

DEECET – 2021

PART - A

Teaching Aptitude – SET – 2

1. What is the important instrument for social change?
 1. Media
 2. Education
 3. Wealth
 4. Temples

2. According to New Education Policy – 2020, what is the new pattern of School system
 1. 10 + 2 + 3
 2. 5 + 3 + 3 + 4
 3. 4 + 3 + 4 + 5
 4. 2 + 4 + 4 + 5

3. One of the following is not a co-curricular activity
 1. Excursion
 2. Essay writing competition
 3. Home work
 4. Sports

4. Physical growth is caused by which of the following?
 1. Sports
 2. Clay modelling
 3. Story telling
 4. Music

5. Which of the following is the best way to maintain discipline in the class?
1. Choosing strong monitor among the students
 2. Giving a variety of activities on the topics taught in the class
 3. Isolating the trouble making child from the class
 4. Spending more time to correct the behaviour of the problem child

G. K. – SET - 2

6. 'Clean India programme' has been inaugurated from which state?
1. Bihar
 2. Uttar Pradesh
 3. Gujarath
 4. West Bengal
7. Who among the following is not been a teacher
1. Maria Montessori
 2. Stephen Hawking
 3. Jawaharlal Nehru
 4. Sarvepalli Radha Krishnan
8. The app that is used to identify any individual who are at risk of Covid – 19 infection
1. Spandana
 2. MyGov
 3. UMANG
 4. Aarogya Setu

9. The game that originated in India is
1. Chess
 2. Judo
 3. Boxing
 4. Volleyball
10. What is the highest literacy award in India?
1. Arjuna
 2. Jnanpith
 3. Bharat Ratna
 4. Padma Shri

English – SET – 2

11. Set backs are inevitable in life. A set back can act as a driving force and also teach us humility. In grief we learn to become victors, not victims.

What positive impact do setbacks have on us?

1. They enable us to become victims, not victors
 2. They act as a driving force
 3. They make us believe in God.
 4. Setbacks are never happening
12. With gratitude I'll reach my goal
Choose the correct synonym and the antonym of the word, "gratitude" respectively
1. greatness (synonym); generosity (antonym)
 2. energy (synonym); ability (antonym)
 3. thankfulness (synonym); thanklessness (antonym)
 4. courage (synonym), discourage(antonym)

13. Choose the word that cannot be used after the word 'deep'

1. dream
2. sympathy
3. sleep
4. breath

14. What do we write in a diary

1. Our syllabus
2. Notices we have seen
3. Headlines of a newspaper
4. Personal feelings, events other than routine.

15. "What is her name?" This sentence is

1. an enquiry
2. an offer
3. an apology
4. a wish

Telugu – SET – 2

16. కఠినంగా పలికే అక్షరాలను ఏమంటారు?

1. పరుషాలు
2. సరళాలు
3. అనునాసికాలు
4. స్థిరాలు

17. “రాజువారి తోటలో రోజాపూలు, చూసేవారే కానీ కోసేవారు లేరు” ఇది ఒక

1. సామెత
2. పొడుపుకథ
3. జాతీయం
4. అభ్యర్థన

18. తెలుగు భాషకు అక్షరాలు ఎన్ని?

1. 40
2. 56
3. 36
4. 50

19. ఒక హల్లుకు వేరొక హల్లు ఒత్తుగా చేరితే అది

1. ద్విత్వము
2. సంయుక్తాక్షరం
3. బహుళము
4. సంశ్లేషాక్షరం

20. “త్యాగం” - ఈ పదానికి వికృతి

1. తలము
2. చాగం
3. సోదెము
4. దమ్ముము

1st Language English – SET - 2

21. Identify the present perfect tense from the following sentences

1. I chose Mathematics
2. I have lived in Vijayawada for a long time
3. He will go to Delhi next week
4. She likes songs

22. Match the following to make compound adjectives

Set – A

Set – B

i) moon

a) house

ii) light

b) set

iii) sea

c) light

iv) sun

d) shore

1. i – d, ii – c, iii – b, iv – a
2. i – b, ii – a, iii – d, iv – c
3. i – c, ii – a, iii – d, iv – b
4. i – a, ii – d, iii – b, iv – c

23. Change the following into passive voice.

Do not waste water

1. waste the water not
2. Waste water not do
3. Water do not waste
4. Let the water not be wasted

24. Find the one word substitute for ‘a film that gives facts about something’.

1. Publisher
2. documentary
3. en route
4. Manuscript

25. I understand your problem; _____ I can't help you

1. besides
2. However
3. as a result
4. Where as

26. I took off my black coat.

Choose the meaning of the phrasal verb “took off” from the following

1. to remove
2. to buy
3. to wash
4. to tell

27. If you leave the door of the cage open, _____

1. The bird fly out
2. The bird would fly
3. The bird will fly out
4. The bird flew

28. I met _____ lawyer yesterday. _____ lawyer was famous in the city

1. the, a
2. a, the
3. a, an
4. an, the

29. Could I use your bat, please?

1. giving advice
2. asking permission
3. asking question
4. making an offer

30. Borra caves are the largest caves in Eastern Ghats.

This sentence is in _____

1. Comparative degree
2. Negative degree
3. Positive degree
4. Superlative degree

Mathematics – SET - 2

31. A man buys a toy for Rs. 25 and sells it for Rs. 30, then the percentage of profit is
1. 10
 2. 20
 3. 30
 4. 40
32. In what time (in years) will Rs. 1200 amount becomes Rs. 1323 at 5% Interest rate per annum on compound interest
1. 1
 2. 2
 3. 3
 4. 4
33. A can complete a piece of work in 5 days, B can complete the same work in 6 days. If they work together how many days will they complete the work?
1. $\frac{30}{11}$
 2. $\frac{20}{11}$
 3. $\frac{19}{11}$
 4. None

34.
$$\frac{\sqrt{0.1296} \times \sqrt{0.1764}}{0.1512}$$

1. 3
2. 4
3. 1
4. 2

35. $(175)^2 - (75)^2$

1. 5000
2. 20000
3. 25000
4. 10000

36. $3^7 + 3^7 + 3^7 = 3^x$ then $x =$

1. 3
2. 4
3. 5
4. 8

37. $\sqrt[3]{\sqrt{64}} =$

1. 2
2. 4
3. 8
4. $\sqrt{2}$

38. Cube of an odd number is
1. even
 2. 1
 3. odd
 4. None
39. $0.75 : x :: 5 : 8$ then $x =$
1. 1
 2. 2
 3. 1.3
 4. 1.2
40. In a school out of 180 students, $\frac{4}{9}$ of the students are boys then the number of Girls in the School is
1. 100
 2. 80
 3. 120
 4. 60

General Science – SET – 2
(Biology)

41. The term cardiac refers to which organ in the body?
1. heart
 2. vein
 3. lymph
 4. capillary

42. The important function of stomata is
1. Conduction
 2. Transpiration
 3. Photosynthesis
 4. Absorption
43. Non insectivorous plant
1. Drosera
 2. Nepenthes
 3. Utricularia
 4. Dodder
44. What are the “Power houses of the cell?”
1. Golgi apparatus
 2. Chloroplast
 3. Mitochondria
 4. Lysosomes
45. At which position of the food chain would you place a human being
1. Primary consumer
 2. Secondary consumer
 3. Tertiary consumer
 4. Primary producer

General Science SET-2

Physical Science

46. The substances which turn blue litmus into red color
1. Acids
 2. Bases
 3. Salts
 4. All the above
47. The method useful for the separation of dissolved substances from a liquid
1. Sedimentation
 2. Chromatography
 3. Crystallization
 4. Filtration
48. Specific heat (S)
1. $\frac{Q}{\Delta T}$
 2. $Q\Delta T$
 3. $\frac{Q}{m\Delta T}$
 4. $\frac{m\Delta T}{Q}$

49. Ramu's house has five 60W bulbs. If they used all the bulbs for 5 hours, then the power consumed by him

1. 1500 KWH
2. 0.3 KWH
3. 70 KWH
4. 1.5 KWH

50. Which of the following is the most active metal?

1. lithium
2. sodium
3. potassium
4. rubidium

Social Studies – SET – 2

51. Velocity of Light in vacuum
1. 3,00,000 km/sec
 2. 4,00,000 km/sec
 3. 2,00,000 km/sec
 4. 5,00,000 km/sec
52. Aryabhata was a well-known
1. Astronomer
 2. Economist
 3. Astrologist
 4. Physician
53. $80^{\circ} 30'$ E longitude passes through which city in India?
1. Karim Nagar
 2. Allahabad
 3. Tirupathi
 4. Bengaluru
54. The second world war lasted from _____ to _____
1. 1914 – 1918
 2. 1919 – 1923
 3. 1939 – 1945
 4. 1947 – 1951

55. Who is the present governor of Andhra Pradesh?
1. Biswabhusan Harichandan
 2. E.S.L. Narasimhan
 3. N. Ranga Swamy
 4. D. Kiran Bedi
56. Whose motto is “Swaraj is my birthright”
1. Bal Gangadhr Tilak
 2. Lala Lajpat Rai
 3. Bipin Chandra Pal
 4. Annie Besant
57. Rampur lies in the fertile alluvial plains of the in the western part of Uttar Pradesh
1. Ganga Plain
 2. Krishna Basin
 3. Godavari Basin
 4. Periyar Basin
58. Who presided in the first session of the Indian National Congress at Bombay?
1. Mahatma Gandhi
 2. S. Subrahmanya Ayyar
 3. W.C. Benerjee
 4. Ramesh Chandra Dutt

59. Expand 'PDS'
1. Public Development System
 2. Public Debit System
 3. Public Distribution System
 4. Public Discount System
60. The first railway line in Britain connected the cities _____ and _____
1. Liverpool and Monchester
 2. Liverpool and Darlington
 3. Stackton and Darlington
 4. Stackton and Monchester

DEECET – 2021
(PHYSICAL SCIENCE)
Physics – SET - 2

61. The dimensional formula of density (ρ) is
1. $M^1 L^{-3} T^1$
 2. $M^1 L^{-3} T^0$
 3. $M^2 L^{-3} T^0$
 4. $M^1 L^{-2} T^0$
62. The area under velocity – time graph for any moving object gives
1. displacement
 2. acceleration
 3. average acceleration
 4. Retardation
63. If $|\vec{a} + \vec{b}| = |\vec{a} - \vec{b}|$ then the angle between \vec{a} and \vec{b} is
1. 0°
 2. 90°
 3. 45°
 4. 180°

64. If u_1 and u_2 be the velocities of the bodies before collision and v_1 and v_2 are the final velocities after collision, then the coefficient of restitution (e) is

1. $\frac{u_1 - u_2}{v_2 - v_1}$

2. $\frac{u_2 - u_1}{v_2 - v_1}$

3. $\frac{v_1 - v_2}{u_1 - u_2}$

4. $\frac{v_2 - v_1}{u_1 - u_2}$

65. The vector product of two vectors $\vec{a} = 3\hat{i} - 4\hat{j} + 5\hat{k}$ and $\vec{b} = -2\hat{i} + \hat{j} - 3\hat{k}$ is

1. $7\hat{i} + \hat{j} - 5\hat{k}$

2. $7\hat{i} - \hat{j} - 5\hat{k}$

3. $-7\hat{i} + \hat{j} - 5\hat{k}$

4. $7\hat{i} + \hat{j} + 5\hat{k}$

66. On an average a human heart is found to beat 75 times in a minute calculate its frequency

1. 1.50 HZ

2. 1 HZ

3. 1.25 HZ

4. 2 HZ

67. SI units of young's modulus is
1. Nm^{-2}
 2. Pascal
 3. 1 and 2
 4. Nm
68. The temperature for which the reading on Kelvin and Fahrenheit scales are same
1. 560.5°F
 2. 574.6°F
 3. 502.3°F
 4. 553.4°F
69. Which of the following is not a thermodynamic state variable
1. Pressure
 2. Volume
 3. Temperature
 4. Work
70. Molar specific heat at constant volume (C_v) for monoatomic gas is
1. $\frac{3}{2} R$
 2. $\frac{5}{2} R$
 3. $3 R$
 4. $2 R$

71. The relation between wave length and angular wave number is

1. $\lambda = \frac{2\pi}{k}$

2. $k = \frac{\lambda}{2\pi}$

3. $\lambda = \frac{2}{k}$

4. $k = \frac{\lambda}{\pi}$

72. What focal length should the reading spectacles have for a person for whom the least distance of distinct vision is 50 cm?

1. $f = +50\text{cm}$

2. $f = -50\text{cm}$

3. $f = +45\text{cm}$

4. $f = -45\text{cm}$

73. Gauss law for electricity

1. $\vec{E} \cdot d\vec{s} = \frac{q}{\epsilon_0}$

2. $\phi = \vec{E} \cdot d\vec{s} = \frac{\epsilon_0}{q}$

3. $\phi = \frac{q}{\epsilon_0}$

4. 1 and 3

74. The value of permittivity of free space in SI units

1. $8.854 \times 10^{-13} \text{ N}^{-1} \text{ m}^{-2} \text{ c}^{-2}$
2. $8.854 \times 10^{-12} \text{ c}^2 \text{ N}^{-1} \text{ m}^{-2}$
3. $8.854 \times 10^{-11} \text{ c}^2 \text{ N}^{-1} \text{ m}^{-2}$
4. $8.854 \times 10^{-14} \text{ c}^2 \text{ N}^{-1} \text{ m}^{-2}$

75. The sequence of bands marked on carbon resistor are Yellow, Violet, Brown, Gold. What is its resistance and tolerance?

1. $(47 \times 10 \text{ ohm}) \pm 10\%$
2. $(47 \times 10^2 \text{ ohm}) \pm 10\%$
3. $(47 \times 10 \text{ ohm}) \pm 5\%$
4. $(47 \times 10^2 \text{ ohm}) \pm 5\%$

76. The BIOT – SAVART law is

1.
$$dB = \frac{\mu_0}{4\pi} \frac{idl \sin \theta}{r}$$
2.
$$dB = \frac{\mu_0}{4\pi} \frac{idl \sin \theta}{r^2}$$
3.
$$dB = \frac{\mu_0}{4\pi} \frac{i \vec{dl} \times \vec{r}}{r^3}$$
4. 2 and 3

77. Which of the following is not a paramagnetic substance
1. Aluminum
 2. Iron
 3. Calcium
 4. Oxygen
78. Which of the following is Inductive reactance (X_L)
1. $\frac{1}{\omega L}$
 2. ωL
 3. $\sqrt{\omega L}$
 4. $\frac{1}{\sqrt{\omega L}}$
79. A 900 PF capacitor is charged by 100v battery. How much electrostatic energy is stored by the capacitor?
1. $4.5 \times 10^{-6} \text{ J}$
 2. $45 \times 10^{-6} \text{ J}$
 3. $0.45 \times 10^{-6} \text{ J}$
 4. $450 \times 10^{-6} \text{ J}$
80. When an α - particle emitted by a radioactive element its atomic number (Z) and mass number (A) changes by
1. $(Z + 1)$ and $(A - 4)$
 2. $(Z + 1)$ and A
 3. $(Z - 2)$ and A
 4. $(Z - 2)$ and $(A - 4)$

Chemistry SET - II

81. Which part of Electromagnetic spectrum does Balmer series belong
1. ultraviolet
 2. visible
 3. infrared
 4. Near – infrared
82. The most electronegative element of the periodic table
1. Iodine
 2. Oxygen
 3. Chlorine
 4. Fluorine
83. Which of the following is a linear molecule?
1. BrO_2
 2. CO_2
 3. NO_2
 4. SO_2
84. The boiling point of pure water is
1. 32°C
 2. 100°F
 3. 373°K
 4. 273°K

85. Oxidation number of iron in Fe_2O_3
1. + 3
 2. + 4
 3. + 1
 4. + 2
86. Which of the following is not an intensive property?
1. temperature
 2. density
 3. pressure
 4. mass
87. Which of the following can act both as Bronsted acid and base
1. H_2O
 2. HCl
 3. HNO_3
 4. H_2SO_4
88. Temporary hardness of water is caused due to the presence of dissolved
1. calcium hydrogen carbonates only
 2. magnesium hydrogen carbonates only
 3. sulphates and chlorides of calcium or magnesium
 4. calcium bicarbonates and magnesium bicarbonates

89. When gypsum is heated to 393k, it forms
1. $\text{CaSO}_2 \cdot 2\text{H}_2\text{O}$
 2. CaSO_4
 3. $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$
 4. SO_3 and CaO
90. Identify the correct statement
1. diamond is amorphous allotrope of carbon
 2. solid carbondioxide is known as dry ice
 3. C_{70} molecule is known as Buckminsterfullerene
 4. graphite is a bad conductor of electricity
91. Identify the compound which shows Frenkel as well as Schottky defect.
1. KCl
 2. AgBr
 3. NaCl
 4. KBr
92. The number of moles of solute per kilogram of solvent is
1. Molality
 2. Normality
 3. Molarity
 4. Formality

93. The Laws of electrolysis were proposed by

1. Henry
2. Vant hoff
3. Fredrick
4. Faraday

94. Example of Pseudo first order reaction is

1. Hydrolysis of ethyl acetate
2. decomposition of hydrogen peroxide
3. decomposition of N_2O_5
4. photochemical reactions

95. Fog is an example of colloidal system of

1. liquid in gas
2. gas in liquid
3. solid in gas
4. gas in solid

96. Atomicity of phosphorous is

1. 1
2. 2
3. 3
4. 4

97. Which of the following d-block elements are not regarded as transition elements
1. Zn, Cd, Hg
 2. Cu, Ag, Au
 3. Ni, Pd, Pt
 4. Fe, Ru, Os
98. The correct IUPAC name of $K_3 [Fe(CN)_6]$ is
1. Potassium ferrocyanide
 2. Potassium ferricyanide
 3. Potassium hexacyanoferrate (II)
 4. Potassium hexacyanoferrate (III)
99. Which of the following is a fat soluble vitamin?
1. B
 2. C
 3. B_{12}
 4. K
100. Schiff's reagent gives pink colour with the following
1. acetone
 2. acetic acid
 3. acetaldehyde
 4. lactic acid