $90 \mathrm{~km} / \mathrm{hr}$ and $60 \mathrm{~km} / \mathrm{hr}$ respectively. The faster train crossed a passenger sitting in the slower train in 27 seconds. The length of faster frain is:
(A) 220 meters
(B) 200 meters
(C) 157 meters
(D) 225 meters
60. A man can row a boat at $4.5 \mathrm{~km} / \mathrm{hr}$ in still water to a certain upstream point and can row back to the starting point in a river flowing with $1.5 \mathrm{~km} / \mathrm{hr}$. The average speed during the total journey is:
(A) $.2 .4 \mathrm{~km} / \mathrm{hr}$
(B) $4 \mathrm{~km} / \mathrm{hr}$
(C) $3.4 \mathrm{~km} / \mathrm{hr}$
(D) $3 \mathrm{~km} / \mathrm{hr}$
61. There is a leak in the bottom of a tank. Before the leak, it could be filled in four and half hours. After leak it takes half an hour longer. If the tank is full, the leakage will empty the tank in:
(A) 45 hours
(B) 25 hours
(C) 28 hours
(D) 8 hours
62. $A, B$ and $C$ enter into a partnership. $A$ invests 3 times as much as $B$ invests and $B$ invests two-third of what $C$ invests. At the end of the year the profit earned is Rs. 6,600. The share of $B$ is :
(A) Rs. 2,100
(B) Rs. 1,200
(C) Rs. 1,500
(D) Rs. 3,160
63. Simple interest on a certain amount is $9 / 16$ of the principal amount. If the number representing the rate of interest in percent and time in years be equal, then time for which the principal amount is lent out is:
(A) 15 years
(B) 7 years
(C) $15 / 2$ years
(D) $15 / 4$ years

Direction (Q. Nos. 64 \& 65) : Each question given below has a problem and two statements numbersd (I) and (II) giving certain information. You have to decide whether the data provided in the statements are sufficient to solve the problem. Select the correct one out of the four given alternatives - $A, B, C$ and $D$ that is needed to answer the question.
64. What is the monthly salary of Alok?

## Statements :

(i) Alok gets $15 \%$ more than Sumit while Sumit gets $10 \%$ less than Raman.
(II) Raman's'monthly salary is Rs. 2,500.
(A) The data in (1) alone are sufficient to answer the question
(B) The data in (II) alone are sufficient to answer the question
(C) The data either in (I) or (II) alone are sufficient to answer the question
(D) The data in both (I) and (II) together are sufficient to answer the question
65. Who is the immediate right of $P$ among the five persons $P, Q, R, S$ and $T$ facing North ?

## Statements :

(i) $R$ is third to the left of $Q$ and $P$ is second to the right of $R$.
(II) $Q$ is to the immediate left of $T$ who is second to the right of $P$.
(A). The data in (I) alone are sufficient while the data in (II) alone are not sufficient to answer the question
(B) The data in (II) alone are sufficient while the data in (I) alone are not sufficient to answer the question
(C) The data either in (I) or (II) are sufficient to answer the question
(D) The data in both (I) and (II) are sufficient to answer the question

Direction (Q. Nos. 66 \& 67) : Study the following line graph that shows Human Resource Indices of an organisation for the given years and answer the questions.

66. The index in 2008 was what percent of that in 2006 ?
(A) 100
(B) 150
(C) 200
(D) 50
67. What is the approximate value of the average index?
(A) 130
(B) 150
(C) 100
(D) 140

Direction (Q. No. $68 \& 69$ ) : The following line graph displays Annual Dividends offered by two companies $M$ and $N$ over different years. Study the graph carefully and answer the questions.

68. Swati invested Rs. 35,000 in company $N$ in 2011: After one year, . she transferred the entire amount with dividend to company M in 2012 for one year. What amount will be received back by Swati including dividend?
(A) Rs. 49,000
(B) Rs. 49,980
(C) Rs. 48,300
(D) Rs. 49,563
69. In the year 2014, Suraj invested

Rs. 56,000 in company N. How much more or less dividend would he have received has the amount been invested in company $M$ ?
(A) Rs. 1,640 more
(B) Rs. 1,640 less
(C) Rs. 1,860 more
(D) Rs. 1,680 less

Direction (Q. No. 70) : The following Bar Diagram reflečts exports of tea and coffee (in tonnes) for the years 2010, 2011, 2012, 2013 and 2014. Refer the diagram and answer the questions.

70. What was the percentage increase in the export of tea in 2014 from that in 2010?
(A) 90
(B) 40
(C) 20
(D) 35

Direction (Q. Nos. 71 to 75) : Read the following passage and answer the given questions:

There are two ancient evils that science, unwisely used, may intensify : they are tyranny and war. But I am concerned now rather with pleasant possibilities than with 1 unpleasant ones.

Science can confer two kinds of benefits : It can diminish bad things and it can increase good things. Let us begin with the former.

Science can abolish poverty and excessive hours of labour. In the earliest human communities, before agriculture, each human individual required two or
more square miles to sustain life. Subsistence was precarious and death from starvation must have been frequent. At that stage, men had the same mixture of misery and carefree enjoyment as still makes up the lives of others animals.

Agriculture was a technical advance of the same kind of importance as attaches to modern machine industry. The way that agriculture was used is an awful warning to our age. It introduced slavery and serfdom, human sacrifice, absolute. monarchy and large wars. Instead of raising the standard of life, except for a tiny governing minority, it merely increased the population. On the whole, it probably increased the sum of human misery. It is not possible that industrialism may take the same course.
71. Which of the following is NOT the main focus of the article?
(A) Tyranny and war
(B) Pleasant possibilities of science
(C) The ability of science to diminish bad things
(D) , The ability of 'science to increase good things
72. According to the article human beings can lessen the quantum of labour if they went back to:
(A) Pre-agriculture days
(B) If they adopt agricultural economy
(C) Use the benefits of science wisely
(D) None of the above
73. Which of the following statements is true?
(A) The condition of human beings has been reduced to the status of animals during the modern age of machine industry
(B) Industrialism introduces slavery
(C) Agriculture was a technical advancement upon industrialism
(D) None of the above
74. Agrarian economy increased the sum of human misery because :
(A) You have to indulge in the practice of human sacrifice to increase the output
(B)' It was not used wisely
(C) It resulted in population explosion
(D) None of the above
75. Which of the following is NOT mentioned in the article?
(A) Human beings enjoyed the same kind of pleasures and suffered the same kind of misery like the animals during pre-agrarian economy
(B) Agriculture raised the standard of the life for some human beings
(C) Agrarian economy is more scientifically advanced than pre-agrarian economy
(D) Industrialism will lessen human misery because it is accompanied by democratic form of government

Direction (Q. Nos. 76 to 80) : Read the following passage and answer the questions given below.

Harnessing the immune system to fight cancer, long a medical dream, is becoming a reality. Remarkable stories of tumours melting away and terminal lliness going into remissions that last years backed by solid data - have led to an explosion of interest and billions of dollars of investments in the rapidly growing field of immunotherapy. Pharmaceutical firms, philanthropists and the U.S. government's "cancer moonshot" program are pouring money into developing treatments. Medical conferences on the topics are packed.

Hundreds of clinical trials involving immunótherapy, alone or combined with other treatmients, are underway for nearly every type of cancer.

The immune system - a network of cells, tissues and biochemicals they secrete - defends the body against viruses, bacteria and other invaders. But cancer often finds ways to hide from the immune system or blocks its ability to fight: Immunotherapy tries to help the immune system to recognize cancer as a threat, and attack it. A widely used type of immunotherapy involves drugs that free immune cells to fight cancer by blocking a mechanism-called a checkpoint - that cancer uses to shut down the immune system. These drugs, called checkpoint inhibitors, have been approved by the Food and Drug Administration to treat advanced melanoma, Hodgkin lymphoma and cancers of the lung, kidney and bladder. More drugs in this class are in the pipeline. Patients are clamoúring for checkpoint drugś, including one, Keytruda,
known to many as "that Jimmy Carter drug" which, combined with surgery and radiation, has left the former President with no sign of recurrence even though melanoma had spread to his liver and brain,
76. Which of the following statements is true?
(A) Cancer is a very dangerous disease because it does not spare even a very powerful person like Jimmy Carter, the former President of the United States
(B) There is improvement in cancer treatment because billions of dollars are being poured into research
(C) If melanoma spreads to liver and brain, there will be no recurrence of cancer
(D) None of the above
77. Checkpoint drugs have become very popular because :
(A) They nullify cancer's attempt to shut down the immune system
(B) You do not have to suffer the pain of surgery and radiation during treatment
(C) Food and Drug Administration has approved its use
(D) None of the above
78. Keytruda is :
(A) A particular type of disease with which Jimmy Carter was suffering from
(B) The name of a drug that is used to treat cancer patients
(C) Another version of Hodgkin lymphoma
(D) None of the above
79. Immunotherapy:
(A) Marks the end of human dependence on drugs during cancer treatment
(B) Augments,the ability of human. immune system to fight cancer cells
(C) Creates 'checkpoints' against cancer cells
(D) None of the above
80. 'Cancer moonshot' program :
(A) Is a philanthropic initiative by US government
(B) Is sponsored by pharmaceutical firms to hold medical conferences on immunotherapy
(C) Channelizes resources into research on the development of cancer treatment through immunotherapy
(D) None of the above.

## GS-II OF OCS - 2018 PRELIMINARY EXAM. ANSWER KEYS \&CRYPTIC SOLUTIONS

1. D

Explanation:
3,13,23,30,31,32,33,34,35,36,37,38,39,43,53,63, $73,83,93=20$ times.
2. B

Explanation:
ADVENTURE,DVENTURE,DVENTUR,VENTUR, VENTU----
BOLD letter are going to be missing in the sequence---
3. A

Explanation: CHAIRS, bold letters are possible pairs.
4. A

Explanation: ejo,tyd,ins,xch,mrw---+3
5. B

Explanation: 3F, 6G, 1 1I, 18L, 27P (3, 5, 7, 9numeric difference) (1, 2, 3, 4-alphabetical difference)
6. A

Explanation: 'BMO, EOQ, HQS, KSU (the differences are 3,2,2).
7. C

Explanation: P3C, R5F, T8I, V12L,X17O(the differences are 2,2,3)
8. C
9. A

Explanation: ABN, CDO, EFP, GHQ
10. D

Explanation: $\mathrm{I}_{1998} / \mathrm{E}_{1998}=1.25$
Where I=Import \& E=Export.
$\mathrm{E}_{1998}=250 / 1.25=200$ crores
$\mathrm{E}_{1999}=500-200=300$ crores
$\mathrm{I}_{1999} / \mathrm{E}_{1999}=1.4$
$\mathrm{I}_{1999}=1.4 \times 300=420$ crores
11. C

Explanation: The value of I/E ratio is lowest in 1997 i.e. 0.35.
12.

Explanation: Date inadequate
$\mathrm{I}_{1997} / \mathrm{E}_{1997}=0.35----------(1)$
$\mathrm{I}_{1998} / \mathrm{E}_{1998}=1.25-----------(2)$
Equations cannot be solved.
13. B

Explanation: $\mathrm{I}_{1996} / \mathrm{E}_{1996}=0.85$
$E_{1996}=272 / 0.85=320$ crores
14. D

Explanation: I/E ratio<1 in four $(95.96,97,00)$ years.
15.

Explanation: Total students failed in half-yearly but passed in annual examination in four sections $=14+12+8+13=47$
Similarly, Total students passed in half-yearly but failed in annual examination oin four sections $=6+17+9+15=47$
So,both the examinations had almost same difficulty level.
16. D

Explanation: Total students=Students of section A+Students of Section B+Students of Section $C+$ Students of section $D$.
Students of Section A=Total fail students+ Total pass students $=(14+6+28)+64=112$
Similarly for Section $B=117$, Section $C=80$ \& Section $D=131$
So,total students $=112+107+80+131=430$.
17. D

Explanation: For section A,(14+6+64/ $28+14+6+64) 100=(84 / 112) 100=75 \%$.Similarly for Section B ,C,D percentage are $78.5,78.75,79.39$ respectively.
18. A

Explanation: $(14+64 / 28+14+6+6) 100=69.64$ and for $B, C$ and $D$ the percentages are $62,67.5$ and 67.94 respectively.
19. Wrong Question
20. A

Explanation: 2,5,10,50,500,5000
The series will be $2 * 5=10,10 * 50=500$,so the next number will be $50 * 500=25000$
21. A

Explanation: $1^{2}+1,2^{2-1}, 3^{2}+1,10^{2}-1,99^{2}+1$
22. C

Explanation: 3,8,15,24,34,48,63(the difference of the series should be $5,7,9,11,13,15---)$
23. B

Explanation: Z, S,W,O,T,K,Q,G,N C
24. A
25. D
26. B

Explanation: ba_, ba_, bac_acb_cbac, the series is bacbacbacbacbacbac $(\mathrm{CCB}(\mathrm{A})$
27. B

Explanation: DHL,PTX, BFJ, NRV(difference is +3)
28. B

Explanation: AZ, GT,MN,SH,YB
A,B,C,D,E,F,G,H,I,J,K,L,M
$Z, Y, X, W, V, U, T, S, R, Q, P, O$,
29. D

Explanation: $90 * 5 / 18=25 \mathrm{~m} / \mathrm{sec}=\mathrm{v}_{1}$
$60 * 5 / 18=300 / 18 \mathrm{~m} / \mathrm{sec}=\mathrm{v}_{2}$
Applying fotmula, $\mathrm{t}=\mathrm{l}_{1}+\mathrm{l}_{2} / \mathrm{v}_{1}+\mathrm{v}_{2}, \mathrm{l}_{2}=0$ (as it is a passenger) and solving,
$l_{1}=225 \mathrm{~m}$
30. A

Explanation: averge speed $=2 u v / u+v=2.25 \mathrm{~km} / \mathrm{hr}$
31. A

Explanation: $4.5 * 5 / 5-4.5=22.5 / 0.5=45$ hours
32. B

Explanation: $A=6 p^{*} 12, B=2 p^{*} 12, C=3 p * 12$
By adding $11 p=6600$,
$2 p=1200$
33. C

Explanation: $\quad \mathrm{S} . \mathrm{I}=\mathrm{PTR} / 100, \mathrm{P}=16 \mathrm{P}, 8 \mathrm{I}=9 \mathrm{P}, \mathrm{T}^{2}=$ 25*9/4=15/2
34. D
35. D
36. A

Explanation: (200/200)100=100
37.

## Explanation:

$225+200+200+100+60+75 / 6=860 / 6=143$
38. B

Explanation:35,000*18/100=6300,Total amount $=35,000+6300=41300$
$41300 * 20 / 100=41300+8260=49563$ (approx)
39. D

56000*16/100 $=8960,56000 * 13=7280,8960-$ $7280=1680$
40. B

Explanation: (210-150/150) 100=(60/150) $100=$ 40
41.A 42.C
43.D
44. C
45. D
46. D
47. A
48. B. 49.B.
50. C
51. B 52.D 53.C 54. D
55. B
56. A
57. B 58. C
59. A
60. D
61. B 62. B
63. B
64. D
65. D
66. C
67.A 68.A
69.D
70. A
71.C 72.B
73. B 74.D
75. C

Explanation: 45*24/10=108
76. C

Explanation: Present age is now $=x$
12 year before $=x-12$
After one year $=x+1$
$X+1=2(x-12)$
$X+1=2 x-24$
$25=x$
77. A

Explanation: Age of Father-Age of Mother=5yrs
Mother age-Ayush age=20 years
Now Auyush=20 years
When he was born his mother was 20 years
According to question her mother age at the time marriage was $=20-2=18$ years
Father-18=5
Father=5+18=23
78. D

Explanation: $\mathrm{R}+\mathrm{G}+\mathrm{B}=108$
$G+R+2 B \cdot B=2 R, G+R=4 R$
$G=3 R$
$R+3 R+2 R=108, R=18 . G=3 R=54$
79. A

Explanation: Sis-Brother=4yrs
Brother-Ravi=3yrs
Father=28 yrs, when his sister was born
After 4 years his brother was borns
So father age $=28+4=32$
Mother age $=26-3=23$ years
80. C

Explanation: $3 x=15,2 x=10$ (total girls participating) $y-z=5, y+z=35, y=20$, where $y$ and $z$ are number of girls and boys not participating, so total no of girls $20+10=30$

