

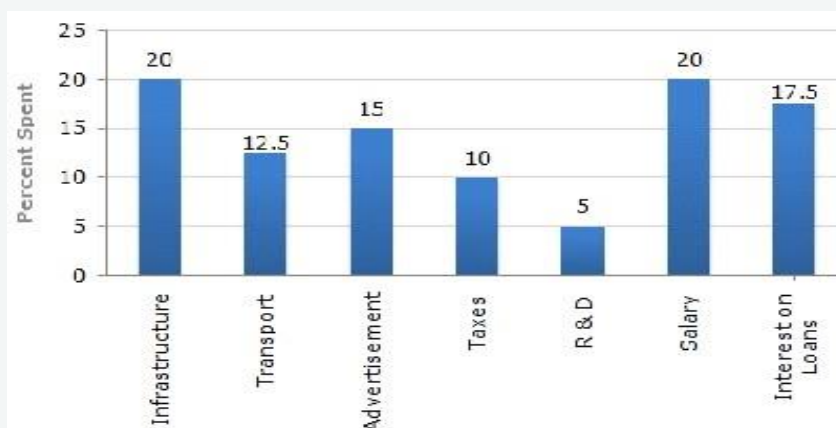
## COGNIZANT ON-CAMPUS EXAM PAPER – 20<sup>th</sup> June 2021

### Section I: Arithmetic reasoning & Analytical thinking

25 Min

**Directions for questions 1 to 5:** The bar graph given below shows the percentage distribution of the total expenditures of a company under various expense heads during 2003.

Percentage Distribution of Total Expenditure of a Company



1. The total amount of expenditures of the company is how many times of expenditure on research and development?  
a. 27                                      b. 20 c. 18                                      d. 8
2. If the expenditure on advertisement is 2.10 crores then the difference between the expenditure on transport and taxes is?  
a. Rs. 1.25 crores                      b. Rs. 95 lakhs c. Rs. 65 lakhs                      d. Rs. 35 lakhs
3. What is the ratio of the total expenditure on infrastructure and transport to the total expenditure on taxes and interest on loans?  
a. 5:4                                      b. 8:7  
c. 9:7                                      d. 13:11
4. If the interest on loans amounted to Rs. 2.45 crores then the total amount of expenditure on advertisement, taxes and research and development is?  
a. Rs. 7 crores                      b. Rs. 5.4 crores c. Rs. 4.2 crores                      d. Rs. 3crores

5. The expenditure on the Interest on Loans is by what percent more than the expenditure on transport?
- |        |        |
|--------|--------|
| a. 5%  | b. 10% |
| c. 20% | d. 40% |

**Directions for question 6 to 10:** In each of the following questions there are three statements which are followed by conclusions. Choose the conclusions which logically follow from the given statements.

6. **Statements:** All the locks are keys.  
All the keys are bats. Some watches are bats.

**Conclusions:** 1. Some bats are locks.  
2. Some watches are Keys  
3. All the keys are locks

a. Only (1) and (2)	b. Only (1)
c. Only (2)	d. Only (1) and (3)

7. **Statements:** Some questions are answers.  
Some answers are writers.  
All the writers are poets.

**Conclusions:** 1. Some writers are answers.  
2. Some poets are questions.  
3. All the questions are poets.  
4. Some poets are answers.

a. Only (1) and (2)	b. Only (1) and (4)
c. Only (1) and (3)	d. Only (2) and (4)

8. **Statements:** Some envelops are gums.  
Some gums are seals.  
Some seals are adhesives.

**Conclusions:** 1. Some envelopes are seals.  
2. Some gums are adhesives.  
3. Some adhesives are seals.  
4. Some adhesives are gums.

a. Only (3)	b. Only (1)
c. Only (2)	d. Only (4)

9. **Statement:** No camera is a phone.  
All phones are watches.  
All watches are batteries.

**Conclusions:** 1. All watches can never be cameras.  
2. All cameras are definitely batteries.

- a. Only (1)
- b. Only (3)
- c. Only (2)
- d. Only (4)

10. **Statement:** Some animals are mangoose.

All mangoose are giraffe.

No giraffe is a bear.

**Conclusions:** 1. All giraffes are animals.

2. Some giraffes are animals.

- a. Only (1)
- b. Only (3)
- c. Only (2)
- d. Only (4)

**Directions for questions 11 to 15:** The question consists of two statements, labelled (a) and (b), in which certain data are given. You have to decide whether the data given in the statements are sufficient for answering the question. You must indicate whether

- A. Statement (a) ALONE is sufficient, but statement (b) alone is not sufficient to answer the question asked.
- B. Statement (b) ALONE is sufficient, but statement (a) alone is not sufficient to answer the question asked.
- C. BOTH statements (a) and (b) TOGETHER are sufficient to answer the question asked, but NEITHER statement ALONE is sufficient to answer the question asked.
- D. EACH statement ALONE is sufficient to answer the question asked.
- E. Statements (a) and (b) TOGETHER are NOT sufficient to answer the question asked, and additional data specific to the problem are needed.

11. How is Bill related to Betty?

- a. Cindy, the wife of Bill's only brother Chris does not have any siblings.
- b. Betty is Cindy's brother in law's wife.

12. Is m divisible by 6?

- a. m is divisible by 3
- b. m is divisible by 4

13. Is ab positive? a.

$$(a+b)^2 < (a-b)^2$$

- b.  $a = b$

14. If a salesman received a commission of 3% of the sales that he has booked in a month, what was the sales booked by the salesman in the month of November 2003?

- a. The sales booked by the salesman in the month of November 2003 minus salesman's commission was \$245,000
- b. The selling price of the sales booked by the salesman in the month of November 2003 were 125 percent of the original purchase price of \$225,000.

15. What is the number?

- a. The sum of two digit is 9. The ratio of the two digits is 1:2
- b. The product of the two digit of a number is 18.  
The quotient of two digit is 3.

**Section II: Mathematical critical reasoning & Logical reasoning**  
**35 min**

**Directions for questions 16 to 17:** Read the following and answer the questions based on it.

An institution has 63 students studying Physics, Chemistry and Biology. 33 study Physics, 25 Chemistry and 26 Biology. 10 study Physics and Chemistry, 9 study Biology and Chemistry while 8 study both Physics and Biology. Equal numbers study all three subjects as those who learn none of the three.

16. How many study all the three subjects?

- a. 2                      b. 3                      c. 5                      d. 7                      e. None of these

17. How many study only one of the three subjects?

- a. 21                      b. 30                      c. 39                      d. 42                      e. None of these

18. In 100 m race, Ram beats Rajesh by 25 m, Rajesh beats Rohan by 4 m, Ram beats Rohan by how many metres?

- a. 25                      b. 28                      c. 30                      d. 22                      e. None of these

19.  $(0+0), (2+1), (4+1), 8, 11, \_, 20, 27, \_$

- a. 10                      b. 20                      c. 13                      d. 15                      e. None of these

20.  $NO+NO+TOO=LATE$  Where  $E=2$ . What is the value of  $O+L+E$ ?

- a. T                      b. O                      c. N                      d. L                      e. None of these

21. 30 litres of mixture contains petrol and diesel in ratio 3:2. 10 litres of mixture is removed and replaced with pure petrol. 10 litre of mixture is again

removed and replaced with pure diesel. What is the percentage of petrol present in the mixture?

- a.  $440/9$                       b.  $440/3$                       c. 60                      d. 40  
e. None of these

22. The number of ways in which AAABBBCCD can be arranged in such a way that 2 B's always come together is

- a.  $3 \cdot 8!$                       b.  $3 \cdot 7!$                       c.  $6 \cdot 7!$   
d.  $6 \cdot 8!$                       e. None of these

23.  $PLEASE+MAKE=OFFERS$ ;  $E=2$ ;  $M=8$ ; Find the value of OFFERS.

- a. 600274                      b. 500274                      c. 599142                      d. 699142  
e. None of these

24. Find the missing number:

3, 4, 10, 33, 136, \_\_\_\_\_.

a. 680

b. 685

c. 132

d. 326

25. A man sold two steel woods for Rs. 600 each. On one, he gains 25% and on other, he loses 14%. How much does he gain or lose in the whole transaction?

a. 1.86% gain

b. 2% gain

c. 1.86% loss

d. 2% loss

### Section III: Verbal Ability

**35 min Directions for questions 26 to 29:** Read the paragraphs given and choose the best option that suits the question asked.

26. Ever since I arrived at the college last week, I've been shocked by the poor behaviour of the students. The student population is completely lacking in proper social skills.

Which of the following, if true, would weaken the above conclusion?

- a. Students who are away from their parents often exhibit rude behaviour
- b. The college numbers over 50,000 students.
- c. The narrator is a student and has not interacted with many students.
- d. Social skills should not be expected of college students

27. Cars are safer than planes. Fifty percent of plane accidents result in death, while only one percent of car accidents result in death.

Which of the following, if true, would most seriously weaken the argument above?

- a. Planes are inspected more often than cars.
- b. The number of car accidents is several hundred thousand times higher than the number of plane accidents
- c. Pilots never fly under the influence of alcohol, while car drivers often do
- d. Plane accidents are usually the fault of air traffic controllers, not pilots.

28. The Japanese economic model created strong domestic industries through subsidies from its Ministry of Trade and by closing off competitive foreign firms to its domestic market. This strategy promised to help economic growth by incubating domestic industries. New Japanese industries could count on a known local demand and would be protected from competition by tariffs and other barriers. The program could reduce the amount of imports and therefore improve the nation's balance of trade.

Which of the following, based on the passage above, is a weakness in this economic strategy?

- a. A protectionist policy will create animosity among other nations.
- b. Fast growth of small industries will create a class of millionaires and increase the inequality of income
- c. Subsidies and import constraints keep domestic prices high and impose a burden on consumers.
- d. Quotas are more regressive than tariffs

29. Sally has never received a violation from the Federal Aviation Administration during her 16-year flying career. Sally must be a great pilot. Which of the following can be said about the reasoning above?

- a. The definitions of the terms create ambiguity.
- b. The argument uses circular reasoning.
- c. The argument works by analogy.
- d. The argument is built upon hidden assumptions.

**Direction for 30 and 31:**

Statement: According to a recent survey, managers of large companies are paid more than managers of small companies. It does not seem fair that just because a manager is heading a big company s/he

should be paid more. Manager's salary should be related to his contribution to the company's growth, especially growth in terms of sales and profits. Of course, big companies are more complex than the small, but all managers require notable amount of energy and time

in managing companies. All managers should be paid according to their performance.

30. A person seeking to refute the argument might argue that

- a. Managers should be paid equally.
- b. Managing big companies is more challenging than small.
- c. If managers of small companies perform well, the company would become big and so would the managers' salary.
- d. Managers who travel more should be paid more.

31. Which of the following, if true, would strengthen the speaker's argument?

- a. Managers of small companies come from good educational background.
- b. Managers in big companies take much longer to reach to the top, as compared to their counterparts in smaller companies.
- c. Managers of big companies are very difficult to hire.
- d. A few big family businesses have managers from within the family.

**Directions for questions 32 to 39:** In each of the following sentences, a part of the sentence is highlighted. Beneath each sentence, four or five different ways of phrasing the underlined part are indicated. Choose the best alternative from among the four.

32. The manner in which Anand always plays up to his superiors is contemptible.

- a. The manner in which Anand always plays up
- b. The manner in which Anand is playing towards
- c. The offensive way in which Anand is playing
- d. The way in which Anand is always playing up

33. The MLA insisted that he would regard it an honour if the Chief Minister would step on his coat.

- a. an honour if the Chief Minister would step on his coat.
- b. an honour if the Chief Minister so much as set foot on his coat.
- c. as an honour if the Chief Minister would step on his coat.
- d. as an honour if the Chief Minister stepped on his coat.

34. The state government also provides 10 crores to finance rural infrastructure projects and for development work.

- a. to finance rural infrastructure projects and for development work.
- b. for financing rural infrastructure projects and to carry out development work.
- c. in order to finance rural infrastructure projects and for development work.
- d. to finance rural infrastructure projects and to carry out development work.



35. Though it was not fashionable being an N.R.I, Teja has made California his home, and remained in London as a trader and businessman.

- a. Though it was not fashionable being an N.R.I, Teja has made California his home
- b. Teja has made California his home though being an N.R.I was not fashionable
- c. Though it was not fashionable to be an N.R.I, California was home to Teja
- d. Though it was not fashionable to be an N.R.I,  
Teja made California his home

36. Discoveries of Homo habilis skeletons in Ethiopia by Lee Strobel's team and in New Zealand by Chong Chang indicates that the first members of our genus had long arms and short legs.

- a. indicates that the first members of our genus had long arms and short legs.
- b. indicate that the first members of our genus had long arms and short legs.
- c. indicate that the first members of our genus  
have had long arms and short legs.
- d. does indicate that the first members of our genus had long arms and short legs.

37. The publishers, unwilling to shoulder the entire risk, insisted that the writer should pay half the cost of the initial print run of his controversial new book. a. The publishers, unwilling to shoulder the entire risk, insisted that the writer should pay half the cost of the initial print run of his controversial new book.

- b. The publishers, unwilling to shoulder the entire risk, insisted that the writer should be paying half the cost of the initial print run of the author's controversial new book.
- c. The publishers, unwilling to shoulder the entire risk, insisted that the writer pay half the cost of the initial print run of his controversial new book.
- d. Unwilling to shoulder the entire risk, the publishers insisted the writer should pay half the cost of the initial print run of his controversial new book.
- e. Unwilling to shoulder the entire risk, the writer was required by the publisher to pay half the cost of the initial print run of his controversial new book.

38. Unlike Sigmund's belief that the unconscious was solely a storehouse of repressed memories, Carl asserted that the unconscious also contained creative reservoirs.

- a. Sigmund's belief that the unconscious was solely  
a storehouse of repressed memories
- b. Sigmund and his belief that the unconscious was solely a storehouse of repressed memories
- c. the belief of Sigmund that states the unconscious is solely a storehouse  
of repressed memories
- d. Sigmund, who believed that the unconscious was solely a storehouse of repressed  
memories
- e. Sigmund and the belief that the unconscious solely stores of repressed memories

39. From what mountains or gardens would future painters draw their inspiration? Would move poets to craft their symphonies, theologians to contemplate the meaning of God, and philosophers write their verse.

- a. painters draw their inspiration? Would move poets to craft their symphonies, composers to contemplate the meaning of God, and philosophers write their verse.
- b. painters draw their inspiration? Would move poets to write their verse, composers to craft their symphonies and philosophers to contemplate the meaning of God
- c. philosophers draw their inspiration? Would move poets to write their verse, composers to craft their symphonies, and painters to contemplate the meaning of God
- d. philosophers to contemplate the meaning of God? Would move painters to draw their inspiration, composers to write their verse, and poets to craft their symphonies?

**Directions for questions 40 to 44:** Read the passage and answer the following questions.

The piranha is a much-maligned fish. Most people think that this is a deadly creature that swarms through rivers and creeks of the Amazon rainforest looking for victims to tear apart. And woe betide anyone unlucky enough to be in the same water as a shoal of Piranhas. It takes only a few minutes for the vicious Piranhas to reduce someone to a mere skeleton.

The truth is that the piranha is really a much more nuanced animal than the mindless killer depicted in the media. In fact, Piranhas are a group made up of approximately twelve different species. Each piranha

species occupies its own ecological niche. One type of piranha takes chunks out of the fins of other fish. Another type eats fruit falling from trees into the river. Each piranha species plays a unique role in the ecology of the rainforest floodplains. So what should you do next time you hear someone talking about the “deadly piranha”? You can remind them that the piranha is not always the notorious killer fish that the tough, muscular heroes of popular nature television shows would have us believe.

However, Piranhas are not always that deadly. In fact, they usually swim alone. They eat small fish as well as seeds and fruits that fall into the water. Piranhas rarely attack people.

Piranhas swim in rivers and lakes in South America. And they are kept as pets around the world. Because they eat so much and can be expensive to feed, some pet owners have released them into local waters. This practice has introduced Piranhas to habitats outside their native range. In these new environments, many Piranhas have eaten large numbers of fish, frogs, and other water animals.

- 40. The primary purpose of the author is to
  - a. correct misconceptions about the piranha
  - b. illustrate the importance of Piranhas in rainforest ecology
  - c. describe two different species of Piranhas
  - d. instruct the reader on what to say if someone describe the piranha as “deadly”
- 41. In paragraph 1, the author most likely uses the old-fashioned expression “woe betide” to
  - a. highlight the danger posed by Piranhas
  - b. suggest that the reputation of the piranha is well-deserved
  - c. emphasize the sarcastic tone
  - d. indicate that the passage was written in the 19th

century

42. In paragraph 1, the author uses hyperbole—characterized by the use of exaggeration for effect—to describe the piranha. The author most likely uses hyperbole to
- a. frame an argument that is supported in a later paragraph
  - b. create ambiguity so the reader cannot be sure which position the writer supports
  - c. juxtapose the myth of the piranha with the truth about the fish
  - d. evoke vivid images of nature television shows in the reader's mind
43. As used in paragraph 2, which is the best synonym for notorious?
- a. celebrated
  - b. disreputable
  - c. notable
  - d. renowned
44. As used in paragraph 2, which is the best definition for unique?
- a. replaceable
  - b. important
  - c. individual
  - d. unusual

**Directions for questions 45 to 49:** Read the passage and answer the following questions.

The Maastricht Treaty can be termed as the first formal treaty that led to the creation of European Union. The treaty was signed on Feb 7<sup>th</sup> 1992 and came to the existence on Nov 1<sup>st</sup> 1993. Denmark, France and Great Britain rejected the treaty in its original format. With the Edinburgh Agreement in Dec 1992 and second referendum on 18<sup>th</sup> May 1993, Denmark adopted the treaty with exceptions, namely with provisions on Citizenship, Unified Economic and monetary policies, and Defence policies and Justice and Home Affairs. The adoption of treaty required approval from citizens of each member states. France narrowly adopted the referendum in September 1992, with 51.05% in favour. Britain has consistently opposed the idea of currency unification with Euro, although some provisions of Maastricht treaty were supported.

Although the treaty initiated the unification of European community in areas of criminal justice and inter-governmental cooperation, the advantages of Euro as a currency over national currencies for stronger European economies have yet to be established. Almost all European states are following an economic cycle of boom and bust, with UK's economy showing a high correlation with that of US. Lack of a federal structure to control inflation, interest rate and taxes in the European Union have made it difficult for ECB to make effective monetary policies. The success of EU depends on each state, and weak links in the system can destabilize the entire union, as has been the case with the crisis in Greece, Ireland and Spain. With a unified monetary policy, the central bank has exposure to debts in weak economies. Politicians of strong economies have to convince the parliament, the people and other member states about a justifiable bailout package. The risk on Euro increases with interest rate hikes. With economic growth, risk of inflation is high. Strong economies opt for interest rate hikes to compensate inflation. Each country, its economy and people has different sensitiveness towards inflation and interest rate hikes. When an

economy is faced with debt, unemployment and slow demand, interest rate hikes can be catastrophic. With the abolishment of independent monetary policies, Euro faces the risk of dissolution.

45. The passage is primarily concerned with:
- providing the context of a historical phenomenon and the long-term advantages
  - underlying one interpretation of a historical phenomenon
  - assessing the merits and weaknesses of a historical phenomenon
  - discussing the historical importance of a treaty
46. According to the passage, what does the author mean with the conclusion "With the abolishment of independent monetary policies, Euro faces the risk of dissolution" mean:
- Providing a hypothetical scenario when the risk on Euro is extremely high.
  - The author is providing a scenario where the risk on Euro is extremely high.
  - Highlighting the disadvantages of Euro
  - Providing a current scenario where the risk on Euro has increased
47. Which of the following is the primary reason for problems like inflation and economic instability in the European Union?
- The central bank is exposed to debts of weak economies
  - Each country doesn't have its own independent monetary policy
  - The weak unions can destabilise the entire union thus forcing the stronger economies to offer bailout packages.
  - An effective monetary policy cannot be framed because of lack of federal structure.
48. Infer why "interest rate hikes can be catastrophic" in the context of the passage.
- With a unified monetary policy, the usage of Euro as a currency by the union countries carries the possibility that it can even destabilize the entire union.
  - Each country's economy has different sensitivity to interest rate hikes.
  - Weak economies cannot afford to hike interest rates.
  - The already slow economic growth of the countries will be threatened.
49. Even though provisions of Maastricht treaty were supported, who constantly opposed the idea of currency unification?
- Britain
  - Ireland
  - France
  - Greece

**Directions for questions 50 to 53:** Read the each sentence to find out whether there is any grammatical error in it. The error, if any will be in one part of the sentence.

50. That hospital is so badly run (A) / that neither the nurses nor the doctor (B) / come on time, and so the patients (C) / have to wait indefinitely to get attended to (D).

51. The chairman reviewed the many details (A) / connecting with probability (B) / of the company and then decided that (C) / further expansion was not desirable (D).

52. Many working men and women have been (A) / able to acquire a university degree (B) / during the last ten years after (C) / many universities started correspondent courses (D).

53. Like his brother who did not wear his helmet (A) / and was injured in the accident (B) / Raja was always careful (C) / and wore his helmet without fail (D).

**Direction for the questions 54 to 61:**

Choose the set of words for each blank which best fits the meaning of the sentence as a whole.

54. Although the defender troops had solved a number of problems, their past incidents made them ..... to show out a positivity that they would definitely succeed.

- a. Rash                      b. Ambivalent    c. Scornful                      d. overjoyed

55. Sharks of the masculine gender are generally \_\_\_\_\_ creatures; however, when they are enviously looking after their areas, they have been known to \_\_\_\_\_ the war ships.

- a. docile, attack              b. aggressive, strike  
c. Large, assault              d. Peaceful, ignore

56. The costume Aathira wore \_\_\_\_\_ with oval shaped, glassy beads, caused a gleaming effect.

- a. Titillated                      b. Reiterated              c. Scintillated                      d. enthralled

57. Her poems are \_\_\_\_\_; she uses a lengthy roundabout expression when a direct coupling of simple parts of speech would be best.

- a. prolix                      b. Pedestrian                      c. Succinct                      d. vapid

58. The reason that the people have the votes to counteract a governmental veto, the Prime minister has no choice but to \_\_\_\_\_.

- a. Object                      b. Abdicate  
c. Abstain                      d. Compromise

59. The director believes that all actors are \_\_\_\_\_, for her main idea is, whatever qualities they may lack, are in fact preeminent qualities of \_\_\_\_\_.

- a. clever . . . ingenuity  
b. covetous . . . greed  
c. virtuous . . . deceit  
d. successful . . . ambition

60. Having faith to ----- the argument, the moderator proposed a letter stating that their fault would be ----- to both the workers and the bosses.

- a. enforce . . useful  
b. end . . divisive

- c. overcome . . unattractive
- d. resolve...acceptable

61. Her beauty was a double-edged sword; in her peer groups, it aroused both admiration and\_\_\_\_\_.

- a. envy
- b. laudation
- c. equanimity
- d. obstinacy

**Directions for questions 62 to 65:** Read the each sentence to find out whether there is any grammatical error in it. The error, if any will be in one part of the sentence.

62. She was wearing a wig that was (A) / far more attractive than (B) / the other women who had (C) / their natural hair (D).

63.It is futile to discuss this further (A) / since neither his nor you (B) / are going to agree (C) /with the other on this problem (D).

64.Each of the dancers whom I invited (A) / to participate in the competition has (B) /indicated their unwillingness (C) / because of the short notice(D).

65.If one watches the news regularly (A) / you will be surprised at the improvement (B) / in your overall reading skills (C) / from day to day (D).