Instruction
All questions are compulsory.

There are three major sections in this paper - English, Mathematics, and IQ. The marks wise distribution of each of the section is as follows:

| Section | Subject | Marks | Time [Suggested ] |
| :--- | :--- | :--- | :--- |
| A | English | 30 | 60 Minutes |
| B | Mathematics | 30 | 60 Minutes |
| C | IQ | 20 | 30 Minutes |

You are advised to spend the suggested time.
Please darken the most appropriate answer in the provided answer sheet.

## Section A - English

This passage is adapted from Hillary Clinton's remarks to the U.N. Fourth World Conference on Women Plenary Session in 1995 in Beijing, China.

There are some who question the reason for this conference. Let them listen to the voices of women in their homes, neighborhoods, and workplaces. There are some who 5 wonder whether the lives of women and girls matter to economic and political progress around the globe. Let them look at the women gathered here and at Huairouthe homemakers and nurses, the teachers
10 and lawyers, the policymakers and women who run their own businesses. It is conferences like this that compel governments and peoples everywhere to listen, look, and face the world's most pressing problems. Wasn't it after the allafter the women's conference in Nairobi ten years ago that the world focused for the first time on the crisis of domestic Violence? The great challenge of this conference is to give voice to women everywhere whose experiences go unnoticed, whose words go unheard. Women comprise- more than half the world's population, 70 percent of the world's poor, and two-thirds of those who are not taught to read and write. We are the primary caretakers for most of the world's
children and elderly. Yet much of the work we do is not valued-not by economists, not by historians, not by popular culture, not by 30 government leaders.

Those of us who have the opportunity to be here have the responsibility to speak for those who could not. As an American, I want to speak for those women in my own
35 country, women who are raising children on the minimum wage, women who can't afford health care or child care, women whose lives are threatened by violence, including violence in their own homes.

40 Speaking to you today, I speak for them, just as each of us speaks for women around the world who are denied the chance to go to school, or see a doctor, or own property, or have a say about the direction of their lives, 45 simply because they are women. The truth is that most women around the world work both inside and outside the home, usually by necessity.

We need to understand there is no one 50 formula for how women should lead their
lives. That is why we must respect the choices that each woman makes for herself and her family. Every woman deserves the chance to realize her own God-given potential. But we must recognize that women will never gain full dignity until their human rights are respected and protected.

Tragically, women are most often the ones whose human rights are violated. Even now, in the late twentieth-century, the rape of women continues to be used as an instrument of armed conflict. Women and children make up a large majority of the world's refugees. And when women are excluded from the political process, they become even more vulnerable to abuse. I believe that now, on the eve of a new millennium, it is time to break the silence. It is time for us to say for the world to hear that it is no longer acceptable to discuss women's rights as separate from human rights.
underpaid, not schooled, subjected to violence in and outside their homes - the potential of the human family to create a peaceful, prosperous world will not be realized.

If there is one message that echoes forth
75 from this conference, let it be that human rights are women's rights and women's rights are human rights once and for all. Let us not forget that among those rights are the right to speak freely-and the right to be heard.

Women must enjoy the rights to participate fully in the social and political lives of their countries, if we want freedom and democracy to thrive and endure. It is indefensible that many women in nongovernmental organizations who wished to participate in this conference have not been able to attend-or have been prohibited from fully taking part.

90 As long as discrimination and inequities remain so commonplace everywhere in the world, as long as girls and women are valued less, fed less, fed last, overworked,

1. The position that Clinton takes in her speech can best be described as that of
a. a critic countering a series of arguments
b. a scholar analyzing social phenomena
c. an advocate seeking a particular outcome
d. a mediator seeking a fair compromise
2. As used in line 27, "valued" most nearly means
a. Increased
b. Considered
c. Bought
d. Insured
3. In lines 15-16, what is the most likely reason that Clinton mentions the prior "women's conference in Nairobi"?
a. To provide an example of a previous, failed attempt to solve the problem of domestic violence
b. To disagree with those who question the reason for the current conference
c. To contend that a great number of women and their experiences have gone unnoticed
d. To offer evidence for the claim that conferences compel people to address problems
4. Which choice provides the best evidence for the answer to the previous question?
a. Lines 1-2 ("There are...conference")
b. Lines $11-14$ ("It is...problems")
c. Lines 25-26 ("We are...elderly")
d. Lines 33-37 ("Women...threatened")
5. In lines 39-45, Clinton draws a distinction between
a. those who work at schools and hospitals
b. people who can and cannot speak out
c. employed and unemployed women
d. women who can and cannot vote
6. Based on the information in the passage, women face each of the following challenges EXCEPT
a. lack of access to health care
b. violence in their homes
c. limited financial resources
d. widespread unemployment
7. As used in line 40, "speak" most nearly means
a. talk aloud
b. scold
c. advocate
d. gossip
8. The principal rhetorical effect of the phrase in lines $73-75$ ("let it be that...once and for all") is to
a. argue against attempts to understand women's rights as distinct from other rights
b. show that many women who should be at the conference are unable to attend
c. emphasize the special nature of women's rights as they relate to human rights at large
d. suggest that the need to focus on the specific problems of women is now past
9. Which choice provides the best evidence for the answer to the previous question?
a. Lines 55-57 ("But we...protected")
b. Lines 68-71 ("It is...rights")
c. Lines $75-76$ ("Let us...heard")
d. Lines 81-86 ("It is...part")
10. Based on the information presented in Clinton's speech, it can be inferred that some of those who have important positions of authority in the world
a. are actively working against the prosperity of women.
b. do not consider the labor done by women to be of serious import.
c. are ready to ensure that men and women have equal legal rights.
d. have made it unacceptable to discuss women's rights.

## Sentence Completion:

11. Today Wegener's theory is $\qquad$ ; however, he died an outsider treated with $\qquad$ by the scientific establishment.
a. unsupported - approval
b. dismissed - contempt
c. accepted-approbation
d. unchallenged - disdain
12. The revolution in art has not lost its steam; it $\qquad$ on as fiercely as ever.
a. Trudges
b. Meanders
c. Edges
d. Rages
13. Each occupation has its own $\qquad$ ; bankers, lawyers and computer professionals, for example, all use among themselves language which outsiders have difficulty following.
a. Merits
b. Disadvantages
c. Rewards
d. Jargon
14. $\qquad$ by nature, Jones spoke very little even to his own family members.
a. Garrulous
b. Equivocal
c. Taciturn
d. Arrogant
15. Biological clocks are of such $\qquad$ adaptive value to living organisms, that we would expect most organisms to
$\qquad$ them.
a. clear - avoid
b. meager - evolve
c. significant - eschew
d. obvious - possess
16. Unwilling to admit that they had been in error, the researchers tried to $\qquad$ their case with more data obtained from dubious sources.
a. Ascertain
b. Buttress
c. Refute
d. Absolve
17. Archaeology is a poor profession; only $\qquad$ sums are available for excavating sites and even more $\qquad$ amounts for preserving the excavations.
a. paltry - meager
b. miniscule - substantial
c. average - augmented
d. judicious - penurious
18. The student was extremely foolhardy; he had the $\qquad$ to question the senior professor's judgment.
a. Wisdom
b. Temerity
c. Interest
d. Trepidation
19. The formerly $\qquad$ waters of the lake have been polluted so that the fish are no longer visible from the surface.
a. Muddy
b. Tranquil
c. Stagnant
d. Pellucid
20. After the accident, the nerves to her arm were damaged and so the muscles $\qquad$ through disuse.
a. Atrophied
b. Contracted
c. Elongated
d. Invigorated

Word Analogies:
21. MEDICINE : ILLNESS :
a. LAW : ANARCHY
b. HUNGER : THIRST
c. ETIQUETTE: DISCIPLINE
d. LOVE:TREASON
22. PALTRY: SIGNIFICANCE :
a. BANAL: ORIGINALITY
b. AUSTERE: LANDSCAPE
c. OPULENT: WEALTH
d. OBLIQUE : FAMILIARITY
23. EXTORT : OBTAIN ::
a. PILFER : STEAL
b. PLAGIARIZE : BORROW
c. EXPLODE: IGNITE
d. PURIFY: STRAIN
e. CONSIDER: APPEAL
24. MAVEN : EXPERTISE ::
a. MONARCH : WISDOM
b. SUPPLICANT : HUMILITY
c. NEOPHYTE : HONESTY
d. KLUTZ: GRACE
25. EQUANIMITY : HARRIED ::
a. CELEBRITY : INFAMOUS
b. ERUDITION : URBANE
c. MODERATION : DISSOLUTE
d. DISTINCTION : SINGULAR
e. INTUITION: LOGICAL
26. DRIP : GUSH
a. CRY: LAUGH
b. CURL: ROLL
c. STREAM :TRIBUTARY
d. DENT: DESTROY
27. WALK : LEGS
a. GLEAM : EYES
b. CHEW : MOUTH
c. DRESS: HEM
d. COVER : BOOK
28. ENFRANCHISE : SLAVERY
a. EQUATION : MATHEMATICS
b. LIBERATE : CONFINE
c. BONDAGE : SUBJUGATION
d. APPEASEMENT : UNREASONABLE
29. UNION JACK : VEXILLOLOGY
a. TOAD : ORNITHOLOGY
b. TURTLE: MICROBIOLOGY
c. GYMNOSPERMS : BOTANY
d. FRIEND : HOME ECONOMICS
30. TOPAZ : YELLOW
a. DIAMOND : CARAT
b. JEWELER : CLARITY
c. SAPPHIRE: RED
d. AMETHYST: PURPLE

## Section B- Mathematics

1. If $n(A)=3$ and $n(B)=6$ and $A \subseteq B$, then the number of elements in $(A \cap B)$ equals
a. 3
b. 9
c. 6
d. 8
2. For how many positive integers, a , is it true that $\mathrm{a} 2 \leq \mathrm{a}$ ?
a. 1
b. 2
c. 3
d. 4
3. If $f(x)=\frac{1}{4 x-3}$ then its domain is given by
a. $R$
b. $\mathrm{R}+\frac{3}{4}$
c. $\mathbf{R}-\frac{3}{4}$
d. $[3 / 4, \infty)$
4. What is the 12 th term of the sequence
$3,-6 \quad 12,-24 \quad 48,-96, \ldots \ldots$. ?
a. -6144
b. -2048
c. -1048
d. 3072
5. For a square matrix $A$, which of the following is true?
a. $|A|=\left|\mathrm{A}^{\top}\right|$
b. $\left|\mathrm{A}^{-1}\right|=|\mathrm{A}|$
c. $\left|A^{-1}\right|=\left|\frac{1}{A}\right|$
d. None
6. What is the Value of $(2-i)^{3}$
a. 2-3i
b. 8 - $i$
c. $2+10 \mathrm{i}$
d. $2-11 \mathrm{i}$
7. If the roots of equation $\left(a^{2}+b^{2}\right) x^{2}-2(a c+b d) x+c^{2}+d^{2}=0$ are equal then the required condition be
a. $a b=c d$
b. $a c=b d$
c. $a d=b c$
d. $a^{2} c=b d^{2}$
8. From a group of four boys and six girls, how many ways are there to choose five of the children, if you must choose at least two boys and two girls.
a. 60
b. 90
c. 120
d. 80
9. If $\cos 3 \theta-\cos \theta=0$ then general values of $\theta$ is equal to
a. $\frac{n \Pi}{2}$
b. $\frac{n \Pi}{2}$
c. $\frac{n \Pi}{4}$
d. $\frac{\pi}{6}$
10. In a triangle $A B C$ if $a=2, b=3$ and $\sin A=\frac{2}{3^{\prime}}$, then angle $B$ equals to
a. $\frac{\pi}{2}$
b. $\frac{\pi}{3}$
c. $\frac{\pi}{4}$
d. $\frac{\pi}{6}$
11. The equation $x^{2}-y^{2}=0$ represents
a. Circle
b. Ellipse
c. Parabola
d. Pair of straight lines
12. In what ration does the point $M(2,3)$ divide the line segment joining $A(3,8)$ and $B(-1,-12)$ ?
a. 1:3
b. 1:4
c. $2: 3$
d. $3: 4$
13. What is the equation of a straight line making 150 with positive $x$-axis and meeting $y$-axis in the point $(0,3)$
a. $\sqrt{3} y=3 \sqrt{3}$
b. $\sqrt{3} y=3 \sqrt{3}$
c. $\sqrt{3} x+y=3 \sqrt{3}$
d. $\mathrm{x}+\sqrt{3} y=3 \sqrt{3}$
14. What are the $x$ and $y$ intercepts of the line passing through $(2,0)$ and having slope -1 ?
a. X-intercept=1 Y-intercept=1
b. X-intercept=2 Y-intercept=-2
c. X-intercept=2 Y-intercept=2
d. X-intercept=1 Y-intercept=2
15. If actual selling price of and an article including $20 \%$ discount and $10 \%$ VAT is Rs. 880 what is the marked price of the article.
a. 500
b. 1000
c. 1500
d. 2000
16. Two numbers are respectively $20 \%$ and $50 \%$ more than a third number. The ratio of two numbers is
a. 1:5
b. $2: 5$
c. $4: 5$
d. 5:7
17. Two cylinders have to be made from a paper having length and breadth 21 cm and 14 cm respectively, if cylinder A is formed by taking the base as length and cylinder B is formed by taking the base of breadth. Compare the volume of cylinders
a. Volume of $A>$ volume of $B$
b. Volume of $A=$ Volume of $B$
c. Volume of $A<$ Volume of $B$
d. Volume of $B=2$ volume of $A$
18. The solution set for $7 \leq|x|+4<10$
a. $x \in(-6,3] \cup[3,6)$
b. $x \in(-6,-3] \cup[3,6)$
c. $x \in(-6,-3] \cup[3, \infty)$
d. $x \in(-\infty, 3] \cup[3, \infty)$
19. If $5 x+3 y=6$ then find the value of $\frac{32^{x}}{8^{-y}}$
a. 1
b. $2^{6}$
c. $2^{3}$
d. $3^{5}$
20. In what time the compound amount of Rs. 60,000 at $10 \%$ rate is Rs. 79860 ?
a. 2
b. 3
c. 4
d. 8
21. If $3 a+5 b=10$ and $5 a+3 b=30$ what is the average (arithmetic mean) of $a$ and $b$ ?
a. 0.5
b. 1.5
c. 2.5
d. 3.5
22. If $n=10, \sum x=120, \sum x^{2}=1530$, what is its coefficient of variation.
a. $10 \%$
b. $15 \%$
c. $25 \%$
d. $30 \%$
23. What is the probability of getting the sum as a prime number if two dice are thrown?
a. $\frac{7}{24}$
b. $\frac{5}{30}$
c. $\frac{1}{4}$
d. $\frac{5}{12}$
24. From a well shuffled pack of 52 cards, a card is drawn at random. Find the probability that the card so drawn so drawn is either a red or a club.
a. $\frac{1}{4}$
b. $\frac{1}{3}$
c. $\frac{3}{4}$
d. $\frac{1}{2}$
25. $\lim _{x \rightarrow 0} \frac{\sin x}{\tan x}$ is equal to
a. -1
b. 0
c. 1
d. 2
26. If $\lim _{x \rightarrow x_{0}} f(x)$ does not exist i.e. $\lim _{x \rightarrow x_{0^{-}}} f(x)=\lim _{x \rightarrow x_{0^{+}}} f(x)$ then $\mathrm{f}(\mathrm{x})$ is said to have
a. Removable Discontinuity
b. Jump Discontinuity
c. Infinite Discontinuity
d. None
27. What is the ratio of derivative of $\log 5 x$ to derivative of $\log 7 x$
a. 1
b. $5 / 7$
c. $7 / 5$
d. $1 / 35$
28. What is the equation of normal to the curve $x^{2}+y^{2}=25$ at $(4,3)$
a. $-\frac{4}{3}$
b. $\frac{4}{3}$
c. $-\frac{3}{4}$
d. $\frac{3}{4}$
29. $\int_{0}^{\frac{\pi}{2}} e^{\sin x} \cos x \mathrm{dx}$ ?
a. 0
b. 1
c. 1-e
d. $\mathrm{e}-1$
30. The area bounded by $y=2-x^{2}$ and $x+y=0$ is?
a. 5/2 sq. Unit
b. $9 / 2$ sq. Unit
c. 5 sq. Unit
d. 9 sq. Unit

## Section C- IQ

1. If Math is code as OCRF for GATE
a. FDRC
b. ICQC
c. FDPV
d. ICRC
2. If PROFIT is coded 12 , then loss will be coded as
a. 10801
b. 10401
c. 101501
d. 101201
3. $0,1,2,4,6,9,12,16$, ?

What number should replace the question mark?
a. 18
b. 20
c. 21
d. 24
4. A train running at the speed of $60 \mathrm{~km} / \mathrm{hr}$ crosses a pole in 9 seconds. What is the length of the train.
a. 120 m
b. 180 m
c. 324 m
d. 150 m
5. An accurate clock shows 8 o'clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 2 o'clock in the afternoon
a. 1440
b. $150{ }^{\circ}$
c. 1680
d. 1800
6. The difference between a two-digit number and the number obtained by interchanging the positions of its digits is 36 . What is the difference between the two digits of that number
a. 9
b. 4
c. None of these
d. Cannot be determined
7. The wages earned by Robin is $30 \%$ more than that earned by Erica. The wages earned by Charles is $60 \%$ more than that earned by Erica. How much \% is the wages earned by Charles more than that earned by Robin?
a. $23 \%$
b. $18.75 \%$
c. $30 \%$
d. $50 \%$
8. How many iron balls, each of radius 1 cm , can be made from a sphere whose radius is 8 cm ?
a. 64
b. 256
c. 512
d. 124
9. If $A B+C=D$, find $A$ and $C$ given that when $B=6, D=30$ and when $B=8, D=36$
a. $A=2, C=6$
b. $A=3, C=12$
c. $A=6, C=3$
d. $A=4, C=3$
10. 20 cards are numbered from 1 to 20 . If one card is drawn at random, what is the probability that the number on the card is not a prime number:
a. $1 / 5$
b. $2 / 5$
c. $3 / 5$
d. $4 / 5$
11. How many cubes are there

a. 5
b. 6
c. 8
d. 9
12. There are 7 doors in a National Art Gallery. In how many ways can a visitor enter the art gallery through a door and leave the gallery by a different door?
a. $7!$
b. 7
c. 42
d. 49
13. If 3 lions can catch 3 deers in 3 minutes, how long will it take 100 lions to catch 100 deers?
a. 3 mins
b. 100 mins
c. 300 mins
d. 9 mins
14. Pick the odd one
a. Rain
b. Fog
c. Cloud
d. Mist
15. If NEW YORK can be encrypted as PGYAQTM, how can you code the word CHARLOTTE?
a. EICSNPVVG
b. EJCTNQVVG
c. EICTNPVVF
d. EJCSMPVVG
16. All matter consists of particles called $\qquad$ .
a. Units
b. Atoms
c. Cubes
d. Pint
17. Weight as a force is due to what factor?
a. Color
b. Taste
c. Gravity
d. Sound
18. Information on a single computer can be accessed by other computers in a $\qquad$
a. Stand-alone
b. network
c. Mainframe
d. None
19. What do we call all of our bones, collectively?
a. Skeleton
b. Marrow
c. Neurons
d. Ecosphere
20. Hottest place on earth......
a. Death Valley
b. Mitribah
c. Kebili
d. None of these

