南京航空航天大学

2012年硕士研究生入学考试初试试题(<u>A</u>卷)

科目代码: <u>620</u>科目名称: <u>基础英语</u>满分: <u>150</u>分

注意: 认真阅读答题纸上的注意事项; 所有答案必须写在答题纸上,写在本试题纸或

草稿纸上均无效; 本试题纸须随答题纸一起装入试题袋中交回!

| I. Vocabulary (20 points) | | | | | |
|---------------------------|--|--|--|--|--|
| | | | | | |
| A. | Choose the word or phrase marked A, B, C, and D to best correspond to the word above. Be | | | | |
| | sure to write down your choice on the answer sheet. (10 points) | | | | |
| | | | | | |
| | 1. ramshackle | | | | |
| | a) brawny | b) sturdy | | | |
| | c) stationary | d) rickety | | | |
| | 2. intermezzo | | | | |
| | a) intermediate | b) intermediary | | | |
| | c) entr'acte | d) entrant | | | |
| | 3. gibberish | | | | |
| | a) unnecessarily pretentious language | b) unnecessarily discourteous language | | | |
| | c) exciting talk | d) depressive talk | | | |
| | 4. tacky | | | | |
| | a) adhesive; tawdry; distasteful | b) subordinate | | | |
| | c) inferior | d) improper | | | |
| | 5. tunic | | | | |
| | a) A short pleated and belted dress worn | b) A long pleated and belted dress worn by | | | |
| | by men for some sports | men for some sports | | | |
| | c) A short pleated and belted dress worn | d) A long pleated and belted dress worn by | | | |
| | by women for some sports | women for some sports | | | |
| | 6. dissent | | | | |
| | a) to agree; to concur | b) conform | | | |
| | c) comply | d) to disagree; to differ in opinion | | | |
| | 7. meticulous | | | | |
| | a) harum-scarum | b) temerarious | | | |
| | c) lacking a sense of responsibility; | d) excessively concerned with details | | | |
| | reckless | | | | |
| | 8. doldrums | | | | |
| | a) period of being stimulated | b) period of stagnation or slump | | | |
| | c) state of excessive exhilaration | d) state of exaltation | | | |
| | 9. camouflage | | | | |
| | a) conceal through misrepresentation or | b) assume the character fraudulently | | | |

other artifice

| c) make known by supernatural or divine | d) take for granted as being true in the | |
|--|--|--|
| means | absence of proof | |
| 10. blaspheme | | |
| a) to speak in an reverent, pious manner | b) to speak in an irreverent, impious manner | |
| c) to abuse God's trust | d) to behave in a secular way | |

B. Directions: Explain the *italicized* words in the following sentences with simple, everyday words or expressions in English. Be sure to write down your explanation on the answer sheet. (10 points)

1. Flirting with the colossal wealth, he was *rebuffed*.

2. To retrieve your PIN, answer the questions below and select Submit Request to continue.

3. ... ageing and *paunchy*, he walked on pompously.

4. He's not ready to *concede* the election.

5. The writer is a *starry-eyed* optimist and acid-tongued cynic.

6. Opponents say the law will *encroach* on privacy and jeopardize civil liberties.

7. It seems difficult to test the *legality* of the case.

8. Only the *agnostic* or atheist was beyond the pale of tolerance.

9. They've asked the judge to *expedite* the lawsuits.

10. levy a fee for service used

II. Cloze (20 points)

A. Fill in each of the following blanks with a suitable word in its proper form and write down the required word on the answer sheet. (**10** points)

We are fortunate in having two different kinds of scientists. Among them are the basic scientists <u>1</u> have curiosity as their impelling motive, who report their findings and <u>2</u> not bother to follow the long road <u>3</u> useful applications of their discoveries. When a research is carried as <u>4</u> as they desire, they return to their <u>5</u> and work on other pioneering problems in which they are <u>6</u>, and again they feed their results into <u>7</u> world's pool of scientific knowledge. Such <u>8</u> predominate in academic laboratories.

<u>9</u> type of scientist, found largely in industrial laboratories, is interested in science <u>10</u> applied in technology. These scientists try to adapt the results of pure <u>11</u> to human needs and to solve specific <u>12</u> in order to improve products or increase efficiencies of manufacturing. The <u>13</u> scientists often work in teams which contain scientists of <u>14</u> backgrounds, perhaps a mathematician, a physicist, a chemist, and an engineer. Rapid advances are <u>15</u> through this programmatic applied research, for <u>16</u>, the three short years from the discovery of nuclear fission to the first nuclear chain reaction, and a <u>17</u> three years from the nuclear chain reaction to the nuclear explosion.

There is no fixed line <u>18</u> basic and applied research: practical applications often require additional basic research in order to fill <u>19</u> in available knowledge, and many good ideas for basic investigations come from applied <u>20</u>. Applied research feeds on basic research, but

basic research and its tools are also dependent on applied research. So technology grows.

B. Fill in each blank with a proper word from the following box. Change its form if necessary and write down the required word on the answer sheet. (**10** points)

along characteristically compromises constant diversity hypocritical initiation juxtapositions mean mixture never none not seriously sovereignties such together turfs variety with

New York is too big to be dominated by any group, by Wasps or Jews or blacks, or by Catholics of many origins — Irish, Italian, Hispanic. All have their little <u>1</u>, all are sizable enough to be reckoned <u>2</u> and tough in asserting their claims, but <u>3</u> is powerful enough to subdue the others. <u>4</u>, the city swallows up the United Nations and refuses to take it <u>5</u>, regarding it as an unworkable <u>6</u> of the idealistic, the impractical, and the <u>7</u>. But New Yorkers themselves are in training in how to live <u>8</u> in a diversity of races --- the necessary <u>9</u> into the future.

The <u>10</u> gives endless color to the city, so that walking in it is a <u>11</u> education in sights and smells. There is a wonderful <u>12</u> of places to eat or shop, and though the most successful of <u>13</u> places are likely to be touristy hybrid <u>14</u>, they too have genuine roots. Other American cities have ethnic <u>15</u> jealously defended, but <u>16</u>, I think, such an admixture of groups, thrown together in such jarring <u>17</u>. In the same way, avenues of high-rise luxury in New York are <u>18</u> far from poverty and <u>19</u> streets. The sadness and fortitude of New York must be celebrated, <u>20</u> with its treasures of art and music. The combination is unstable; it produces friction, or an uneasy forbearance that sometimes becomes a real toleration.

III. Error correction (20 points)

Directions: There are twenty mistakes in the following passage. You are required to underline or mark the mistakes and get them corrected. Be sure to write down the correct form on the answer sheet.

1

2

| Example: "Wordsworth is said to have | most fascinating voice!" | the |
|--------------------------------------|--------------------------|-----|
|--------------------------------------|--------------------------|-----|

A notion has taken hold in the United States to an effect that the only people who should be encouraged to bring children into the world are those who can afford them. This notion is an absurd and a dangerous one.

The problem of population control has to be recognized and approach in a
world environmental context. In coping with population pressure or anything
that affect the environment, the most important need is for the United States3to protect human's life on this planet. The situation today is that the world's
population is increased faster than the supply of food and available resources.56

| In the present rate of population expansion, land depletion, reduction of | | |
|---|-----------|--|
| available water, and exhaustion of natural sources, within thirty years this | 8 | |
| planet will experience survival tensions the like of them have never existed | 9 | |
| before. One figure only is worth considering: the approximate annual rate of | 10 | |
| world population increase is 2 percent. If, starting with few thousand human | <u>11</u> | |
| beings 5,000 years ago, the human race experienced a constant 2 percent | 12 | |
| annual increase, the Earth today would be swarmed with people fighting for | 13 | |
| standing rooms. | 14 | |
| Any view of the future must begin with the sense of the whole. The human | 15 | |
| habitat is on jeopardy. There can no longer be privileged sanctuaries on this | 16 | |
| planet. None can nations be regarded as the ultimate form of human | 17 | |
| organization. It now becomes necessary to develop the United Nations into an | | |
| agency with adequate authority attacking world problems, most especially | 18 | |
| with respect for war and environmental destruction. The role of Americans in | 19 | |
| helping to bring this on will be speeded by the development of a world outlook. | 20 | |
| | | |

IV. Paraphrase (30 points)

Directions: Restate the following sentences in another form in English to clarify the meaning. Be sure to write down your restatement on the answer sheet.

- 1. He throws a reassuring arm around John's shoulder.
- 2. It is a huge waste of hummocky earth, like a derelict building lot.
- 3. The glow of the conversation burst into flames.
- 4. Those who sought power by riding the back of the tiger ended up inside.
- 5. Oblivious of the fragility of the earth's natural systems, human beings will be punished.
- 6. Logic is far from being a dry, pedantic discipline.
- 7. Science is committed to the universal.
- 8. It reduced the whole aspiration of man to a macabre and depressing joke.
- 9. With a clamour of bells that set the swallows soaring, the Festival came to Omelas.
- 10. The war acted merely as a catalytic agent in the breakdown of the Victorian social structure.

V. General Knowledge (20 points)

a. Directions: Choose the best to fill in the blank or answer the question.(10 points)

The exploration of the syntactic relation between sentences in a paragraph or chapter or 1. the whole text leads to the emergence of _____.

A. cohesion

B. text linguistics

C. syntactics

D. discourse

2. The capital city in Wales is____.

- A. Dublin
- B. Edinburgh
- C. Glasgow
- D. Cardiff

3. The Head of the executive branch in New Zealand is _____.

- A. the British monarch
- B. the Governor-General
- C. the President
- D. the prime minister
- 4. Who is NOT a 20th century writer?
 - A. Allen Ginsberg
 - B. Wystan Hugh Auden
 - C. Elizabeth Gaskell
 - D. William Faulkner
- 5. Which is the international newspaper published daily online, Monday to Friday, and weekly in print?
 - A. The Times
 - B. The Guardian
 - C. Financial Times
 - D. Christian Science Monitor
- 6. _____ writes, "it is a truth universally acknowledged, that a single man in possession of a good fortune must be in want of a wife."
 - A. Gorge Gorden Byron
 - B. Jane Austin
 - C. Percy Bysshe Shelley
 - D. William Wordsworth
- 7. Americans observe _____ on the fourth Thursday in November.
 - A. Thanksgiving Day
 - B. Veterans Day.
 - C. Halloween
 - D. Columbus Day

8. Which of the following words is a lexical word?

- A. my
- B. however
- C. very
- D. phrase

9. Which of the following is NOT written by Charles Dickens.

- A. A Christmas Carol
- B. Great expectation
- C. The Red Wheelbarrow
- D. Hard Times

10. Which of the following is not an agglutinative language?

- A. Chinese
- B. Japanese
- C. French
- D. Russian

b. Directions: Candidates are **FREE** to choose any **FIVE** from the following **TEN** terms and explain them in plain English on the answer sheet. (**10** points)

- 1. affricate
- 2. a lexical gap
- 3. pragmatics
- 4. voice
- 5. reference
- 6. flashback
- 7. free Verse
- 8. genre
- 9. theatre of the absurd
- 10. imagery

VI. Reading Comprehension (40 points)

Directions: Each of the passages below is followed by some questions. For each question there are four answers marked [A], [B], [C] or [D]. Read the passages carefully and choose the best answer to each of the questions. Be sure to write down your choice on the answer sheet.

Passage 1

Recently the end of the Mayan Long Calendar has received a lot of attention because of the belief that the date is closely linked with the end of the world as we know it today. These 2012 predictions range from those on a celestial level to those on a much more earthly realm. One of the reasons why researchers of Mayan culture and mythology are so certain that this calendar means something is because of the exacting relevance and research that was put into studying the solar system and the corresponding important dates.

For example, the end of the calendar takes place at the end of the thirteenth baktun. The number thirteen was considered by the Mayan to be a very important and spiritual number. Not to

mention the fact that December 21st, 2012, is not only the winter solstice, but is actually the date that a rare alignment will take place of the entire Milky Way. This is something that only occurs once every twenty five thousand years. The fact that the Mayans knew this date was going to be an important one for the alignment of the planets is not a coincidence. In fact, the Mayan culture has several components that are closely linked with the study of astronomy.

When researchers began to look into the dates on the Mayan calendar they realized that they actually corresponded to certain astronomical phenomenon. It was that which amazed most of them. After all, this culture did not have access to the high tech scientific equipment that we have today, yet they were able to pinpoint many events in our solar system with complete accuracy. It was this ability of the Mayans that caused many who looked into the 2012 predictions to take them a little more seriously than they might have otherwise.

There are arguments that the end of the baktun cycle that the Mayans put into their calendar does not necessarily mean that it is the end of humanity, but rather they would have seen it as an important transition that would affect everyone on a different level. However, there are others who view it as a literal end of the world scenario. Besides the rare planetary alignment that is set to occur, there are also interesting astronomical occurrences that help to lend credence to this idea.

One of these is the belief that there is a planet named Nibiru (sometimes referred to as Planet X) that orbits through our solar system once every three thousand six hundred years. While there is no definite scientific proof of this, there are those researchers who agree that there appears to be a missing planet from the orbital rotation. Some even believe that the next time this planet's orbit is set to intersect with ours will be in the year 2012. If this orbit interferes with our solar system it could cause a lot of problems, and these issues are what some people are anticipating.

While you may find the idea of this strange planet something out of a science fiction novel, you should know that the ancient Sumerians actually wrote about this planet, and they are the ones who named it Nibiru. They also believed that an advanced race of beings known as the Anunnaki lived on the planet, and that these beings created humanity through a form of genetic manipulation. While the Sumerians did not know about genetic mutation, it appears that the hieroglyphs that have been uncovered by archeologists show a detailed description of the Anunnaki taking a part of themselves and combining it with other creatures to create humanity.

Even though the 2012 predictions are completely shrouded in mystery, it is certain that they have intrigued people around the world. If you are interested in finding out more, you can go to the website below as a way to find out more about the countdown to this date. In fact, it is full of helpful information to make sure that no matter what happens you and your family will be fully prepared.

- 1. Why does the end of the Mayan Long Calendar receive much attention by people from all over the world?
 - A. Because the date is closely linked with the "judgment day".
 - B. Because it is the date that a rare alignment will take place.
 - C. Because the date is assumed to be the last day of humanity.
 - D. Because it is the end of the thirteenth baktun.
- 2. Which of the following statements about December 21st, 2012 is NOT true?
 - A. December 21st, 2012 is the winter solstice.
 - B. On this day, the orbit of Nibiru interferes with our solar system and it will definitely cause

a lot of problems

- C. It might be an important transition that would affect everyone on a different level.
- D. This day is no different from other common days.
- 3. Which of the statements about Mayan culture is true?
 - A. It is rather primitive and is not credible at all.
 - B. It was prosperous due to the involvement of beings from outer space.
 - C. It is closely linked with the study of astronomy.
 - D. This culture has access to the high tech scientific equipment
- 4. What is the appropriate word which may replace the word "pinpoint" in Para.3?
 - A. observe
 - B. anticipate
 - C. experiment
 - D. organize
- 5. The relevant statement about the planet named Nibiru is true except _____
 - A. The ancient Sumerians named it Nibiru.
 - B. It is proved that Nibiru orbits through our solar system once every 3600 years.
 - C. It is said that there are outerspace intelligent beings living on Nibiru.
 - D. The hieroglyphs indicate that the Anunnaki combining themselves with other creatures to create humanity

Passage 2

Psychologists warn that therapies based on positive emotions may not work for Asians. Thinking happy thoughts, focusing on the good and downplaying the bad is believed to accelerate recovery from depression, bolster resilience during a crisis and improve overall mental health. But a new study by University of Washington psychologists reveals that pursuing happiness may not be beneficial across all cultures.

In a survey of college students, Asian respondents showed no relationship between positive emotions and levels of stress and depression. For European-American participants, however, the more stress and depression they felt, the fewer positive emotions they reported.

The study indicates that psychotherapies emphasizing positive emotions, which can relieve stress and depression in white populations, may not work for Asians, who make up 60 percent of the world population.

The findings have implications for helping the Japanese recover from natural disasters and subsequent nuclear crisis in March, and for Chinese coping with post-traumatic stress following the 2008 Sichuan Province earthquake.

The researchers asked 633 college students – a mix of Asian immigrants, Asian Americans and European Americans – to rate how much stress and depression they felt and how often they've been in a sad mood, felt worthless or had sleep or appetite changes.

The participants also rated the intensity of the positive emotions that they felt, including feelings of serenity, joy, confidence and attentiveness.

For European-American participants, there was a strong correlation showing that the more positive emotions they expressed, the less depression or stress they reported. The correlation was more subtle among Asian-Americans, but for Asians, there was no correlation between positive emotions and depression and stress. The findings show that Asians interpret and react to positive emotions differently in regards to their mental health.

Upon winning an award, for instance, the researchers said that a typical response would be "I'm so happy that I'm afraid." The award would trigger feelings of happiness for the achievement combined with concern that others would be jealous.

This blend of emotions is common among Asians and it may be shaped by Buddhist beliefs that happiness either leads to suffering or is impossible to obtain.

"Happiness signals that something bad will happen next; happiness is fleeting," one researcher said. Similarly, yin-and-yang attitudes may instill views that life is a natural balance of good and bad.

For Asians with depression, therapies likely to work the best are those that encourage patients to observe when they feel good and bad and notice that both will disappear. Everything passes.

6. According to the article, which is **NOT** the function of positive emotions?

- A. Enhancing resilience in a crisis
- B. Downplaying the bad among Asians
- C. Speeding up recovery from depression
- D. Boosting overall mental health
- 7. What is the objective of the study carried out by psychologists in the University of Washington?
 - A. Revealing the different effects of positive emotions and negative emotions on European-American participants.
 - B. To show that there is no relationship between positive emotions and levels of stress and depression among Asians.
 - C. To confirm that the emphasis on positive emotions in therapies is not scientific at all.
 - D. To illustrate that European-Americans and Asians interpret and respond to positive emotions differently.

8. According to the article, the therapies based on positive emotions is true _____.

- A. can be used to encourage the Japanese to recover from natural disasters.
- B. might be effective in helping Greek people conquer the pessimistic sentiments in the economic recession.
- C. can be employed to help Chinese overcome the post-traumatic depression
- D. might be used to relieve the anxiety in Burma after earthquake.
- 9. According to the study in the article, which statement is **NOT** precise in terms of the relationship between positive emotions and stress?
 - A. Asian people are not subject to the effect of positive emotions when they feel depressed.
 - B. The European people can get rid of their depression and stress with positive emotions.
 - C. As to Asian-Americans there is no apparent sign which indicates the close link between positive emotions and the elimination of stress.
 - D. The European-Americans are vulnerable to positive emotions and stress.
- 10. Which of the following statement might **NOT** be used to comfort an Asian patient?
 - A. I'm so happy that you are recovering but I am afraid you will have to stay at hospital for a longer time.
 - B. Good or bad, everything passes.
 - C. Be optimistic. Cheer up and you will recover soon.

D. Don't be afraid of death which is a new beginning.

Passage 3

Throughout human history, the Arctic has had little trouble retaining its reputation for austere beauty. However as the irreversible effects of global climate change continue to negatively impact ecosystems worldwide, the once ice blanketed region is rapidly melting away. This climatic shift has caused unexpected political tension between several northern nations.

At the same time, according to the United States Geological Survey (USGS) as much as 90 billion barrels of oil and 1,670 trillion cubic feet of natural gas may be available for extraction beneath the ice barrier. The United States, Canada, Norway, and Russia are at odds as they compete for access to the potential wealth.

In a world where large energy consumers are scrambling for every last drop of oil they can find and energy resource exporters desire to maintain their_hegemony on the political-economic ladder, any source of oil is worth pursuing, no matter how high the cost of extraction.

Despite the still debated status of the Arctic Circle's sovereignty arrangement, it represents a more desirable area to extract oil in contrast to the complicated diplomatic and geopolitical dealings with the Middle East, Africa, and Latin America.

With the diminution of the Arctic ice cap, the world will begin to look to the Arctic for potential energy reserves and, as such, must find a way to peacefully divide the natural resources in the newly available territory. This is absolutely crucial to avoid potential large scale security dilemmas. In light of the inadequate territorial definitions, it is apparent that changes to the treaty are not only prudent but critical. These international jurisdictional issues would seem to provide another opportunity for cooperation between Canadian, Russian, and American officials for economic, military, and political reasons. Whether concerning oil, natural gas, or rights of passage, the United States has to compromise in order to improve relations with its faithful neighbor to the north and its former enemy to the west.

11. The article suggests all the following except_____

- A. There are abundant natural resources beneath the ice barrier of the Arctic.
- B. The Arctic boasts its austere beauty throughout human history.
- C. The climate has exerted a devastating impact on the ice blanketed region of the Arctic.
- D. There is hot debate about the status of the Arctic Circle's sovereignty arrangement.

12. Which is synonymous with "hegemony" in Paragraph 3?

A. priority

B. primacy

C. superiority

D. status

13. Which of the following statements about the energy resources in the Arctic is true?

- A. The Middle East, Africa, and Latin America are also involved in the scramble for the energy resources in the Arctic.
- B. The energy resources in the Arctic have not been dominated by any country in the world.
- C. America has the priority to utilize the energy resources in the Arctic.
- D. Many countries have been looking to the Arctic for potential energy reserved.

14. Which of the following can best replace "diminution" in the last paragraph?

A. discontinuation

- B. reduction
- C. increasing
- D. expansion
- 15. How to avoid large scale security dilemmas caused by the debate linked to the energy resources in the Arctic?
 - A. The United States should endeavor to play a dominating role in distributing the energy resources.
 - B. Every country in the world including Africa and Latin America should have the right to gain access to the energy resources in the Arctic.
 - C. Cooperation between Canadian, Russian, and American officials is the best way to peacefully divide the natural resources.
 - D. America has to make concessions in order to improve relations with its faithful neighbor to the west.

16. What is the tone of this article?

- A. humorous
- B. objective
- C. pessimistic
- D. pathetic

Passage 4

An international team of astronomers has used a new technique to study the bright disc of matter surrounding a faraway black hole. Using the NASA/ESA Hubble Space Telescope, combined with the gravitational lensing effect of stars in a distant galaxy, the team measured the disc's size and studied the colours (and hence the temperatures) of different parts of the disc. These observations show a level of precision equivalent to spotting individual grains of sand on the surface of the Moon. While black holes themselves are invisible, the forces they unleash cause some of the brightest phenomena in the Universe. Quasars — short for quasi-stellar objects — are glowing discs of matter that orbit supermassive black holes, heating up and emitting extremely bright radiation as they do so.

A quasar accretion disc has a typical size of a few light-days, or around 100 billion kilometres across, but they lie billions of light-years away. This means their apparent size when viewed from Earth is so small that we will probably never have a telescope powerful enough to see their structure directly. Until now, the minute apparent size of quasars has meant that most of our knowledge of their inner structure has been based on theoretical extrapolations, rather than direct observations.

The team therefore used an innovative method to study the quasar: using the stars in an intervening galaxy as a scanning microscope to probe features in the quasar's disc that would otherwise be far too small to see. As these stars move across the light from the quasar, gravitational effects amplify the light from different parts of the quasar, giving detailed colour information for a line that crosses through the accretion disc.

The team observed a group of distant quasars that are gravitationally lensed by the chance alignment of other galaxies in the foreground, producing several images of the quasar. They spotted subtle differences in colour between the images, and changes in colour over the time the observations were carried out. Part of these colour differences are caused by the properties of dust in the intervening galaxies: the light coming from each one of the lensed images has followed a different path through the galaxy, so that the various colours encapsulate information about the material within the galaxy.

There were clear signs that stars in the intervening galaxy were passing through the path of the light from the quasar. Just as the gravitational effect due to the whole intervening galaxy can bend and amplify the quasar's light, so can that of the stars within the intervening galaxy subtly bend and amplify the light from different parts of the accretion disc as they pass through the path of the quasar's light.

By recording the variation in colour, the team was able to reconstruct the colour profile across the accretion disc. This is important because the temperature of an accretion disc increases the closer it is to the black hole, and the colours emitted by the hot matter get bluer the hotter they are. This allowed the team to measure the diameter of the disc of hot matter, and plot how hot it is at different distances from the centre.

17. "Extrapolations" in Para. 2 is closest in meaning to _____

A. deduction

B. inference

- C. explanation
- D. assumption

18. Which of the following statements about the quasar accretion disc is correct?

- A. They are very small in size that man will perhaps never see their structure directly
- B. The quasar accretion disc generally has a radius of 50 billion kilometers.
- C. Most of our knowledge about its inner structure is based upon direct observations.
- D. The quasar accretion disc emits bright radiation when the black holes orbit it.

19. What is the method that the team employed to make some explorations into the quasar?

- A. Their method is experimental and innovative.
- B. They made the intervening galaxy work as a scanning microscope to observe the characteristics of the quasar's disc.
- C. They referred to the bending lights due to the gravitational effects.
- D. They judge the size of the black hole by exploring into the quasar.

20. According to the article, what is the main purpose of the study?

A. To record the colours of the quasar accretion disc

B. To measure the diameter of the quasar accretion disc

C. To plot how hot the quasar accretion disc is at different distance from the center.

D. A, B and C.