Bundelkhand Institute of Engineering and Technology, Jhansi Computer Science Students' Council (CoSSCo) 2k19-20

Aptitude Test

(SET - A)

Instructions:

- There are total 40 questions.
- Maximum time allotted is 45 minutes.
- There is only one option correct for each question
- Each question consists of 3 marks.
- There will be 1/3rd negative marking in case of wrong answer.
- No marks will be deducted or provided in case of unattempted question.
- 1. It takes 2 litres to paint the surface of a solid sphere. If this solid sphere is sliced into 4 identical pieces, how many litres will be required to paint all the surfaces of these 4 pieces?
 - a. 2.2 L
- c. 3.0 L
 - b. 2.5 L
 - d. 4.0 L
- 2. A container originally contains 10 L of pure spirit. From this container 1 L of spirit is replaced with 1 L of water. Subsequently, 1 L of the mixture is again replaced with 1 L of water and this process is repeated on more time. How much spirit is now left in the container?
 - a. 7.58 L c. 7 L
 - b. 7.84 L d. 7.29 L
- The value of $\sqrt{12 + \sqrt{12 + \sqrt{12 + \cdots}}}$ is 3.
 - a. 3.464 c. 4.000
 - b. 3.932 d. 4.444
- 4. In a college, there are three student clubs. Sixty students are only in the Drama club, 80 students are only in the Dance club, 30 students are only in the Maths club, 40 students are in both Drama and Dance clubs, 12 students are in both Dance and Maths clubs, 7 students are in both Drama and Maths clubs, and 2 students are in all the clubs. If 75% of the students in the college are not in any of these clubs, then the total number of students in the college is ____
 - a. 1000 c. 900
 - b. 975 d. 225
- 5. Mariya was travelling in her boat when the wind blew her hat off and the hat started floating back downstream. The boat continued to travel

upstream for twelve more minutes before Mariya realized that her hat had fallen off and turned back downstream. She caught up with that as soon as it reached the starting point. Find the speed of river if Mariya's hat flew off exactly 3 km from where she started:

- a. 5 km/h
- c. 7.5 km/h
- b. 6 km/h
- d. Can't be determined
- 6. Arun, Gulab, Neel and Shweta must choose one shirt each from a pile of four shirts coloured red, pink, blue and white respectively. Arun dislikes the colour red and Shweta dislikes the colour white. Gulab and Neel like all the colours. In how many different ways can they choose the shirts so that no one has a shirt with a colour he or she dislikes?
 - a. 12
- c. 16
- b. 21
- d. 14
- 7. 4 years ago, the ratio of ½ of A's age at that time and four times of B's age at the time was 5:12. Eight years hence, ½ of A's age at that time will be less than B's age at that time by 2 years. What is B's present age?
 - a. 10 years
- c. 8 years
- b. 14 years
- d. 5 years
- 8. A trader marks his goods such that he can make 32% profit after giving 12% discount. However, a customer availed 20% discount instead of 12%. What is the new profit percentage of trader?
 - a. 20%

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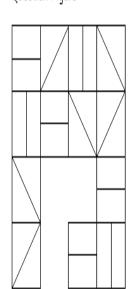
- c. 44%
- b. 30%
- d. 28.8%
- 9. Kevin, Joseph, and Nicholas are 3 brothers. If the following statements are all true, which of them is the youngest?
 - √Kevin is the oldest.
 - √Nicholas is not the oldest.
 - √Joseph is not the youngest.
 - a. Joseph c. Nicholas
 - b. Kevin d. Both Joseph and Nicholas
- 10. If A + B means A is the mother of B: A B means A is the brother B; A % B means A is the father of B and A x B means A is the sister of B, which of the following shows that P is the maternal uncle of Q?
 - a. $Q N + M \times P$
- c. $P M + N \times Q$
- b. $P + S \times N Q$
- d.Q-S%P

- 11. One morning Udai and Vishal were talking to each other face to face at a crossing. If Vishal's shadow was exactly to the left of Udai, which direction was Udai facing?
 - a. East
- c. North
- b. West
- d. South
- 12. Find the number following the sequence.

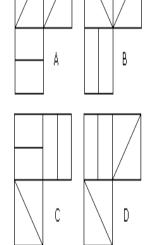
18 26 38 62

- a. 88
- c. 110
- b. 74
- d. None
- 13. If DISTRACTION is written as JTUSBDUJPOE then how CONFIDENCE will be written as
 - a. JDGOEJOFFD
- c. POGJEFODFD
- b. UOEIJNEUC
- d. JPZAYHJAPVU
- 14. Introducing a boy, a girl said, "He is the son of the daughter of the father of my uncle." How is the boy related to the girl?
 - a. Brother
- c. Uncle
- b. Nephew
- d. Son-in-law
- 15. BZX, DOK, LMA,
 - a. NOB
- c. LQD
- b. ESN
- d. MTF
- 16. Which of the Answer Figures best fits the missing space in the Question Figure?

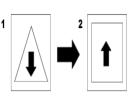
Question Figure



Answer Figures

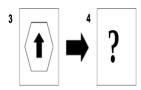


17. 1 is to 2, as 3 is to 4:













- 18. If 20+24=16, 29+36=22 then 44+88=?
 - a. 78
- c. 0
- b. 34
- d. None
- 19. Which word does NOT belong with the others?
 - a. Wing
- c. Beak
- b. Fin
- d. Rudder
- 20. Which symbol will be on the face opposite to the face with symbol *?







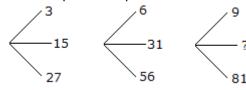


- @ a.
- c. 8
- VHERE TECHNOLS
- d. +: ETS INTELLIGENCE
- 21. P, Q, R, S, T, U, V and W are sitting around a circular table, facing the centre. P sits third to the right of W and third to the left of Q. S sits second to the right of T. V sits second to the left of R. T is not the neighbour of Q while U is neither a neighbour of T nor of W. Who sits second to the left of V?
 - a. R
- c. U
- b. P
- d. T
- 22. Statements: Some papers are pens. All the pencils are pens.

Conclusions:

- 1. Some pens are pencils.
- 2. Some pens are papers.
- a. Only (1) conclusion follows
- b. Only (2) conclusion follows
- c. Both (1) and (2) follow
- d. Either (1) or (2) follows

23. Which one will replace the question mark?



- a. 45
- c. 32
- b. 41
- d. 40
- 24. A box contains two dozen of glasses. If it is dropped on a concrete floor than which of the following cannot be the ratio of broken and unbroken cups?
 - a. 2:1
- c. 5:1
- b. 6:1
- d. 3:1
- 25. Modern warfare has changed from large scale clashes of armies to suppression of civilian populations. Chemical agents that do their work silently appear to be suited to such warfare; and regretfully, there exist people in military establishments who think that chemical agents are useful tools for their cause. Which of the following statements best sums up the meaning of the above passage:
 - a. Modern warfare has resulted in civil strife.
 - b. Chemical agents are useful in modern warfare.
 - Use of chemical agents in warfare would be undesirable
 - use chemical agents in war.
- 26. A dance programme is scheduled for 10.00 a.m. Some students are participating in the programme and they need to come an hour earlier than the start of the event. These students should be accompanied by a parent. Other students and parents should come in time for the programme. The instruction you think that is appropriate for this is
 - a. Students should come at 9.00 a.m. and parents should come at 10.00 a.m.
 - b. Participating students should come at 9.00 a.m. accompanied by a parent, and other parents and students should come by 10.00 a.m.
 - c. Students who are not participating should come by 10.00 a.m. and they should not bring their parents. Participating students should come at 9.00 a.m.
 - d. Participating students should come before 9.00 a.m. Parents who accompany them

- should come at 9.00 a.m. All others should come at 10.00 a.m.
- 27. Out of the following four sentences, select the most suitable sentence with respect to grammar and usage:
 - a. Since the report lacked needed information, it was of no use to them
 - b. The report was useless to them because there were no needed information in it
 - c. Since the report did not contain the needed information, it was not real useful to them
 - d. Since the report lacked needed information, it would not had been useful to them
- 28. Computers were invented for performing only high-end useful computations. However, it is no understatement that they have taken over our world today. The internet, for example, is ubiquitous. Many believe that the internet itself is an unintended consequence of the original invention. With the advent of mobile computing on our phones, a whole new dimension is now enabled. One is left wondering if all these developments are good or, more importantly, required. Which of the statement(s) below is/are logically valid and can be inferred from the above paragraph?
- 1. The author believes that computers d. People in military establishments like to HERE ECHNOLOGare not good for us.
 - 2. Mobile computers and the internet are both intended inventions
 - a. (i) only
 - b. (ii) only
 - c. both (i) and (ii)
 - d. neither (i) nor (ii)
 - 29. "We lived in culture and denied any merit to literally works, considering them important only when they were handmaidens to something seemingly more urgent - namely ideology. This was a country where all gestures even the most private, interpreted as political terms." The authors believe that ideology is not as important as literature is revealed by the word:
 - a. Culture
 - b. Seemingly
 - c. Urgent
 - d. Political

- 30. "A recent High Court judgement has sought to dispel the idea of begging as a disease which leads to its stigmatization and criminalization and to regard it as a symptom. The underlying disease is the failure of the state to protect citizens who fall through the social security net." Which one of the following statements can be inferred from the given passage?
 - a. Beggars are lazy people who beg because they are unwilling to work
 - b. Beggars are created because of the lack of social welfare schemes
 - c. Begging is an offence that has to be dealt with firmly
 - d. Begging has to be banned because it adversely affects the welfare of the state
- 31. A ______ investigation can sometimes yield new facts, but typically organized once are more successful.
 - a. Meandering
- c. Consistent
- b. Timely
- d. Systematic
- 32. Out of the following four sentences, select the most suitable sentence with respect to grammar and usage.
 - a. I will not leave the place until the minister does not meet me.
 - b. I will not leave the place until the minister doesn't meet me.
 - c. I will not leave the place until the minister HERE TECHNOLOGY MEETS INTELLIGENCE meet me.
 - d. I will not leave the place until the minister meets me
- 33. The minorities of which country is not covered under citizenship Amendment Act,2019?
 - a. Afghanistan
- c. Bangladesh
- b. Pakistan
- d. Myanmar
- 34. What is the cut-off date for citizenship under Citizenship Amendment Act, 2019?
 - a. December 31,2014 c. March 31, 2014
 - b. December 1,2014 d. July 31, 2014
- 35. When did NPR started in India?
 - a. 2011
- c. 2008
- b. 2010
- d. 2009
- 36. "South Asia Economics Focus, Fall 2019: Making (De) centralization Work", has been released by which of the following organisations?
 - a) IMF
- c. WEF
- b) World Bank
- d. BIS

- 37. Which player named most valuable Player in IPL auction 2020?
 - a) Virat Kohli
- c. Pat Cummins
- b) Glenn Maxwell
- d. Shemron Hetmyer
- 38. How many total teams are playing in IPL?
 - a) 6
- c. 8
- b) 7
- d. 9
- 39. Who is the current Chief Justice of India?
 - a) Justice Sharad Arvind Bobde
 - b) Justice Mehr Chand Mahajan
 - c) Justice Bijan kumar Mukherjee
 - d) Sudhi Ranjan Das
- 40. Who won the best actor award in 66th National Film Award?
 - a) Akshay Kumar
 - b) Ayushman Khurana
 - c) Vicky Kaushal
 - d) Both b and c