## HSEE 2020

## Question Paper

HUMANITEIS \& SOCIAL SCIENCES ENTRANCE EXAMINATION-2020
INDIAN INSTITUTE OF TECHNOLOGY MADRAS

Part -I: HSEE-2020 contains 144 multiple choice questions in this part. Total mark is 144.
Answer to each question will be evaluated according to the following marking scheme:

Full Marks : $\mathbf{+ 1}$ If the correct option is chosen
Zero Marks : 0 If none of the options is chosen (i.e. the question is unanswered)
Negative Marks : $\mathbf{- 0 . 2 5}$ If the incorrect option is chosen.

Total time for Part I is 150 minutes ( 09.00 am to 11:30 am).
Section 1: English and Comprehension Skill (36 questions)
Section 2: Analytical \& Quantitative Ability (36 question)
Section 3 (a): General Studies-Indian Economy (18 questions)
Section 3 (b): General Studies-Indian Society and Culture (18 questions)
Section 3 (c): General Studies-World Affairs
Section 3 (d): General Studies-Environmental and Ecology (18 questions)

Part -II: In this part, students will be asked to choose ONE topic from a given list and write an essay (approximately 300 words). Either online or offline options can be availed. Total mark is 30 .

If you have chosen online mode while downloading the admit card, please use computer key board and type the essay in the space provided in Part II.

If you have chosen offline mode while downloading the admit card, please type "I opt offline mode for essay writing" in the space provided in Part II and proceed essay writing using pen and paper.

Total time for Part II is 30 minutes ( 11.30 am to 12.00 noon).

## Part - I

## Section 1: English and Comprehension Skill

## Read the given extract and answer the following questions (Subsequent 5 questions are based on the passage)

Unquestionably a literary life is for the most part an unhappy life; because, if you have genius, you must suffer the penalty of genius; and, if you have only talent, there are so many cares and worries incidental to the circumstances of men of letters, as to make life exceedingly miserable. Besides the pangs of composition, and the continuous disappointment which a true artist feels at his inability to reveal himself, there is the ever-recurring difficulty of gaining the public ear. Young writers are buoyed up by the hope and the belief that they have only to throw that poem at the world's feet to get back in return the laurel-crown; that they have only to push that novel into print to be acknowledged at once as a new light in literature. You can never convince a young author that the editors of magazines and the publishers of books are a practical body of men, who are by no means frantically anxious about placing the best literature before the public. Nay, that for the most part they are mere brokers, who conduct their business on the hardest lines of a profit and loss account. But supposing your book fairly launches, its perils are only beginning. You have to run the gauntlet of the critics. To a young author, again, this seems to be as terrible an ordeal as passing down the files of Sioux or Comanche Indians, each one of whom is thirsting for your scalp. When you are a little older, you will find that criticism is not much more serious than the bye-play of clowns in a circus, when they beat around the ring the victim with bladders slung at the end of long poles. A time comes in the life of every author when he regards critics as comical rather than formidable, and goes his way unheeding. But there are sensitive souls that yield under the chastisement and, perhaps after suffering much silent torture, abandon the profession of the pen for ever. Keats, perhaps, is the saddest example of a fine spirit hounded to death by savage criticism; because, whatever his biographers may aver, that furious attack of Gifford and Terry undoubtedly expedited his death. But no doubt there are hundreds who suffer keenly hostile and unscrupulous criticism, and who have to bear that suffering in silence, because it is a cardinal principle in literature that the most unwise thing in the world for an author is to take public notice of criticism in the way of defending himself. Silence is the only safeguard, as it is the only dignified protest against insult and offence.

1. When do writers become indifferent to critics?
(a) When they are young and naive
(b) When they gain some experience and age a little
(c) When they read about the tragic demise of Keats and become more sensitive
(d) When they are driven by the material concerns of profit and loss
2. Which among the following does pose a challenge to young authors?
(a) Exigencies of market
(b) Pragmatic concern of editors and publishers
(c) Less anxious editors to publish best literature
(d) Savage criticism of reviewers
3. What is the wisest thing for an author to do to protect himself/herself from the criticism of merciless reviewers?
(a) To defend him/herself strongly
(b) To follow the example of Keats and endure it painfully
(c) To maintain a stoic silence
(d) To take a stand against insult and offence
4. What does the phrase "run the gauntlet" mean in the given extract?
(a) To engage in flattery to appease someone
(b) To ignore your opponents
(c) To be criticized or attacked by others
(d) To challenge and defeat your critics through your writing
5. Which of the following is a synonym of the word "unscrupulous" used in the excerpt?
(a) Demoralizing
(b) Covert
(c) Incisive
(d) Unprincipled

## Read the following poem "Survivors" by Siegfried Sassoon and answer the following questions (Subsequent 5 questions are based on this poem).

No doubt they'll soon get well; the shock and strain have caused their stammering, disconnected talk. Of course they're 'longing to go out again,' These boys with old, scared faces, learning to walk. They'll soon forget their haunted nights; their cowed Subjection to the ghosts of friends who died, Their dreams that drip with murder; and they'll be proud Of glorious war that shattered all their pride... Men who went out to battle, grim and glad; Children, with eyes that hate you, broken and mad.
6. In the given poem who is "longing to go out again"?
(a) The children who lost their parents
(b) The ghosts of dead friends
(c) The soldiers who returned from war
(d) Those who stammer and cannot walk properly
7. The central message of the poem is:
(a) To glamorize and romanticize war
(b) To promote patriotism and nationalism
(c) To excoriate war by pointing out its horrors
(d) To condemn soldiers who fought in the war
8. Identify the contrasting image from the following that is used in the poem:
(a) Shock and strain
(b) Grim and glad
(c) Broken and mad
(d) Stammering and disconnected
9. In the above-mentioned poem, what does the poet intend to convey when he says that "boys" will be proud of glorious war?
(a) The victory of their nation
(b) Their love for war
(c) Their patriotic love for the nation
(d) The paradoxical nature of their victory
10. Which of the following options does not capture the meaning of the verb "cow" used in the phrase "cowed subjection"?
(a) Insinuate
(b) Petrify
(c) Intimidate
(d) Frighten

## Identify the figure of speech used in the following sentences [Question Number: 11 to 14]

11. When I moved to Chennai from Delhi, I had many sleepless nights during summers.
(a) Litotes
(b) Transferred epithet
(c) Metonymy
(d) Metaphor
12. What a piece of work is man! How noble in reason, how infinite in faculties! In action, how like an angel! In apprehension, how like a god!
(a) Pun
(b) Irony
(c) Synecdoche
(d) Climax
13. 'Uneasy lies the head that wears a crown', wrote Shakespeare in his play Henry IV.
(a) Antithesis
(b) Synecdoche
(c) Metaphor
(d) Irony
14. I never enjoyed reading Homer during my undergraduate days
(a) Metonymy
(b) Metaphor
(c) Hyperbole
(d) Oxymoron

Choose the correct meaning of the given idioms from the following options [Question Number: 15 to 18]
15. Salad days
(a) The time when you are young and do not have much experience of life
(b) A period of your life when you are mature enough to take your own decisions
(c) Glorious days of your life
(d) The time when you are old and dependent on someone even for your basic needs
16. No/little love lost between them
(a) They like each other.
(b) They dislike each other.
(c) They are great friends.
(d) They barely interact with each other.
17. Hobson's choice
(a) A situation in which one has no choice but to accept whatever is offered
(b) A situation which allows a range of choices within particular categories
(c) One foregoes one's right to choose
(d) Lack of choice within an autocratic regime
18. Talk shop
(a) Talk about nonsensical things
(b) Talk exclusively about business or professional matters in the presence of colleagues and others
(c) To talk about lofty things without taking any action
(d) To talk intermittently

Turn the following sentences from direct into indirect speech and choose the most appropriate option [Question Number: 19 to 20]
19. My elder brother said to me, "I have often told you not to play with fire."
(a) My elder brother often told me not to play with fire.
(b) My elder brother reminded me that he has often told me not to play with fire.
(c) My elder brother reminded me that he had often instructed me not to play with fire
(d) My elder brother reminded me that he often told me not to play with fire.
20. The teacher said, "I do not wish to see any of you; go away."
(a) The teacher exclaimed that he did not wish to see anyone and requested them to go away.
(b) The teacher said that he did not wish to see any of them and ordered them to go away.
(c) The teacher remarked that he would not wish to see anyone and asked them to go away.
(d) The teacher angrily said that he did not wish to see anyone and wanted them to go away.

In the following words three are correctly spelt whereas one is misspelt. Choose the incorrect word [Question Number: 21 to 23]
21.
(a) Effervescence
(b) Remeniscence
(c) Connoisseur
(d) Fortuitous
22.
(a) Diphthong
(b) Libidinous
(c) Naphthalene
(d) Sacreligious
23.
(a) Exasparated
(b) Criminologist
(c) Crescendo
(d) Impregnable
24. Identify the most appropriate antonym of the word "untrammelled" from the given options
(a) Not hampered
(b) Not restricted by something
(c) Restricted
(d) Unyielding
25. Which of the following words could be the antonym of the word "nefarious"?
(a) Villainous
(b) Virtuous
(c) Officious
(d) Facetious
26. Identify the sentence with the correct article usage from the given options
(a) He was elected a chairman of the municipality corporation.
(b) His father is an European whereas mother an Indian.
(c) Could you please give me an one-Rupee note?
(d) The Mr Sharma whom you met last night is my uncle.
27. Identify the dramatic convention in which a character who is alone on stage speaks his or her thoughts.
(a) Soliloquy
(b) Sobriquet
(c) Serendipity
(d) Rhapsody
28. Some say that his downfall was caused by his hubris. Identify the most appropriate synonym to replace the underlined word
(a) Conspiracy
(b) Accident
(c) Fate
(d) Pride
29. Change the voice of the following sentence from active to passive. They laughed at his warnings and objected to all his proposals.
(a) His proposals were objected to and everybody laughed at him.
(b) His warnings were laughed at and all his proposals were objected to.
(c) His warnings were laughed at and all his proposals were objected against.
(d) His proposals were objected and warnings laughed at.
30. Identify the word which captures the essence of the word "aggression"
(a) Flagrant
(b) Effulgent
(c) Truculent
(d) Trenchant
31. Choose the correct alternative from the options to fill in the blank: "Did you think you $\qquad$ me somewhere before?"
(a) Have seen
(b) Had seen
(c) Had been seeing
(d) Will have seen
32. Fill in the blank with the correct alternative from the options: "Unless we $\qquad$ now we can't be on time."
(a) Will start
(b) Start
(c) Started
(d) Have started
33. "Life is what it is about; I want no truck with death." Which of the given options captures the meaning of the underlined phrase?
(a) The refusal to associate with
(b) The desire to become one with
(c) Enmity with
(d) Friendliness with
34. "His obsequious nature was very evident to everyone." In this sentence the word "obsequious" means:
(a) Amicable
(b) Servile
(c) Hostile
(d) Superficial
35. "From what source shall I as a partial layman in the realm of pedagogy, derive courage to expound opinions with no foundations except personal experience and personal conviction?" The word pedagogy here means:
(a) The study of teaching methods
(b) The study of philosophy
(c) The study of psychological aspects
(d) The study of rhetoric
36. He behaved as if $\qquad$ Choose the most appropriate option and fill in the blanks.
(a) he was angry
(b) he had been angry
(c) he has been angry
(d) he were angry

## Section 2: Analytical and Quantitative Ability

37. Consider a right angled triangle, in which, $p$ represents the height, $b$, the base and $h$, the hypotenuse. The ratio $\mathrm{h} / \mathrm{b}$ is known as
(a) Cosine
(b) Sine
(c) Tangent
(d) Secant
38. The maximum and minimum values the Sine function (in trigonometry) can have are
(a) 1 and 0
(b) 1 and -1
(c) 0 and -1
(d) 2 and 1
39. Consider a ratio $20 / 40$ that changes to $22 / 50$. Then the percentage change in the ratio is
(a) $12 \%$
(b) $6 \%$
(c) $8 \%$
(d) $10 \%$
40. The sum of the two integers is 10 and sum of their reciprocals is $5 / 12$. One of the integers must be
(a) 5
(b) 7
(c) 3
(d) 6
41. The third lowest prime number is
(a) 7
(b) 3
(c) 5
(d) 11
42. The total number of factors of number 40 are
(a) 4
(b) 8
(c) 10
(d) 6
43. Petrol price has gone up by $40 \%$. How much percentage (approx.) reduction in consumption is required to keep the budget unchanged?
(a) $28 \%$
(b) $32 \%$
(c) $20 \%$
(d) $25 \%$
44. A $25 \%$ rise in the price of atta leads to 20 kg reduction in purchase for Rs. 400 . The original price
kg ) of atta was
(a) 6
(b) 4
(c) 8
(d) 2
45. A shopkeeper uses a 900 gm weight for 1 kg . The profit in percentage he makes is
(a) 9.6
(b) 10.5
(c) 11.1
(d) 12.5
46. A sum of money doubles in 10 years. The percentage rate of interest is
(a) 12
(b) 14
(c) 10
(d) 8
47. A certain principal amount is charged at a rate of $10 \%$ compound interest for two years and the amount becomes Rs. 605. The principal amount is
(a) Rs. 450
(b) Rs. 500
(c) Rs. 550
(d) Rs. 530
48. Rs. 10000 has to be divided among Amar, Akbar and Anthony in such a way that if Rs. 200, 300 and 500 are deducted from their respective shares, their money will be in the ratio of 3,5 and 7 . Find Akbar's share (in Rs. 10000)
(a) Rs. 3000
(b) Rs. 2800
(c) Rs. 3300
(d) Rs. 3500
49. Three containers have capacities in the ratio of $2: 3: 5$. Container $A$ has milk mixed with water in the ratio of $2: 3$, container B 1:2 and container C 3:2. When all the milk and water from three containers are mixed together , the final ratio of milk and water will be
(a) 5 by 8
(b) 7 by 9
(c) 1 by 3
(d) 12 by 13
50. A contractor engages 100 persons to complete a work. They finish $2 / 3$ of the work in 8 weeks. At this stage, 50 persons left the work. How much more time the contractor will take to finish the work with remaining 50 persons
(a) 8 weeks
(b) 10 weeks
(c) 12 weeks
(d) 14 weeks
51. Donald can do a work in 8 days and Mike can do in 12 days. How many days (approx.) will it take to finish the work if they work on alternate days
(a) 8 days
(b) 10 days
(c) 12 days
(d) 7 days
52. Ritu is twice as efficient as Titu. If they work together and complete a work in 30 days, then the time required by each to complete the work individually are
(a) 30 and 60 days
(b) 50 and 100 days
(c) 45 and 90 days
(d) 25 and 50 days
53. How many numbers of 3 digits can be formed with the digits $1,2,3,4$ and 5 (without any repetition of digits).
(a) 40
(b) 60
(c) 80
(d) 120
54. Consider the number of ways the letters in the word LUCKNOW can be arranged. What is the probability that 3 letters $\mathrm{N}, \mathrm{O}$ and W will always come together
(a) $5!/ 7!$
(b) $3!/ 5$ !
(c) $4!/ 6!$
(d) 2 ! / 3 !
55. On a certain road 3 consecutive traffic lights change after 36,42 and 72 seconds respectively. If the lights are first switched on exactly at 6 am (06:00:00), then they will again change simultaneously at
(a) 06:10:14
(b) 06:12:46
(c) $06: 14: 36$
(d) 06:08:24
56. The highest common factor (HCF) of $\left(2^{34}-1\right)$ and $\left(2^{85}-1\right)$ is
(a) $2^{34}-1$
(b) $2^{19}-1$
(c) $2^{77}-1$
(d) $2^{17}-1$
57. The least common multiple (LCM) and highest common factor (HCF) of two numbers are 120 and 20 . If one of the numbers is 30 , then the other number is
(a) 80
(b) 70
(c) 60
(d) 50
58. A batsman has an average of 48 runs in 20 innings. How much should he score in $21^{\text {st }}$ innings so that the average increases to 50 ?
(a) 48
(b) 80
(c) 90
(d) 50
59. The mean temperature at a place from Sunday to Tuesday was $25^{\circ} \mathrm{C}$ and that from Monday to Wednesday was $27^{\circ} \mathrm{C}$. If the temperature on Sunday was $4 / 5$ of the temperature on Wednesday, what was the temperature on Wednesday?
(a) $25^{\circ} \mathrm{C}$
(b) $27^{\circ} \mathrm{C}$
(c) $28^{\circ} \mathrm{C}$
(d) $30^{\circ} \mathrm{C}$
60. The average age of 80 students of a certain batch in IIT Madras is 20 years. When the age of 20 faculty members are also counted, the overall average age increases to 25 . The average age of the 20 faculty members are
(a) 40
(b) 45
(c) 25
(d) 30
61. What day of the week was 15 August 1947?
(a) Saturday
(b) Monday
(c) Sunday
(d) Friday
62. The calendar for 2020 will be repeated in
(a) 2022
(b) 2025
(c) 2030
(d) 2048
63. The ages of Boris and Johnson are in the ratio of $4: 5$. Fifteen years ago their ages were in the ratio of $2: 3$. The present age of Boris is
(a) 30
(b) 45
(c) 35
(d) 40
64. My sister is 4 years elder to me. My father was 29 years when by brother was born and mother was 27 years when I was born. If my brother was 3 years of age when my sister was born, what were the ages of my father and mother respectively when my sister was born?
(a) 30 years and 28 years
(b) 32 years and 29 years
(c) 32 years and 23 years
(d) 30 years and 25 years
65. In statistics, the percentage distribution of any data is represented as
(a) Barchart
(b) Histogram
(c) Frequency polygon
(d) Pie chart
66. The digit at the unit place in $(264)^{102}+(264)^{103}$ will be
(a) 0
(b) 6
(c) 4
(d) 2
67. If $(x+y)=10-z$ and $y(x+z)+x z=20$, then the value of $\left(x^{2}+y^{2}+z^{2}\right)$ will be
(a) 10
(b) 60
(c) 40
(d) 20
68. Find the odd number in the series $284,331,383,263,133,242$
(a) 284
(b) 383
(c) 263
(d) 133
69. In algebra, if B represents "bracket" operation, O represents "of", D represents division, M represents multiplication, $A$ represents addition and $S$ represents subtraction. Then the correct sequence of mathematical operation is
(a) B-O-D-M-A-S
(b) A-M-S-B-O-D
(c) D-B-O-M-A-S
(d) D-O-B-M-A-S
70. An importer pays $10 \%$ customs duty on an item priced at Rs. 5000 (price at abroad in equivalent Indian rupees). How much price should be marked on the item if the importer wishes to earn a profit of $20 \%$ even after giving a discount of $40 \%$ on the marked price?
(a) 8500
(b) 9500
(c) 10000
(d) 11000
71. If the word CHENNAI is represented by EKISTHQ then MUMBAI can be represented as
(a) PMNAIR
(b) MNOPQR
(c) OXQGGP
(d) LKZIXP
72. If the equation $\mathrm{y}=\mathrm{kx}$ ( k is constant) is plotted between x and y , the resultant graph will be a
(a) Circle
(b) Straight line
(c) Parabola
(d) Ellipse

## Section 3: Indian Economy

73. Which of the following would lead to a shift in the demand curve?
(a) Increase in the price of the goods
(b) Change in the price of other goods
(c) Decrease in the price of the goods
(d) All of the above
74. The expenditure on a good would change in the opposite direction as the price change if
(a) the good is price elastic
(b) the good is price inelastic
(c) the good is price constant
(d) the good is price indeterminate
75. Imposition of price ceiling below the equilibrium price leads to
(a) excess demand
(b) excess supply
(c) no change in demand
(d) none of the options
76. Speculative demand for money is
(a) directly related to interest rate
(b) inversely related to interest rate
(c) neutral to interest rate
(d) proportional to interest rate
77. Which of the following is NOT an instrument of monetary policy of the RBI?
(a) Open market operations
(b) Varying cash reserve ratio
(c) Varying government purchase
(d) Varying the bank rate
78. Net foreign portfolio investments are recorded in the $\qquad$ account of India's balance of payments
(a) trade account
(b) current account
(c) capital account
(d) reserves account
79. According to 2011 census, sex ratio is $\qquad$ females per thousand males
(a) 927
(b) 933
(c) 940
(d) 950
80. $\qquad$ is a payments bank
(a) Airtel bank
(b) Bandhan bank
(c) Indusind bank
(d) Yes bank
81. Total fertility rate (TFR) refers to
(a) Number of live births by a woman at the time of census
(b) Number of live births by a woman during the entire reproductive period
(c) Number of live births by a woman in a decade
(d) Number of live births by a woman adjusted for sequencing of delivery
82. 'Blue Revolution' refers to
(a) Increasing production of biofuels
(b) increasing production of fish
(c) increasing production of indigo
(d) increasing area under irrigation
83. The person who is known as 'the architect of Indian planning' is
(a) Amartya Sen
(b) Sukhamoy Chakravarthy
(c) P C Mahalanobis
(d) Jagdish Bhagwati
84. Official estimates of poverty line is determined by the monetary value of
(a) calorie intake
(b) PDS offtake
(c) durable goods consumption
(d) non-durable goods consumption
85. The longest national highway in India is
(a) NH 1
(b) NH 12
(c) NH 16
(d) NH 44
86. Domestic industry is protected from foreign competition by
(a) quotas
(b) dumping
(c) free trade
(d) trade liberalization
87. $\qquad$ was the earliest iron and steel company established
(a) IISCO
(b) TISCO
(c) Jindal steel
(d) Salem steel
88. Production of a commodity mostly through natural process is an activity in the $\qquad$ sector
(a) primary
(b) secondary
(c) tertiary
(d) construction
89. The measure of money supply denoted as M4 by RBI is
(a) currency held by the public + demand deposits
(b) currency held by the public + savings deposits with post office saving bank
(c) currency held by the public + time deposits of commercial banks
(d) currency held by the public + demand deposits + net time deposits of commercial banks + total deposits with post office
90. $15^{\text {th }}$ Finance Commission was headed by
(a) Y V Reddy
(b) N K Singh
(c) Vijay Kelkar
(d) Urjit Patel

## Section 4: Society and Culture

91. The current Chairperson of National Human Rights Commission is
(a) Justice H.L. Dattu
(b) Justice R.C. Ghose
(c) Justice P.C. Panth
(d) Justice K.G. Balakrishnan
92. Lothal is a place in Gujrat widely known for
(a) archeological excavations
(b) biodiversity
(c) siesmic activity
(d) salt making
93. The last caste census conducted in colonial India was in
(a) 1911
(b) 1941
(c) 1921
(d) 1931
94. Fraternal poliyandry was widely practiced among the following tribes
(a) Gonds
(b) Santhals
(c) Bhills
(d) Todas
95. Pipli is a village in Orissa known for its
(a) applique craft
(b) stone carving
(c) brass sculpture
(d) silver filigree
96. Article 352 of Indian Constitution deals with
(a) official language of the states
(b) national commission for the scheduled castes
(c) separation of judiciary from executive
(d) national emergency
97. V.S.Sukthankar was instrumental in preparing a critical edition of
(a) Mahabharata
(b) Ramayana
(c) Bhagavat Gita
(d) Rig Veda
98. Chowri-Chowra incident is closely associated with
(a) khilafat movement
(b) salt Satyagraha
(c) non-cooperation movement
(d) none of the other options
99. Iravatam Mahadevan is a well-known scholar in
(a) Sanskrit grammar
(b) Tamil Literature
(c) Epigraphy
(d) Indology
100. Visakha guidelines are related to
(a) workplace caste discrimination
(b) workplace sexual harassment
(c) domestic violence
(d) workplace equal opportunity
101. Kerala school of astronomy and mathematics belonged to which period?
(a) $8^{\text {th }}$ to $10^{\text {th }}$ century
(b) $12^{\text {th }}$ to $14^{\text {th }}$ century
(c) $14^{\text {th }}$ to $16^{\text {th }}$ century
(d) $10^{\text {th }}$ to $12^{\text {th }}$ century
102. Verrier Elwin, the British scholar who lived in India is remembered for his contribution in the field of
(a) anthropology
(b) history
(c) sanskrit literature
(d) archeology
103. 'Subaltern studies' refers to an intellectual movement in
(a) sociology
(b) English literature
(c) history
(d) anthropology
104. 'Buddha and his Dhamma' is written by
(a) Prakash Ambedkar
(b) M.K. Gandhi
(c) Arundhati Roy
(d) none of the other options
105. The ancient university of Takshashila is located near the present city of
(a) Delhi
(b) Ahmedabad
(c) Karachi
(d) Islamabad
106. Forest Rights Act of 2006 is intended to
(a) ensure rights of the state over forests
(b) relocate forest dwellers to outside
(c) secure the rights of forest-dwelling tribals
(d) none of the other options
107. Tomb of Salim Chishti is situated in
(a) Ajmer
(b) Fatehpur Sikri
(c) Lucknow
(d) Hyderabad
108. The word 'queer' is associated with
(a) religious identity
(b) ethnic identity
(c) regional identity
(d) none of the other options

## Section 5: World Affairs

109. The author of the book 'The Rise and Fall of the Great Powers' is
(a) Paul Kennedy
(b) Francis Fukuyama
(c) Benjamin Barber
(d) Thomas Friedman
110. NATO and Warsaw Pact, two military alliances during the Cold War, came into being in years $\qquad$ and $\qquad$ ,
(a) 1950, 1955
(b) 1949, 1958
(c) 1949,1955
(d) 1950, 1956
111. Where was the first non-aligned summit held and when?
(a) Belgrade, 1961
(b) Cairo, 1960
(c) Bandung, 1955
(d) New Delhi, 1956
112. The code name of the atomic bomb which was dropped on Hiroshima was
(a) Fat Man
(b) Little Boy
(c) Little Man
(d) Fat Boy
113. Kwame Nkrumah was the first prime minister of
(a) Ghana
(b) Nigeria
(c) Uganda
(d) Ethiopia
114. The years in which Berlin Wall was built and pulled down are $\qquad$ and $\qquad$ , respectively.
(a) 1960, 1989
(b) 1961, 1989
(c) 1962,1990
(d) 1963, 1991
115. The leader who introduced 'open door' policy and economic reforms in China was
(a) Zhou Enlai
(b) Deng Xiaoping
(c) Mao Zedong
(d) Xi Jinping
116. The Indus Water Treaty was signed between India and Pakistan in
(a) 1960
(b) 1961
(c) 1962
(d) 1963
117. The headquarter of AU (African Union) is located at
(a) Addis Ababa
(b) Tripoli
(c) Cairo
(d) Dare Salam
118. RCEP stands for
(a) Regional Comprehensive Economic Partnership
(b) Regional Cooperative Economic Partnership
(c) Regional Comprehensive Energy Partnership
(d) Regional Cooperation in Energy Partnership
119. The 'Atoms for Peace' programme was proposed by
(a) Harry Truman
(b) Dwight Eisenhower
(c) John F Kennedy
(d) Richard Nixon
120. Dumbarton Oaks Conference in 1944 was important because
(a) it promised all nations would be invited to join the world organisation
(b) it established World Bank and IMF
(c) it came up with the first draft of the UN Charter
(d) it settled the question of occupation and control of defeated Germany
121. The recipient of Nobel peace prize for 2019 is
(a) Abiy Ahmed Ali
(b) Peter Handke
(c) Olga Tokarczuk
(d) James Peebles
122. Who among the following won the Wimbledon men's singles in 2019?
(a) Rafael Nadal
(b) Roger Fedrer
(c) J S Cabal
(d) Novak Djokovic
123. Which of the following is NOT a UN Agency?
(a) WHO
(b) ILO
(c) ICRC
(d) FAO
124. Where was the second SAARC summit held and who was its chairman?
(a) Dhaka, Abdul Ahsan
(b) Dhaka, H M Ershad
(c) Bangalore, Rajiv Gandhi
(d) Islamabad, Zia ul Haq
125. When was the Greenpeace established and where is it's headquarter located?
(a) 1971, Amsterdam
(b) 1972, London
(c) 1971, Brussels
(d) 1973, London
126. Omar al-Bashir, overthrown in a coup recently, belongs to
(a) Ethiopia
(b) Sudan
(c) Nigeria
(d) Senegal

## Section 6: Ecology and Environment

127. Which among the following is the least populated country?
(a) Indonesia
(b) Bangladesh
(c) Pakistan
(d) Brazil
128. An example of micro-nutrient is:
(a) Copper
(b) Carbon
(c) Calcium
(d) Cobalt
129. Gir National Park of India is famous for
(a) Asiatic Lion
(b) Great Indian Bustard
(c) Tiger
(d) Elephant

| Plant | Medicinal property/usage |
| :--- | :--- |
| (a) Amla (Phyllanthus emblica) | (i) Tooth paste |
| (b) Doob ghas (cynodon dactylon) | (ii) Cough |
| (c) Vasaka (Adhatoda Zeylanica) | (iii) Acidity |
| (d) Borsali (Mimusops elengi) | (iv) Source of Vitamin C |

(a) (a)=iv,(b)=(iii),(c)=(ii),(d)=(i)
(b) (a)=i,(b)=(ii),(c)=(iii),(d)=(iv)
(c) (a)=ii,(b)=(iv),(c)=(iii),(d)=(i)
(d) $(\mathrm{a})=\mathrm{iv},(\mathrm{b})=(\mathrm{i}),(\mathrm{c})=(\mathrm{iii}),(\mathrm{d})=(\mathrm{ii})$
131. APPIKO movement was held in the state of
(a) Karnataka
(b) Assam
(c) Kerala
(d) Jharkhand
132. Parameters considered in Koeppen's scheme of classification of climate are:
(a) Temperature and precipitation
(b) Temperature and pressure
(c) Rainfall and mixing height
(d) Cloud cover and pressure
133. In which one of the following states is the Gulf of Mannar reserve situated?
(a) Assam
(b) Kerala
(c) Tamil Nadu
(d) Andaman and Nicobar Islands
134. Which of the following soil type has 40-50 \% organic matter?
(a) Marine soil
(b) Forest soil
(c) Peaty soil
(d) Arid soil
135. On the earthquake map of India, Chennai region is considered:
(a) Very high damage risk zone
(b) High damage riak zone
(c) Moderate damage risk zone
(d) Low damage risk zone
136. Burning of waste in absence of air is called
(a) Incineration
(b) Pyrolysis
(c) Combustion
(d) Ignition
137. The diversity of habitats over the geographical area is referred as
(a) Alpha diversity
(b) Beta diversity
(c) Gamma diversity
(d) Sigma diversity
138. The body of Himalayan mountaineering person compensates the low oxygen availability through:
(a) Increasing red blood cell production
(b) Increasing the binding affinity of haemoglobin
(c) Decreasing breathing rate
(d) Increasing white blood cell production
139. In the interaction where one species is benefitted and the other species is neither benefitted nor harmed is called
(a) Commensalism
(b) Amensalism
(c) Mutualism
(d) Parasitism
140. The per-capita generation of municipal solid waste per day in a large metro city of India is equal to
(a) $0.50 \mathrm{~kg} / \mathrm{day}$
(b) $0.25 \mathrm{~kg} / \mathrm{day}$
(c) $1.00 \mathrm{~kg} / \mathrm{day}$
(d) $1.50 \mathrm{~kg} / \mathrm{day}$
141. An example of secondary wastewater treatment unit is:
(a) Sedimentation tank
(b) Activated sludge process
(c) Nitrification system
(d) Reverse osmosis
$142.95 \%$ of the constituent of natural gas is:
(a) Butane
(b) Methane
(c) Propane
(d) Ethane
143. The device used in industries to control both gaseous and particulate matter air pollutants is:
(a) Cyclone
(b) Scrubber
(c) Fabric filter
(d) Settling chamber
144. Soil widely used to make bricks is:
(a) Arid soil
(b) Laterite soil
(c) Forest soil
(d) Peaty soil

## End of Part - I

## Part - II : Essay Writing

## Write an essay on ANY ONE of the following topics

1. You are asked to conduct a gender sensitization session for high school students. Explain the core ideas, concepts and activities you will consider for conducting this session.

## OR

2. Globalisation is destroying local cultures and making people culturally alienated. Do you agree with this statement? Substantiate your answer.

## OR

3. Equality is not a natural phenomenon. Hence, trying to create an egalitarian society is a futile exercise. Give your response either for or against to the given proposition.

## OR

4. Are the World Bank and IMF relevant in today's world? Justify your answer.
