

- 36) Which part of the given sentence is erroneous? In case, there is no error, choose option (d).
- The oxygen content of Mars is not
 - Sufficient enough to support life
 - As we know it.
 - No error

[4]

- a) Option (a) b) Option (b)
c) Option (c) d) Option (d)

- 37) Which part of the given sentence is erroneous? In case, there is no error, choose option (d).
- A great part
 - Of Arabia
 - Is desert.
 - No error

[4]

- a) Option (a) b) Option (d)
c) Option (c) d) Option (b)

- 38) Which part of the given sentence is erroneous? In case, there is no error, choose option (d).
- Emphasis on equality of life ensures
 - For the health and happiness
 - Of every individual.
 - No error

[4]

- a) Option (b) b) Option (d)
c) Option (a) d) Option (c)

- 39) Which part of the given sentence is erroneous? In case, there is no error, choose option (d).
- Having read a number of stories
 - About space travel
 - His dream now is about to visit the Moon.
 - No error

[4]

- a) Option (c) b) Option (b)
c) Option (d) d) Option (a)

- 40) Which part of the given sentence is erroneous? In case, there is no error, choose option (d).
- He was charged of murder
 - Though the evidence did every thing
 - To convince the judge of his innocence.
 - No error

[4]

- a) Option (a) b) Option (d)
c) Option (b) d) Option (c)

Question No. 41 to 45 are based on the given text. Read the text carefully and answer the questions:

It is no doubt true that we cannot go through life without sorrow. There can be no sunshine without shadow, we must not complain that roses have thorns but rather be grateful that thorns bear flowers. Our existence here is so complex that we must expect much sorrow and suffering. Yet, it is certain that no man was ever discontented with the world who did his duty in it. The world is like a looking glass; if you smile, it smiles; if you frown, it frowns back. Always try, then, to look at the bright side of things. There are some people whose very presence seems like a ray of sunshine and brightens the whole room. Life has been described as a comedy to those who think and a tragedy to those who feel.

- 41) The author says that we cannot go through life without sorrow because [4]

- We are always discontented
- Life is a tragedy
- Human life is very complex
- It is our fate

- 42) According to the author, no man can be discontented with the world if he [4]

- Is determined to be happy
- Has a healthy attitude to life
- Is sincere in discharging his duties
- Likes sunshine

- 43) The expression 'Life is a tragedy to those who feel' means that it is a tragedy to those who [4]

- Do not understand the world
- Are sensitive and emotional
- Think about the world
- Believe in fate

- 44) The author says, "There are some persons whose very presence seems like a ray of sunshine and brightens the whole room"?

The reason for this is that they [4]

- Talk more of roses and less of thorns
- Are happy and spread happiness
- Look good and behave well
- Have the capacity to love

- 45) What is the author's message in this passage? [4]

- Expect much sorrow and suffering
- The world is a looking glass
- Our existence is so complex
- Look at the bright side of things

- 46) Which of the following best expresses the meaning of the word **HARD** [4]

- Simple
- Difficult
- Common
- Easy

- 47) Which one of the following best expresses the meaning of the word **RECAPITULATION** [4]

- Withdrawal
- Capture
- Introduction
- Recall

- 48) Out of the four alternatives suggested, choose the the one which best expresses the meaning of the word **FRONTIER** [4]

- Edge
- Landmark
- Corner
- Boundary

- 49) The given item consists of a sentence followed by four words or group of words. Select the synonym of word (underlined in the sentence) as per the context.

To abolish poverty would be to destroy the soil upon which mankind produces the virtues conducive to higher civilisation. [4]

- Eradicate
- Assimilate
- Detest
- Nurture

- 50) Which of the following best expresses the meaning of the word. **OBSTREPEROUS** [4]

- Lazy
- Awkward
- Unruly
- Sullen

PART-B

- 51) Weight and mass of an object are defined with Newton's laws of motion. Which among the following is true? [4]

- Weight is a constant of proportionality
- Mass is a constant of proportionality

- c) Weight is a universal constant
d) Mass is not a constant of proportionality
- 52) A car starts from Bengaluru, goes 50 km in a straight line towards South, immediately turns around and returns to Bengaluru. The time taken for this round trip is 2 h. The magnitude of the average velocity of the car for this round trip [4]
- a) Is zero
b) Is 25 km/h
c) Cannot be calculated without knowing acceleration
d) Is 50 km/h
- 53) A body is falling freely under the action of gravity alone in vacuum. Which one of the following remains constant during the fall? [4]
- a) Total mechanical energy
b) Kinetic energy
c) Total linear momentum
d) Potential energy
- 54) A solid disc and a solid sphere have the same mass and same radius. Which one has the higher moment of inertia about its centre of mass? [4]
- a) The information provided is not sufficient to answer the question
b) The sphere
c) Both have the same moment of inertia
d) The disc
- 55) A heavy iron bar of weight w is having its one end on the ground and the other on the shoulder of a man. The rod makes an angle θ with the horizontal. What is the weight experienced by the man? [4]
- a) W
b) $W \cos\theta$
c) $\frac{w}{2}$
d) $W \sin\theta$
- 56) A man weighing 70 kg is coming down in lift. If the cable of the lift breaks sudden, then the weight of the man would become [4]
- a) 35 kg
b) 0
c) 140 kg
d) 70 kg
- 57) The following four wires are made of the same material. Which of these will have the largest extension, when the same tension is applied? [4]
- a) $L = 300 \text{ cm}, d = 3 \text{ mm}$
b) $L = 50 \text{ cm}, d = 0.5 \text{ mm}$
c) $L = 100 \text{ cm}, d = 2 \text{ mm}$
d) $L = 250 \text{ cm}, d = 2 \text{ mm}$
- 58) A stone weighing 750 g appears to weigh only 500 g when it is submerged in water of density 1 g(cc)^{-1} . The volume of the stone is [4]
- a) 1000 cc
b) 250 cc
c) 750 cc
d) 500 cc
- 59) Real expansion of a liquid is always [4]
- a) Equal to apparent expansion
b) Greater than apparent expansion
c) Varies depending on conditions
d) Less than apparent expansion
- 60) The absolute zero temperature is 0 K. In $^{\circ}\text{C}$ unit, which one of the following is the absolute zero temperature? [4]
- a) 0°C
b) -100°C
c) -273.15°C
d) -173.15°C
- 61) Which of the following are factors upon which the amount of heat radiated from a body depends?
- Excess temperature of the body over surroundings.
 - Density of the body.
 - Exposed area of the body.
 - Nature of the surface of the body
- Choose the correct answer from the codes given below [4]
- a) I, II and IV
b) II, III and IV
c) I, III and IV
d) I, II and III
- 62) The pressure and density of a diatomic gas changes adiabatically from (p, ρ) to (p', ρ') . If $\frac{p'}{p}$ is equal to 32, then $\frac{\rho'}{\rho}$ should be [4]
- a) $\frac{1}{128}$
b) 28
c) 32
d) 128
- 63) When a ray of light is reflected under multiple reflections by a set of plane parallel mirrors, then the intensity of the ray diminishes due to [4]
- a) Absorption of light by the atmosphere
b) Absorption as well as scattering of light from the mirrors
c) Scattering of light by the atmosphere
d) None of these
- 64) In optical instruments, the lenses are used to form image by the phenomenon of [4]
- a) Diffusion
b) Reflection
c) Scattering
d) Refraction
- 65) A person is unable to read a newspaper without his glasses. He is most probably suffering from [4]
- a) Astigmatism
b) Presbyopia
c) Hypermetropia
d) Myopia
- 66) A sound wave has a frequency of 1 kHz and wavelength 50 cm. How long will it take to travel 1 km? [4]
- a) 3 s
b) 5 s
c) 4 s
d) 2 s
- 67) Which one of the following statements is true for sound waves propagating in air? [4]
- a) Sound is an electromagnetic wave and transverse in nature.
b) Sound is an electromagnetic wave and longitudinal in nature.
c) Sound is a mechanical wave and longitudinal in nature
d) Sound is a mechanical wave and transverse in nature.
- 68) Two electrons are separated by distance of 1Å . The Coulomb force between them will be [4]
- a) $2.3 \times 10^{-8} \text{ N}$
b) $3.6 \times 10^{-8} \text{ N}$
c) $1.6 \times 10^{-9} \text{ N}$
d) $4.6 \times 10^{-8} \text{ N}$
- 69) There are two wires of the same material and lengths. The cross - sections of the wires are different. If the diameter of the first wire is double that of the second wire, then the specific resistance of the first wire will be [4]
- a) Four times that of the second wire
b) Same as that of the second wire
c) Double that of the second wire
d) Half that of the second wire
- 70) Consider the following circuit, The current flowing through each of the resistors connected in the below circuit is

- d) Aniline ink
- 90) Common salt (NaCl) is not used as a raw material for preparation of which one of the following compounds? [4]
 a) Washing soda b) Baking soda
 c) Plaster of Paris d) Bleaching powder
- 91) Read the following statements about bacteria and select the correct option. [4]
 a) Bacteria are simple in both structure and behaviour
 b) Bacteria are complex in both structure and behaviour
 c) Bacteria are simple in structure, but complex in behaviour
 d) Bacteria are complex in structure, but simple in behaviour
- 92) Mitochondria are able to produce their own [4]
 a) Nucleus b) Proteins
 c) Chloroplasts d) Digestive enzyme
- 93) Eating of raw fish can cause deficiency of vitamin [4]
 a) D b) B₄
 c) B₁₂ d) B₁
- 94) Consider the following functions of xylem.
 i. Conduction of water.
 ii. Conduction of minerals.
 iii. Translocation of food.
 Which of the function(s) of xylem given above is/are correct? [4]
 a) I and ii b) Only i
 c) Only iii d) Ii and iii
- 95) Damage to the apical meristem of a growing young plant will affect the [4]
 a) Colour of the flower b) Colour of the leaves
 c) Taste of the fruits d) Length of the plant
- 96) Which one is antigibberellin? [4]
 a) Malic hydrazide
 b) Phosphon - D
 c) All of these
 d) Chlorocholine chloride
- 97) The joint between skull and first vertebra is [4]
 a) Ellipsoidal joint
 b) Hinge joint
 c) Pivot joint
 d) Ball and socket joint
- 98) Which one of the following depicts the correct circuit of a reflex arc? [4]
 a) Receptor → sensory neuron → brain → motor neuron → effector
 b) Sensory neuron → receptor → brain effector → motor neuron
 c) Receptor → sensory neuron → spinal cord → motor neuron → effector
 d) Effector → sensory neuron → spinal cord → motor neuron → receptor
- 99) Which one of the following is the scientific name of the causal organism elephantiasis? [4]
 a) *Ascaris lumbricoides* b) *Fasciola hepatica*
 c) *Wuchereria bancrofti* d) *Culex pipiens*
- 100) The genetically engineered **Golden rice** was created by transforming β - carotene biosynthesis genes namely, [4]
 a) Chy - 1 b) Psy and Crt gene
 c) Chy - 2 d) Lcy - e
- 101) Megasthenes classified the Indians into classes. [4]
 a) Nine b) Seven
 c) Eleven d) Five
- 102) Who among the following leaders started the Indian Home Rule League? [4]
 a) JB Kripalani
 b) Bal Gangadhar Tilak
 c) Mahatma Gandhi
 d) Gopal Krishna Gokhale
- 103) Which one among the following works of Mahatma Gandhi provides a critique of modern machine - oriented civilisation? [4]
 a) Constructive Programme
 b) Anasakti Yoga (Commentary on 'Gita')
 c) The Story of My Experiments with Truth
 d) Hind Swaraj
- 104) The Mathura school of Art was influenced by: [4]
 a) Gandhara School of Art
 b) Roman School of Art
 c) Amaravati School of Art
 d) Bodh Gaya School of Art
- 105) The "Mudrarakshasa" was composed by: [4]
 a) Shudraka b) Varahamihira
 c) Vishakhadatta d) Aryabhata
- 106) The Huna leader Mihirgula was defeated by: [4]
 a) Chandragupta b) Rajjyardhana
 c) Budhagupta d) Yashodharaman
- 107) The hero of the Kakort 'Dacolty' case was [4]
 a) Bhagat Singh b) Ramprasad Bismil
 c) Batukeshwar Datta d) Barkatulla
- 108) The Vijayanagara Empire emerged during the reign of: [4]
 a) Humayun b) Muhammad Tughlaq
 c) Balban d) Ala - ud - din - Khilji
- 109) Who said 'Swaraj is my birthright and I shall have it'? [4]
 a) B.G. Tilak b) M.K. Gandhi
 c) B. R. Ambedkar d) G.K. Gokhale
- 110) Which one among the following statement(s) relating to the Home Rule Movement is not correct? [4]
 a) The movement was again revived by Mahatma Gandhi
 b) Annie Besant, the leader of the movement did not oppose the entry of extremists
 c) The movement, instead of going forward after its great advance in 1917, gradually declined in 1918
 d) The movement became weaker and weaker because of the continuous differences of opinion among the nationalist leaders
- 111) Which year did Bankim Chandra Chatopadhyay write Anandmath? [4]
 a) 1882 b) 1890
 c) 1892 d) 1858
- 112) Who was appointed by Akbar as his Court Musician? [4]
 a) Mian Tansen b) Abul Fazal
 c) Raja Todar Mal d) Raja Birbal

- 113) The innovator of the Revenue settlement during the rule of Akbar was [4]
 a) Raja Mansingh b) Raja Bhagwan Das
 c) Raja Birbal d) Raja Todarmal
- 114) The first Satyagraha of Gandhiji for the cause of indigo farmers was observed at [4]
 a) Champaran b) Bardoli
 c) Chauri - Chaura d) Sabarmati
- 115) Which of the following statements with regards to the Civil Disobedience Movement is/are correct?
 i. The movement received massive response from business groups and peasantry.
 ii. The movement coincided with large scale labour upsurge in Maharashtra.
 iii. The movement was marked by the mass participation of lawyers and students.
 Select the correct answer using the codes given below.
 [4]
 a) All of these b) 2 and 3
 c) 1 and 2 d) Only 1
- 116) Which of the following was the chief characteristic of Renaissance period? [4]
 a) All of these
 b) Rationalistic thinking
 c) Humanistic thinking
 d) Spiritualistic thinking
- 117) The industrial revolution in England had a profound impact on the lives of people. Which of the following statements are correct about that?
 i. Women were the main workers in the silk, lace - making and knitting industries
 ii. Factory managers were well aware of the health risks of industrial work on children
 iii. Children were often employed in textile factories.
 iv. The novel 'Hard Times' by Charles Dickens was a severe critique of the horrors of industrialisation.
 [4]
 a) 3 and 4 b) 1 and 3
 c) 1 and 2 d) 1, 3 and 4
- 118) Which of the following was/were the reasons for the defeat of British during the American War of Independence?
 i. The remoteness of the American Continent and the lack of good roads.
 ii. The British authorities failed to rally the loyalist Americans.
 iii. The Americans benefited from the extraordinary military leadership of George Washington.
 iv. The Americans had access to superior arms and ammunition.
 [4]
 a) 1, 2 and 4 b) 1, 2 and 3
 c) Only 3 d) 2 and 3
- 119) Whose teachings inspired the French Revolution? [4]
 a) Rousseau b) Hegel
 c) Plato d) Locke
- 120) Which one of the following statements about Renaissance Humanist Culture is not true? [4]
 a) It slackened the control of religion over human life.
 b) It criticised material wealth, power and glory
 c) It was concerned with good manners.
 d) It believed that human nature was many - sided.
- 121) Growth rate of population means [4]
 a) The difference of growth between male and female.
 b) The number of births per thousand people.
 c) The difference in population between urban and rural area.
 d) The difference between birth and death rates.
- 122) A continuous chain of mountains that rise abruptly more or less parallel to the coastline of India is [4]
 a) Satpura b) Western ghats
 c) Aravalli d) Eastern ghats
- 123) In India, glacial terraces known as **Karewas** are found in [4]
 a) Sapt Kosi valley b) Alakananda valley
 c) Teesta valley d) Jhelum valley
- 124) Administration of India was transferred to the British Crown (from the East India Company) in: [4]
 a) 1857 b) 1600
 c) 1858 d) 1912
- 125) Which one of the following States/Union Territories of India recorded the lowest density of population in the 1991 Census? [4]
 a) Mizoram b) Nagaland
 c) Sikkim d) Arunachal Pradesh
- 126) Which one of the following hydroelectric projects does not belong to Tamil Nadu? [4]
 a) Periyar b) Idukki
 c) Kundah d) Aliyar
- 127) Which of the following are West flowing rivers?
 1. Krishna 2. Narmada 3. Mahanadi 4. Sabarmati
 Select the correct answer using the codes given below.
 [4]
 a) 1 and 3 b) 2 and 3
 c) 2 and 4 d) 1 and 4
- 128) The name of India's Aircraft carrier is: [4]
 a) INS Vikrant b) INS Nilgiri
 c) INS Kukri d) INS Himgiri
- 129) The maximum concentration of scheduled caste population is in the [4]
 a) North - East India b) Indo - Gangetic Plains
 c) Eastern Coast d) Western Coast
- 130) Palghat joins which of the following states? [4]
 a) Kerala and Tamil Nadu
 b) Arunachal Pradesh and Sikkim
 c) Maharashtra and Gujarat
 d) Sikkim and West Bengal
- 131) Of the following, the river which attains its maximum flow before monsoon is: [4]
 a) Narmada b) Jhelum
 c) Sabarmati d) Yamuna
- 132) The atomic power station in Rajasthan is situated at: [4]
 a) Rawatbhata b) Pokhran
 c) Chittorgarh d) Suratgarh
- 133) The term **Mixed Economy** denotes [4]
 a) Existence of both heavy and small industries
 b) Existence of both developed and underdeveloped sectors
 c) Existence of both private and public sectors
 d) Existence of both rural and urban sectors
- 134) The three highest mountain peaks are: [4]

- a) Everest, Turish Mir, Lenin Peak
 b) Everest, Kanchanjungha, Nanda Devi
 c) Everest, Godwin Austin (K - 2), Kanchanjungha
 d) Everest, Nanda Devi, Nanga Prabat
- 135) In the budget figures of the Government of India, interest payments, subsidies, pensions, social services and the like are parts of the [4]
 a) Public Debt in the form of Capital Expenditure
 b) Non - plan Expenditure
 c) Plan Expenditure
 d) State Government Expenditure
- 136) The Government has renamed NREGA scheme and the name associated with the scheme is that of [4]
 a) Indira Gandhi b) Jawahar Lal Nehru
 c) Mahatma Gandhi d) Rajiv Gandhi
- 137) After which one of the following tribes of India, has a large contingent of the ancient geological history of the world been named? [4]
 a) Marias b) Santhals
 c) Bhils d) Gonds
- 138) Which one of the following is likely to be the most prevalent form of weathering in hot - tropical desert areas? [4]
 a) Biological b) Chemical
 c) Mechanical d) Leaching
- 139) A landscape that is caused due to the fissure in the earth along which one side has moved down with reference to the other is known as [4]
 a) Rift Valley b) Hanging Valley
 c) U Shaped Valley d) V Shaped Valley
- 140) When does solar eclipse take place? [4]
 a) When the moon is between the sun and earth
 b) When the moon does not lie on the line joining the sun and earth
 c) When the earth is between the moon and sun
 d) When the sun is between the moon and earth
- 141) Which of the following country/countries successfully inserted a spacecraft into Mars' orbit by maiden attempt? [4]
 a) The USA and Russia b) India
 c) China d) The USA
- 142) Schemes run under the National Rural Employment Guarantee Act are sponsored (NREGA). [4]
 a) On public - private partnership basis
 b) By Centre, State and Panchayat bodies together
 c) Partly by the Central Government and partly by the State Government
 d) By the Central Government alone
- 143) A high level committee set - up by the Ministry of Housing and Urban Poverty Alleviation, conducted a survey of the slum populations in India's states. Which one among the following states was identified as being the one with highest slum population? [4]
 a) Andhra Pradesh b) Maharashtra
 c) Tamil Nadu d) Madhya Pradesh
- 144) What was the code name for the Indian Air Force operations during the Kargil Conflict of 1999? [4]
 a) Operation Meghdoot
 b) Operation Vijay
 c) Operation Indradhanush
 d) Operation Safed Sagar
- 145) Who has been named as the official sponsor of the Indian contingent for the 19th Asian Games? [4]
 a) Airtel India b) Jio
 c) Paytm d) Amul
- 146) Which country has recently approved a new constitution? [4]
 a) Sri Lanka b) Gabon
 c) Kenya d) Maldives
- 147) Which country has recently become the new member of the International Solar Alliance? [4]
 a) Chile b) Qatar
 c) Albania d) Malta
- 148) With whom has the Bihar state government signed an agreement to promote the startup ecosystem? [4]
 a) SIDBI b) World Bank
 c) New Development Bank d) NITI Aayog
- 149) Who built the two advanced Triput class ships for the Indian Navy? [4]
 a) Goa Shipyard Limited
 b) HSL Drydock
 c) Hindustan Shipyard Limited
 d) Cochin Shipyard Limited
- 150) What is India's rank in the recently released Passport Index Points? [4]
 a) 141th b) 144th
 c) 143th d) 142th