

Question Booklet Number:

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Applicant's Name: _____									
Roll Number: <input type="text"/>					Application Number: <input type="text"/>				
Date: <input type="text"/>					Test Centre: _____				

	Section Title	Question Type	No. of Questions	Question Nos.	Total Time *
Part I	1. English Language	Multiple choice	18	1 – 18	2 hours (10.30 a.m. to 12.30 p.m.)
	2. Quantitative Reasoning	Multiple choice	15	19 - 33	
Part II	Descriptive component (to be written for your first major preference)	Subjective			1 hour (12.30 p.m. to 1.30 p.m.)

* Candidates shall be allowed to leave the examination hall only after 1 hour of the commencement of the Examination.

Please read the following instructions carefully:

1) At the test venue, the instructions given by the test administrator and invigilators must be followed. Violation of instructions will result in disqualification and the candidate will be asked to leave the examination hall. Any candidate found guilty of using unfair means of any nature in the examination hall shall be liable to be disqualified.

2) Candidates are not allowed to carry any papers, notes, books, log table, calculators or calculating devices, scanning devices, communication devices like cellular phone/pager/docupen, etc. to the Examination Hall.

3) Please use ONLY blue/black ball point pen to fill details and to darken the circles on the OMR sheet. **USING PENCILS IS PROHIBITED.**

4) Before beginning to answer the paper, write your Roll Number in the space provided in the Question Booklet. On the OMR Answer Sheet, please fill in the details and sign at the appropriate place.

5) For each correct answer, candidate will be given 2 marks. 1 mark will be deducted for each wrong attempt. Zero marks will be given for no attempt.

6) Each objective type question is followed by four responses. Please mark the correct response by darkening the relevant CIRCLE with a BLUE/BLACK ball point pen on the OMR Answer Sheet. Darken ONLY ONE circle for each answer so that the letter inside the circle is not visible.

The CORRECT and the WRONG methods of darkening a circle are given below



7) Please DO NOT make any stray marks anywhere on the OMR Answer Sheet. DO NOT fold or wrinkle the OMR Answer Sheet. Rough work MUST NOT be done on the Answer Sheet. Use space provided in the Question Booklet for rough work. Rough sheets will be provided to you separately.

8) After completing the test, please hand over the Question Booklet to the Test Invigilator. DO NOT carry the Question Booklet or any part thereof outside the Examination Hall.

Part I - English Language

Directions for Questions 1-9:

Read the following passage and answer the questions that follow:

Researchers have uncovered traces of a lost continent that disappeared about 120 million years ago under what is today Europe. Geologists have seen hints of the continent, dubbed Greater Adria, for years. But the Mediterranean area is incredibly complicated, so piecing together its history took a decade of academic detective work. "The Mediterranean region is quite simply a geological mess," geologist Douwe van Hinsbergen of Utrecht University, first author of the study says. "Everything is curved, broken, and stacked." (1)

The story that the rocks tell begins on the supercontinent Gondwana, which would eventually split into Africa, South America, Australia, Antarctica and India. Greater Adria broke away from the mother continent about 240 million years ago, beginning a slow drift northward. Roughly 140 million years ago, it was about the size of Greenland, mostly submerged in a tropical sea, collecting sediment that hardened into rock. Then, roughly 100 to 120 million years ago, it hit the southern edge of future Europe, spinning counter-clockwise and moving at about 3 to 4 centimetres per year. (2)

As Robin George Andrews at National Geographic reports, the destruction of Greater Adria was complex. It hit several subduction zones, or areas where tectonic plates meet. In this case, the Greater Adria plate was trumped by the European plate, and most of it dove down into Earth's mantle. The overlying plate scraped the top layers of Great Adria off. That debris eventually formed mountain ranges in Italy, Turkey, Greece, the Balkans and in the Alps. A few bits of Greater Adria escaped the plunge into the mantle and still exist in Italy and Croatia. (3)

Figuring out the story of Greater Adria was difficult, not only because of the geology but also due to human factors. Information about the continent is spread across many countries, from Spain to Iran. "Every country has their own geological survey and their own maps and their own stories and their own continents," Hinsbergen tells Yasemin Saplakolu at LiveScience. "[With this study] we brought that all together in one big picture." (4)

They also spent time constructing the continent's history by examining the orientation of tiny magnetic minerals created by bacteria trapped in the Adria rocks. From that data they were able to understand how much the rock layers rotated over time. They also pieced together structures like strings of volcanoes and coral reefs. New, more powerful software developed over the last 15 years or so also aided in reconstructing the lost land mass. (5)

The new study, apparently, isn't the only evidence for Greater Adria. In 2016, another team identified slabs of the continent in Earth's mantle using seismic waves. Nor

is it the only "lost continent" out there. A large land mass called Zeelandia is submerged under two-thirds of a mile of water in the South Pacific and is considered the "eighth continent" by some researchers. In 2017, other scientists announced that they found a sunken "mini-continent" under the island of Mauritius in the Indian Ocean. (6)

(From: 'Study Reveals Lost Continent' by Jason Daley)

1) According to the passage, what is the name of the continent that broke into many continents?

- A) Greater Adria
- B) Gondwana
- C) Greenland
- D) Zeelandia

2) According to the passage, which of the following is true?

- A) Roughly 140 million years ago, Greenland was submerged in a tropical sea.
- B) About 100 million years ago, the northern edge of Africa hit the southern edge of Europe.
- C) About 120 million years ago, Europe began spinning counter-clockwise and moving at about 3 to 4 centimetres per year.
- D) About 240 million years ago, Greater Adria began to move towards the north.

3) Which of the following theories does the passage support?

- A) Europe was formed because Greater Adria moved to a place of tectonic pressure.
- B) The European continental plate was originally to be found close to the Earth's mantle in the Mediterranean.
- C) The European continental plate was stronger than that of Greater Adria.
- D) Debris from the shifting of the European plate is still to be found in Italy and Croatia.

4) Which of the following is the main idea that the passage seeks to convey?

- A) From a geological viewpoint, the Mediterranean region is a mess.
- B) Geologists now know of at least three "lost continents".
- C) There is evidence of a lost continent in the Mediterranean region, but tracing the history of that continent is difficult.
- D) Geologists have spent much time constructing the continent's history by examining the orientation of tiny magnetic minerals created by bacteria.

5) Which of the following is an opinion held by the author of this passage?

- A) Every country has their own geological survey and their own maps and their own stories and their own continents
- B) Everything in the Mediterranean area is curved, broken, and stacked.
- C) Human factors can sometimes complicate the reconstruction of our geological past.
- D) Zeelandia is the eighth continent.

6) Which of the following words is the closest antonym (opposite) of the word “submerged” as used in the sentence beginning:

“A large land mass called Zeelandia is submerged under two-thirds of a mile of water ...”? (Para 6)

- A) soaked
- B) floating
- C) discovered
- D) visible

7) Which of the following words or phrases is the closest in meaning to the word “sediment” as used in the sentence ending

“...collecting sediment that hardened into rock.”? (Para 2)

- A) reddish material found in continental plates
- B) clay particles that cling loosely together
- C) matter that settles at the bottom of a liquid
- D) thick, sticky fluid in the Earth’s mantle

8) What is the present tense of the word “dove”, used in the sentence ending

“most of it dove down into Earth’s mantle”? (Para 3)

- A) dive
- B) drive
- C) diver
- D) divert

9) Which of the following words is the closest in meaning to the word “survey” as used in the sentence starting:

“Every country has their own geological survey”? (Para 4)

- A) study
- B) collection
- C) ascent
- D) descent

Directions for Questions 10-18:

Read the following passage and answer the questions that follow:

To do something well you have to like it. That idea is not exactly novel. We’ve got it down to four words: “Do what you love.” But it’s not enough just to tell people that. Doing what you love is complicated. (1)

The very idea is foreign to what most of us learn as kids. When I was a kid, it seemed as if work and fun were opposites by definition. Life had two states: some of the time adults were making you do things, and that was called work; the rest of the time you could do what you wanted, and that was called playing. Occasionally the things adults made you do were fun, just as, occasionally, playing wasn’t—for example, if you fell and hurt yourself. But except for these few anomalous cases, work was pretty much defined as not-fun. (2)

And it did not seem to be an accident. School, it was implied, was tedious because it was preparation for grownup work. The world then was divided into two groups, grownups and kids. Grownups, like some kind of cursed race, had to work. Kids didn’t, but they did have to go to school, which was a diluted version of work meant to prepare us for the real thing. Much as we disliked school, the grownups all agreed that grownup work was worse, and that we had it easy. (3)

Teachers in particular all seemed to believe implicitly that work was not fun. Which is not surprising: work wasn’t fun for most of them. Why did we have to memorize state capitals instead of playing dodgeball? For the same reason they had to watch over a bunch of kids instead of lying on a beach. You couldn’t just do what you wanted.(4)

I’m not saying we should let little kids do whatever they want. They may have to be made to work on certain things. But if we make kids work on dull stuff, it might be wise to tell them that tediousness is not the defining quality of work, and indeed that the reason they have to work on dull stuff now is so they can work on more interesting stuff later. (5)

Once, when I was about 9 or 10, my father told me I could be whatever I wanted when I grew up, so long as I enjoyed it. I remember that precisely because it seemed so strange. It was like being told to use dry water. Whatever I thought he meant, I didn’t think he meant work could literally be fun—fun like playing. It took me years to grasp that. (6)

By high school, the prospect of an actual job was on the horizon. Adults would sometimes come to speak to us about their work, or we would go to see them at work. It was always understood that they enjoyed what they did. In retrospect I think one may have: the private jet pilot. But I don’t think the bank manager really did.

The main reason they all acted as if they enjoyed their work was presumably the upper-middle class convention that you're supposed to. It would not merely be bad for your career to say that you despised your job, but also socially embarrassing. (7)

Why is it conventional to pretend to like what you do? The first sentence of this essay explains that. If you have to like something to do it well, then the most successful people will all like what they do. That's where the upper-middle class tradition comes from. Just as houses all over America are full of chairs that are, without the owners even knowing it, nth-degree imitations of chairs designed 250 years ago for French kings, conventional attitudes about work are, without the owners even knowing it, nth-degree imitations of the attitudes of people who've done great things. (8)

What a recipe for feeling like misfits. By the time they reach an age to think about what they'd like to do, most kids have been thoroughly misled about the idea of loving one's work. School has trained them to regard work as an unpleasant duty. Having a job is said to be even harder than schoolwork. And yet all the adults claim to like what they do. You can't blame kids for thinking "I am not like these people; I am not suited to this world." (9)

Actually they've been told three lies: the stuff they've been taught to regard as work in school is not real work; grownup work is not (necessarily) worse than schoolwork; and many of the adults around them are lying when they say they like what they do. (10)

(Adapted from: 'How To Do What You Love' by Paul Graham)

10) The author of the above passage is likeliest to be:

- A) a person with no particular interest in the question of career choices
- B) a person with fairly well defined views on career choices
- C) a middle school student with some part time summer work experience
- D) a person of little education or significant work experience

11) According to the author of this passage, if children work on dull material in school:

- A) It is to make them ready for a career that will be even duller.
- B) They should be made aware that this is only in preparation for more interesting work in future.
- C) It is because teachers don't enjoy their work and take this out on students.
- D) It is because teachers cannot teach well enough or select the right material.

12) The passage states that:

- A) Work can never be enjoyable.
- B) Work is always enjoyable.
- C) Work should always be enjoyable.
- D) Work should be enjoyable but is not often so.

13) According to the author of this passage, children have the wrong idea about what work is like mainly because:

- A) They have no experience of the world outside school.
- B) They are told untruths about what work can be like by the adults around them.
- C) They are misfits.
- D) They do not pay attention in their school's career counselling sessions.

14) According to the author of this passage:

- A) People claim to enjoy their work because, in their minds, liking what one does is closely linked with success.
- B) People claim to enjoy their work because it is not as hard as getting an education
- C) People claim to enjoy their work because we can't all be private jet pilots.
- D) People claim to enjoy their work because, as bank managers, they control so much money

15) Which of the following words is the closest in meaning to the word "anomalous" as used in the sentence beginning:

"Except for these few anomalous cases..."? (Para 2)

- A) recent
- B) general
- C) true
- D) odd

16) Which of the following words is the closest in meaning to the word "foreign" as used in the sentence beginning

"The very idea is foreign..."? (Para 2)

- A) international
- B) domestic
- C) strange
- D) familiar

17) Which of the following words or phrases is the closest antonym (opposite) of the word “diluted” as used in the phrase

“a diluted version of work”? (Para 3)

- A) Misleading
- B) Concentrated
- C) Unnatural
- D) Early

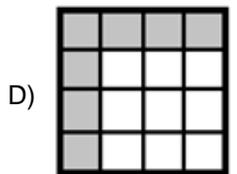
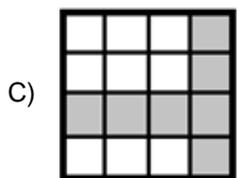
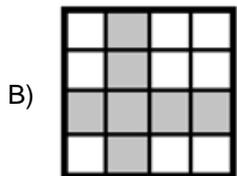
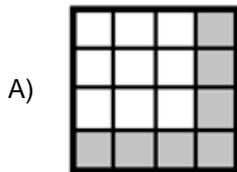
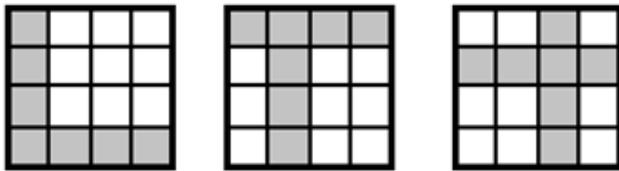
18) The word “conventional” in the phrase

“conventional attitudes about work....” (Para 8):

- A) is the name of an object, and is therefore a noun
- B) describes something, and is therefore an adjective
- C) represents an action, and is therefore a verb
- D) is a substitute for the name of an object, and is therefore a pronoun

Part II – Quantitative Reasoning

19) Which shape comes next in the pattern below?



20) Suppose X is 5% of 30 and Y is 3% of 80. Then

- A) $5X = 3Y$
- B) Y is bigger than X
- C) $3X = 5Y$
- D) X is bigger than Y

21) A goat needs 2.5 kgs of grass per day. If you have 100 kgs of grass, for how many days can you feed two goats?

- A) 20 days
- B) 25 days
- C) 40 days
- D) 80 days

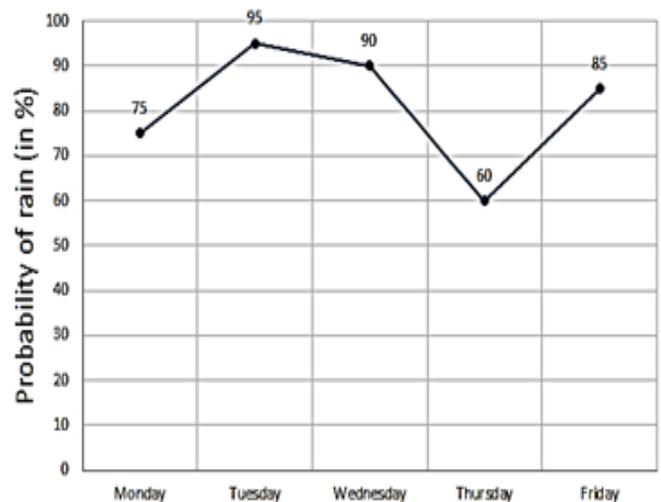
22) If you have a cardboard square of side 3 cm, and cut out a circle of radius 1 cm, what is the area of the remaining shape (in cm^2)?

- A) $9 - 2\pi$
- B) $12 - \pi$
- C) $12 - 2\pi$
- D) $9 - \pi$

23) Suppose $xy = 1$ and $y = 50$. Then x equals

- A) 0.5
- B) 0.2
- C) 0.02
- D) 0.05

24) The graph below shows the probability of rain in Bangalore for the coming week.



Which of the following is true?

- A) It will definitely rain some time during the week
- B) It is possible that there will be no rain on both Thursday and Friday
- C) If it does not rain on Tuesday, it will not rain on Thursday
- D) If it does not rain on Tuesday, it has to rain on Wednesday

25) Which of the following is correct?

- A) $3/20 = 4/30 = 5/40$
- B) $5/40 < 4/30 < 3/20$
- C) $3/20 < 4/30 < 5/40$
- D) $5/40 > 4/30$ and $4/30 < 3/20$

26) A password consists of three whole numbers between 0 and 9. Numbers can be repeated but have to be entered in the right order. It takes you one second to enter a number. What is the maximum time it will take you to find the correct password if you work non-stop?

- A) Less than thirty minutes
- B) More than thirty minutes but less than one hour
- C) More than one hour but less than one day
- D) More than one day

27) P is a bigger number than Q. If you subtract 2 from Q, you get R. Which of the following is true?

- A) P is bigger than R
- B) R is bigger than P
- C) Q is smaller than R
- D) We cannot say which of P and R is bigger

28) The following table shows the cost of travelling in a bus for various distances.

D = Distance (in Km)	2	4	6	8	10	12	14
F = Bus Fare (in Rs.)	10	15	18	18	20	20	23

Which of the following is correct?

- A) $F = 2D$
- B) $F \geq 2D$
- C) $F = 3D$
- D) None of the above formulas is true.

29) A shopkeeper has 30 kg of white rice and 20 kg of red rice. 5% of the white rice and 10% of the red rice are spoilt. Altogether, what percentage of the rice is spoilt?

- A) 5%
- B) 7%
- C) 15%
- D) 12.5%

30) An oval bicycle track is 1 km long and the total distance for the race is 7.5 km. Cyclist 1 is going at an average speed of 15 km/hr and Cyclist 2 is going at an average speed of 30 km/hr.

Which of the following is true?

- A) Cyclist 2 will never meet Cyclist 1
- B) The two cyclists will meet exactly once
- C) The two cyclists will meet seven times
- D) The two cyclists will meet three times

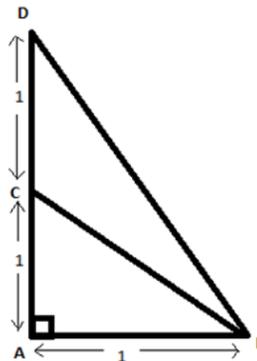
31) In a class with 55 students, 36 are taking biology and 22 are taking maths. Which of the following is true?

- A) At least three students are taking both biology and maths
- B) No more than three students are taking both biology and maths
- C) Exactly three students are taking both biology and maths
- D) This situation is not possible

32) The average of the numbers 7, -2, X and Y is 5. Which of the following has to be true?

- A) X and Y must be positive
- B) X and Y must lie in between -2 and 7
- C) $X+Y=15$
- D) $X=5, Y=8$

33) In the figure below, which of the following is true?



- A) The area of triangle ABC equals the area of triangle CBD
- B) The area of triangle ABC is larger than the area of triangle CBD
- C) The area of triangle ABC is smaller than the area of triangle CBD
- D) We do not have enough information to compare the areas of the two triangles

Space for Rough Work: