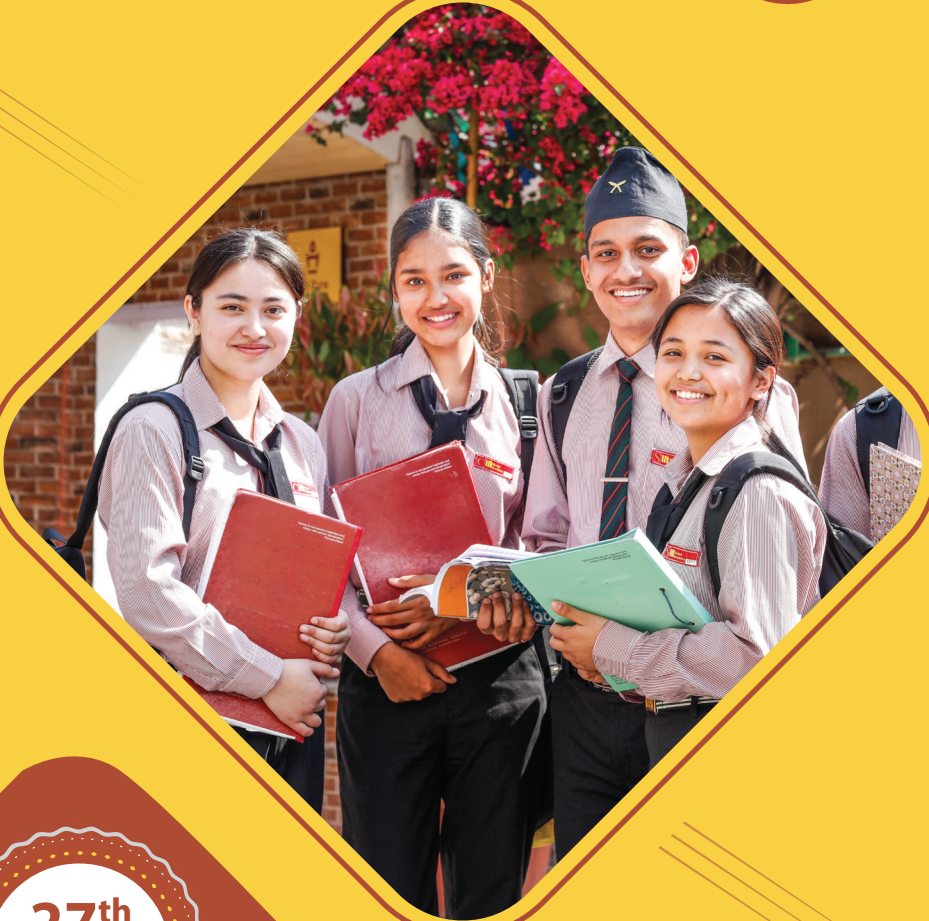




United
Academy



27th
Years'
Experience

Entrance Model Questions-2083

• Science • Management • Humanities • Law

“Genius is one percent inspiration and ninety-nine percent perspiration.”

- Thomas Alva Edison



Under the management of UAG



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Preface

United Academy (UA) has always remained deeply committed to the academic growth, learning potential, and holistic development of thousands of students. UA firmly believes that education is not merely about delivering content—it is about nurturing curious minds, guiding ambitions, and shaping responsible, confident individuals ready to face their challenges in the future.

In this regard, UA is pleased to present this **Entrance Model Questions (2025)**, designed as an efficient tool to succeed for those students who are preparing for the Entrance Examination(s) for Grade XI at UA. UA understands how important this phase is in a student's life, as it lays the foundation for further academic and professional pursuits—whether in Science, Management, Humanities, Law, or any other discipline.

The primary objectives of this booklet are threefold:

1. To **familiarize students with the format and pattern of entrance questions** so that they can approach the Entrance Examination with confidence.
2. To **offer a wide range of practice sets** that help sharpen critical thinking, time management, and subject-wise preparations.
3. To **bridge the gap between current learning and future academic goals**, especially for those aspiring to pursue competitive fields like Medicine, Engineering, Business, and Social or Human Sciences.

Thus, UA extends its heartfelt best wishes to all its prospective students. May this booklet be a stepping stone towards a bright academic future and a successful career path. Your dreams are valid, and with sincere efforts and the right guidance, one will surely achieve them.

Happy Reading! Best Wishes!

United Academy Family
Kumaripati, Lalitpur

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(Management/Humanities/Law Faculty)

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Instruction for the Entrance Examination

Instructions for Students

1. All the questions are objective.
2. Read the questions carefully, do the calculations on the scrap paper and then indicate the correct answer on a separate answer sheet provided. Use cross mark (X) in the provided box for correct answers in the answer sheet.
3. There should not be any rough marks in the answer sheet.
4. Students are instructed to submit both the papers (question paper and answer sheet) after completing the examination.

Entrance Model Questions-2082 (1)
Faculty of Science

Time: 2 Hrs

Full Marks: 100

Pass Marks: 40

Choose the best option and cross-mark the right box available in the answer sheet.

MATHEMATICS [25 Marks]

1. If $y = \sqrt{\frac{x}{1-x}} + \sqrt{\frac{1-x}{x}}$, then y^2 equals
- (a) $\frac{1}{1-x^2}$ (b) $\frac{1}{1-x}$
(c) $1-2x + \frac{x^2}{x-x^2}$ (d) $1-x + \frac{x^2}{x-x^2}$
2. Two dice are thrown simultaneously. The probability of getting a sum of 9 is:
- (a) $\frac{1}{10}$ (b) $\frac{3}{10}$ (c) $\frac{1}{9}$ (d) $\frac{4}{9}$
3. A man sells an article at a profit of 20% of S.P. What is his real profit %?
- (a) 16.66% (b) 25% (c) 18% (d) 20%
4. The cuboidal tank is 20cm long 10 cm wide & 8 cm high. With what minimum base area can it stand upright?
- (a) 200 cm² (b) 80 cm² (c) 160 cm² (d) None
5. Which of the following is an example of pure quadratic equation?
- (a) $x^2 + 3x - 9 = 0$ (b) $x^2 + 3x = 0$
(c) $x^2 - 9 = 0$ (d) $3x - 9 = 0$
6. If $m:n = 3:2$ then what is the value of $(4m+5n) : (4m - 5n)$?
- (a) 4:9 (b) 9:4 (c) 11:1 (d) 9:1

7. What is the compound interest of Rs 1 for 3 years at the rate of 10% per annum?
 (a) Rs 13.31 (b) Rs 1.331 (c) Rs 0.331 (d) Rs 0.30
8. Which of the following is not true?
 (a) Diagonals of a square are equal
 (b) Diagonals of a rectangle are equal
 (c) Diagonals of a rhombus are equal
 (d) Diagonals of a square and rectangle are equal
9. Which of the axioms does not verify congruency of any two triangles?
 (a) R.H.S. axiom (b) S.S.S. axiom
 (c) S.S.A. axiom (d) A.A.S. axiom
10. Which of the relations is true for cylinder and cone of same radius and height?
 (a) $3 \times \text{CSA of cone} = \text{CSA of cylinder}$
 (b) $\text{TSA of cylinder} = \text{CSA of cone} + \text{Area of base}$
 (c) $3 \times \text{volume of cone} = \text{volume of cylinder}$
 (d) $\sqrt{7a} \times 3 \times \text{volume of cylinder} = \text{volume of cone}$
11. If $f(x) = x$ and $g(x) = n$ then $\text{gof}(x)$ is equal to
 (a) x (b) n (c) $x^n[2 - 5 - 3 6]$ (d) $x.n$
12. If $(f-3)x = 2x-3$ then $f(3)$ is equal to
 (a) 2 (b) 3 (c) $6[2 - 5 - 3 6]$ (d) None of these
13. Zeros of $p(x) = x^2 - 1$ are
 (a) ± 1 (b) ± 2 (c) 0 (d) None of these
14. What is the determinant of an identity matrix?
 (a) 0 (b) 1 (c) 2 (d) All
15. If $\begin{pmatrix} 2x & 4 \\ 6 & 3x \end{pmatrix}$ is a singular matrix then the value of x is
 (a) 0 (b) 2 (c) -2 (d) ± 2
16. If $|\vec{a} + \vec{b}| = |\vec{a} - \vec{b}|$ then the relation between \vec{a} and \vec{b} is
 (a) parallel (b) orthogonal (c) equal (d) none
17. If $\sin 8\theta = \cos 7\theta$ then the value of θ is
 (a) 90° (b) 0° (c) 15° (d) 6°

18. If the third term of a G.S. is 3 then the product of first five terms is
 (a) 243 (b) 27 (c) 81 (d) none of these

19. If $\vec{x} = \begin{pmatrix} 3 \\ 4 \end{pmatrix}$ and $\vec{y} = \begin{pmatrix} -4 \\ 3 \end{pmatrix}$ then angle between \vec{x} and \vec{y} is
 (a) 0° (b) 45° (c) 90° (d) none of these
20. If $Q_1 = 20$ and $Q_3 = 50$ then the semi-inter quartile range is
 (a) 35 (b) 30 (c) 15 (d) none of these

21. The 11th term of an A.P. $-5, -\frac{5}{2}, 0, \frac{5}{2}, \dots$ is
 (a) -20 (b) 20 (c) -30 (d) 30

22. The value of $\tan 1^\circ \cdot \tan 2^\circ \cdot \tan 3^\circ \dots \tan 89^\circ$ is
 (a) 0 (b) 1 (c) ∞ (d) $\frac{1}{2}$

23. The value of 'a' for which 2a, (a+10) and (3a+2) are three consecutive terms of an A.P. is:
 (a) 6 (b) -6 (c) -18 (d) 18

24. If $A + B + C = \pi^c$, $\sin 2A - \sin 2B - \sin 2C$ equals
 (a) $4 \cos A \cdot \cos B \cdot \sin C$ (b) $4 \cos A \cdot \sin B \cdot \cos C$
 (c) $-4 \sin A \cdot \cos B \cdot \cos C$ (d) $-4 \cos A \cdot \cos B \cdot \sin C$

25. For what value of 'k' with $(k+2)x^2 = 4xy + (2k+5)y^2$ represents two straight lines perpendicular to each other?
 (a) 2 (b) -4 (c) -3 (d) 4

PHYSICS [20 Marks]

26. 1 A^0 is equal to
 a. 10^{-10} m b. 10^{-10} mm c. 10^{-10} cm d. 10^{-10} km
27. 1 horse power is:
 a. 746 joule b. 746 watt c. 476 watt d. 764 watt
28. The dimensional formula of PV is same as:
 a. force b. energy
 c. moment of inertia d. upthrust
29. The minimum no. of coplanar vectors of unequal magnitude can be added to give zero resultant are:
 a. 2 b. 4 c. 3 d. 5

30. The numerical ratio of displacement to distance is
 a. always < 1 b. always $= 1$
 c. always > 1 d. may be less than equal to 1
31. Which law gives the quantitative definition of force?
 a. 1st law b. 2nd law
 c. 3rd law d. law of gravitation
32. Which is not the unit of pressure?
 a. pascal b. dyne/cm² c. Nm d. N/m²
33. “ If a body is emerged in a liquid the weight of displaced liquid is equal to the upthrust.” this is known as
 a. Pascal’s law b. Ohm’s law
 c. Newton’s law d. Archimedes principle
34. If two masses of 4 kg and 16 kg are moving with equal kinetic energy. What will be the ratio of their momentum
 a. 4:1 b. 1:4 c. 1:2 d. 1:√2
35. According to table, in which substance does temperature rise much if equal amount of heat is supplied in same time interval to equal mass.

Substance	A	B	C	D
Sp.H.C(J/kg°C)	4200	800	600	400

- a. A b. B c. C d. D
36. An amount of water of mass 20 gm at 0°C is mixed with 40 gm of water at 10°C. Final temperature of the mixture is:
 a. - 20°C b. 6.60°C c. 5°C d. 0°C
37. The specific heat capacity of boiling water is:
 a. infinite b. zero c. 4200 J kg⁻¹ k⁻¹ d. one
38. What amount of heat is required to increase the temperature of 10gm of water from 20°C to 30°C?
 a. 420 J b. 4200 J c. 240 J d. 2400 J
39. Which of the following formula represents the definition of electric current?
 a. $I = \frac{Q}{t}$ b. $I = \frac{P}{V}$
 c. $I = \frac{V}{R}$ d. none of the above
40. Three resistors of 4,5 and 6 ohms are joined in series. The total resistance will be:
 a. 15 Ω b. 1/15 Ω c. 37/60 Ω d. 37/30 Ω

53. Which of the following compound is base?
 a. HCl b. KOH c. H₂SO₄ d. PbSO₄
54. During electrolysis of CuSO₄, Cu⁺⁺ move towards.
 a. anode b. cathode c. both d. solution
55. Electrolysis is carried out by,
 a. AC b. DC
 c. either AC or DC d. non
56. Which gas is living gas?
 a. H₂ b. O₂ c. N₂ d. CO₂
57. Which catalyst is used in the manufacture of ammonia by Haber's process?
 a. nickel b. sodium c. iron fillings d. copper
58. What is the general formula of alkyne?:
 a. C_nH_{2n-2} b. C_nH_{2n+2} c. C_nH_{2n} d. C_nH_{2n+1}
59. Which of the following compounds is Iodoform?
 a. CHI₃ b. CHBr₃ c. CHCl₃ d. CH₄
60. Which of the following process is used for the production of alcohol?
 a. Distillation process b. Sublimation process
 c. Evaporation process d. Decantation process
61. Raksi is called;
 a. methyl alcohol b. ethyl alcohol
 c. ether d. acetic acid
62. Aquaregia is,
 a. conc HNO₃ + conc 3HCl b. conc H₂SO₄ + conc 3HCl
 c. conc HCl + conc 3H₂SO₄ d. conc HNO₃ + conc 3H₂SO₄
63. Molecular weight of CO₂ is,
 a. 22 b. 28 c. 44 d. 18
64. Which of the following is the strongest oxidizing species?
 a. Na⁺ b. Li⁺ c. Ba⁺² d. Mg⁺²
65. The strongest reducing agent is,
 a. HNO₂ b. H₂S c. H₂SO₃ d. SnCl₂

BIOLOGY [20 Marks]

66. Genetics is the study of
- Heredity and variations
 - Forms and features of plant organs
 - Growth and differentiation in living organisms
 - Classification based on characters of somatic chromosome
67. The science of vegetable culture is called
- Agriculture
 - Horticulture
 - Olericulture
 - Floriculture
68. Ginger is a
- root
 - stem
 - tuber
 - leaves
69. Mucor reproduces only by
- vegetative reproduction
 - asexual reproduction
 - sexual reproduction
 - all
70. Animal viruses mostly contain genetic material
- DNA
 - RNA
 - DNA or RNA
 - none
71. Viruses can multiply in
- bacterial cells only
 - all living cells
 - specific cells only
 - rotten food
72. The main difference between animal and plant cell is that
- animal cells lack rigid cell wall
 - animal cells have vacuoles
 - plant cells lack rigid cell wall
 - plant cells have small vacuoles
73. Extra nuclear DNA is found in
- Chloroplast
 - Endoplasmic reticulum
 - Ribosomes
 - Nucleus
74. Blood is a
- reddish fluid tissue
 - brownish yellow tissue
 - greenish white tissue
 - none
75. Nervous tissue consists of
- neurons
 - neutrons
 - electrons
 - protons
76. Genotypic ratio of monohybrid cross is
- 3:1
 - 1:1
 - 1:2:1
 - 2:1
77. Father of genetics is
- Mendel
 - Watson
 - Bateson
 - Darwin

78. Response of organism to stimulus of touch is called
 a. phototaxis b. thermo taxis
 c. hydro taxis d. thigmo taxis
79. Plant grows in desert is called
 a. Pteridophyte b. cyclophyte
 c. xerophyte d. hydrophyte
80. Pollination occurs in
 a. bryophytes and angiosperms
 b. pteridophytes and angiosperms
 c. gymnosperms and angiosperms
 d. bryophytes and gymnosperms
81. Reproduction in yeast is
 a. fission b. budding c. sporulation d. all
82. Globulin is found in:
 a. liver b. pancreas c. lymph d. kidney
83. Which artery carries the deoxygenated to blood?
 a. Pulmonary artery b. Hepatic artery
 c. Umbilical artery d. Coronary artery
84. Fungi is
 a. producers b. consumers
 c. decomposers d. all
85. Rabbit is
 a. consumers b. producers c. decomposers d. none

ENGLISH

[15 MARKS]

86. *The correct passivization of "Did she write the report yesterday?" is:*
 a. Was the report written yesterday by her?
 b. Is the report written yesterday by her?
 c. Has the report been written yesterday by her?
 d. Will the report be written yesterday by her?
87. *"They opened the store at 9 a.m." changes into passive as:*
 a. The store was opened at 9 a.m.
 b. The store had been opened at 9 a.m.
 c. The store is opened at 9 a.m.
 d. The store will be opened at 9 a.m.

88. *He said, "I am reading a novel."* changes to indirect speech as:
- He said that he reads a novel.
 - He said that he was reading a novel.
 - He said that he had read a novel.
 - He said that he is reading a novel.
89. *She said, "I will visit you next week."* becomes in indirect speech as:
- She said that she will visit me the next week.
 - She said that she would visit me the next week.
 - She said that she visited me the next week.
 - She said that she is visiting me the next week.
90. *He studies at this college. Its WH-question is:*
- Where does he study?
 - What does he study?
 - When does he study?
 - Why does he study?
91. *They go hiking every weekend. Its WH-question is:*
- When do they go hiking?
 - Why do they go hiking?
 - Where do they go hiking?
 - Who do they go hiking?
92. If he ___ more money, he would buy that bike.
- had
 - has
 - have
 - will have
93. If I ___ the invitation, I would have joined the event.
- receives
 - received
 - had received
 - was receiving
94. He gave me ___ useful advice.
- a.
 - an
 - the
 - no article
95. We saw ___ eagle flying above the hills.
- a
 - an
 - the
 - no article
96. The children are fond ___ chocolates.
- for
 - about
 - with
 - of
97. She is good ___ solving problems quickly.
- at
 - in
 - for
 - with
98. He had the mechanic ___ his car.
- fixing
 - fix
 - to fix
 - fixed

99. They got the house ___ before winter.
a. paint b. painting c. painted d. paints
100. Which modal auxiliary verb is used to express advice or suggestion?
a. must b. should c. will d. shall

All the Best

Entrance Model Questions-2082 (2)
Faculty of Science

Time: 2 Hrs

Full Marks: 100

Pass Marks: 40

Choose the best option and cross-mark the right box available in the answer sheet.

MATHEMATICS [25 Marks]

1. What is the period of function $y = \tan x$?
 a. π^c b. $2\pi^c$ c. $3\pi^c$ d. $4\pi^c$
2. What is the range of $y = \cos x$?
 a. (-1,1) b. [-1,1] c. (-1,1] d. [-1,1]
3. Function $y = ax^2 + bx + c$ represents a linear function if:
 a. $a < 0$ b. $a > 0$ c. $a = 0$ d. $c = 0$
4. If $f^{-1}(x) = \frac{2x+3}{4}$, then what is the value of $f(x)$?
 a. $3x-2/4$ b. $2x+4/3$ c. $4/3x+2$ d. $4x-3/2$
5. When a polynomial $p(x)$ is divided by $(x + a)$, remainder R is:
 a. $p(a)$ b. 0 c. $p(-a)$ d. $p(x + a)$
6. If the degree of dividend is $4m$ and divisor is m , then what will be the degree of Quotient?
 a. $4m$ b. $3m$ c. $5m$ d. m
7. Add next two terms in the sequence o, t, t, f, f, s, s, e, n, _, _
 a. n, e b. t, i c. t, e d. e, t
8. In the standard equation of parabola, $y = a(x - h)^2 + k$. If $a > 0$, parabola opens:
 a. upward b. downward c. towards right d. towards left
9. In which side from the line $y = 3$ is the solution region of $y \leq 3$ lie?
 a. Right b. Left c. Up d. Down
10. Which of the following numbers represents continuity?
 a. Whole number c. Rational number
 b. Natural number d. Real number

11. What is the determinant of a unit/Identity matrix?
 a. 0 b. 1 c. -1 d. 2
12. If the slopes of two lines are equal, then what is the angular relation between the lines?
 a. Coincident b. Normal
 c. Orthogonal d. Perpendicular
13. The equation of a straight line perpendicular to $ax + by + c = 0$ is:
 a. $ax + by - k = 0$ b. $bx - ay + k = 0$
 b. $c. bx + ay - k = 0$ d. $ax + by + k = 0$
14. For what value of k, the pair of straight lines represented by $3x^2 + 4xy - ky^2 = 0$ are at right angle?
 a. 3 b. -3 c. 4 d. -4
15. What is the slope of a straight line if inclination is 45° ?
 a. 4 b. 2 c. 1 d. 5
16. What is the equation of the pair of straight lines passing through the origin and perpendicular to the lines represented by $ax^2 + 2hxy + by^2 = 0$?
 a. $bx^2 + 2hxy + ay^2 = 0$
 b. $bx^2 - 2hxy + ay^2 = 0$
 c. $ax^2 - 2hxy + by^2 = 0$
 d. $ax^2 - 2hxy - by^2 = 0$
17. The equation of a circle $(x - h)^2 + (y - k)^2 = r^2$ touches X-axis if:
 a. $r=|x|$ b. $r=|h|$ c. $r=|y|$ d. $r=|k|$
18. If $\sin A = \frac{1}{2}$, what will be the value of $\sin 2A$?
 a. 1 b. 2 c. $\frac{1}{\sqrt{2}}$ d. $\frac{\sqrt{3}}{2}$
19. If $\tan A = \cot A$, what is the value of A?
 a. 30° b. 45° c. 60° d. 0°
20. If $A+B+C=90^\circ$, then what will be the value of $\sin(A+B)$?
 a. $\sin C$ b. $\cos C$ c. $-\sin C$ d. $-\cos C$
21. If $\vec{a} \cdot \vec{b} = |\vec{a}||\vec{b}|$, What will be the angle between \vec{a} and \vec{b} ?
 a. 0° b. 30° c. 60° d. 90°
22. What will be the length of a string if the height of kite from ground is 30 m and angle made by string is 30° ?
 a. $30\sqrt{3}$ m b. 60m c. 30m d. $30\sqrt{2}$ m

23. Which of the following is an example of non-isometric transformation?
 a. Translation b. Reflection c. Rotation d. Enlargement
24. If the lower and upper quartile of any data are 10 and 30 respectively, what is the value of semi-interquartile range?
 a. 30 b. 20 c. 15 d. 10
25. Which of the following measure of dispersion takes the absolute deviation from the value of central tendency?
 a. Mean deviation c. Quartile deviation
 b. Standard deviation d. Exodeviation

PHYSICS [20 Marks]

26. The dimensional formula $[ML^2T^{-2}]$ represents:
 a) acceleration b) Force
 c) angular momentum d) energy
27. One astronomical unit (AU) is equal to:
 a) 10^{-10} b) 1.496×10^{11} m
 c) 9.45×10^{15} m d) 4.964×10^{11} m
28. For which action, more force is required:
 a) to pull a body b) to push a body
 c) both requires equal force d) depend on condition
29. A body can have zero velocity and still be accelerating.
 a) True
 b) False
 c) Can't say unless the mass is unknown
 d) None of the above
30. The initial magnitude of momentum of a projectile projected at an angle θ is P, the magnitude of momentum at top most point will be:
 a) $P \cos\theta$ b) $P \tan\theta$ c) $p \sin\theta$ d) $P \cot\theta$
31. The refractive index is:
 a) scalar b) vector
 c) both scalar and vector d) neither scalar nor vector
32. Glittering of diamond is due to,
 a) interference b) dispersion
 c) refraction d) total internal reflection
33. The velocity of light is maximum in,
 a) diamond b) water c) glass d) vacuum

34. Power of convex lens with focal length 50 cm is,
 a) - 2D b) 1/50 c) +2D d) - 1/50 D
35. For which of the following color of light refractive index of the material is high?
 a) Red b) Green c) Yellow d) Violet
36. The field of view is maximum for:
 a) plane mirror b) concave mirror
 c) convex mirror d) cylindrical mirror
37. If sky is seen from moon's surface it will appear:
 a) blue b) black c) white d) red
38. In the celcius scale the correct value of absolute zero temperature is:
 a) 0°C b) -273.15°C c) -32°C d) 100°C
39. 1 cal =
 a) 1/4.2 j b) 4.2 j c) 4200 j d) 42.0 j
40. Which has the highest specific heat capacity,
 a) copper b) water c) hydrogen d) silver
41. Hailstones are produced/formed by freezing of
 a) cloud b) water vapour
 c) rain drops d) none
42. At what temperature do celcius and fahrenheit scale coincide,
 a) 40° b) 50° c) -40° d) -50°
43. The minimum value of charge on any charged body may be
 a) $1.6 \times 10^{-19} \text{ c}$ b) 1 c c) 1/4 c d) $4.8 \times 10^{-12} \text{ c}$
44. The diameter of a wire is reduced to half. Now the resistance changes by factor:
 a) 2 b) 4 c) 8 d) 16
45. Which of the following instrument is used to record sound?
 a) Amplifier b) Headphone c) Dictaphone d) Phonograph

CHEMISTRY [20 Marks]

46. Which is the chemical formula of water-glass.
 a) NaCO_3 b) SiO_3 c) Na_2SiO_3 d) CaCO_3
47. The chemical formula of lime water is
 a) CaO b) Ca(OH)_2 c) CaCO_3 d) CO_2
48. The elements which reacted with water and forms hydroxide and hydrogen called.,
 a) non metal b) alkali metal c) both a and b d) none

49. In the modern periodic table, the elements are arranged in the order of their,
 a) atomic number b) atomic weight c) valency d) all
50. Balanced chemical equation is.....
 a) $\text{NH}_4\text{Cl} + \text{NaNO}_2 \rightarrow \text{NaCl} + \text{N}_2 + \text{H}_2\text{O}$
 b) $\text{Mg} + \text{N}_2 \rightarrow \text{Mg}_3\text{N}_2$
 c) $\text{CO}_2 + \text{H}_2\text{O} \rightarrow \text{H}_2\text{CO}_3$
 d) $\text{Mg} + \text{O}_2 \rightarrow \text{MgO}$
51. Given reaction is the example of : $2\text{KClO}_3 \rightarrow 2\text{KCl} + 3\text{O}_2$
 a) acid-base reaction b) decomposition reaction
 c) displacement reaction d) addition reaction
52. When moist blue litmus paper is dipped into acidic solution, it changes into.
 a) red b) green c) black d) no change
53. What is the P^{H} value of strong acid?
 a) less than 2 b) more than 2 c) less than 7 d) more than 7
54. The gas collected at anode during electrolysis of water is:
 a) hydrogen b) oxygen c) both a and b d) none
55. When CaCl_2 is ionized it decomposes on
 a) Ca^+ and Cl^- b) Ca^{++} and Cl^- c) Ca^- and Cl^+ d) none
56. One of the properties of nitrogen gas is.....
 a) heavier than oxygen b) heavier than carbon dioxide
 c) inert in nature d) easily soluble in water
57. Which catalyst is used in the manufacture of ammonia by Haber's process?
 a) nickel b) sodium c) iron filings d) copper
58. How many electrons does carbon have in its outermost shell.....
 a) 2 b) 4 c) 3 d) 6
59. Glycerol is aalcohol
 a) trihydric b) dihydric c) ketone d) none
60. Smoke particle is an example of;
 a) solution b) suspension c) colloids d) all
61. Milk is an example of:
 a) solution b) suspension c) colloids d) none
62. Metals have the property.....
 a) electropositivity b) electronegativity
 c) both and b d) none of a and b

88. *He said, "when did you arrive?"* changes to indirect speech as:
(a) He asked if I arrived. (b) He asked when I arrived.
(c) He asked if I had arrived. (d) He asked when I had arrived
89. Choose the sentence in which the subject and verb agree:
(a) The group of students are going on a trip tomorrow.
(b) Neither the teacher nor the students was present.
(c) Each of the players has a unique skill.
(d) The list of items are on the table.
90. *He usually takes some eggs in breakfast.* Its WH-question is:
(a) Where does he take his breakfast?
(b) What does he take in breakfast?
(c) When does he take in breakfast?
(d) How often does he take his breakfast?
91. They go hiking every weekend. The function of underlined word is:
(a) Adverbial (b) Verb
(c) Complement (d) Object
92. If he ___ more money, he would have bought that bike.
(a) had (b) has (c) have (d) will have
93. The person wearing a red cap is my uncle. The word class of underlined word is
(a) Pronoun (b) determiner
(c) object (d) interjection
94. English is most effective language in international context.
Complete the sentence with best option.
(a) a (b) an (c) the (d) no article
95. A school of poets reciting their poems at our school today.
Complete the sentence with best option.
(a) is (b) has been (c) was (d) are
96. I am least interested ... account. Complete the sentence with best option.
(a) for (b) about (c) with (d) in
97. Which sentence contains a correctly used relative clause?

- (a) The man which lives next door is a doctor.
(b) She bought the car, who was very expensive.
(c) The book that you lent me is interesting.
(d) I know the girl whom bike was stolen.
98. He had the mechanic ___ his car.
(a) fixing (b) fix (c) to fix (d) fixed
99. Finally, she becomes a teacher. The verb used in the sentence is:
(a) Transitive (b) Intransitive (c) Linking (d) Passive
100. If singular-plural analogy reads *cat* : *mice* then what completes the cognitive parallel of *butterfly*: ?
(a) flowers (b) wings (c) butterflies (d) leaves

All the Best

Entrance Model Questions-2082 (3)

Faculty of Science

Time: 2 Hrs

Full Marks: 100

Pass Marks: 40

Choose the best option and cross-mark the right box available in the answer sheet.

MATHEMATICS [25 Marks]

1. What is the minimum value of function $y = \cos x$?
a. $-\infty$ b. 1 c. -1 d. 0
2. What is the range of $y = \tan x$?
a. $(-\infty, \infty)$ b. $[-\infty, \infty)$ c. $(-\infty, \infty]$ d. $[-\infty, \infty]$
3. Function $y = ax + b$ represents an identity function if:
a. $a = 0, b = 1$ b. $b = 0, a = 1$ c. $x = 0, a = 1$ d. $y = 0, b = 1$
4. If $f(x)$ and $g(x)$ are two functions and they are inverse of each other, then what is the value of $f \circ g(x)$?
a. $f(x) = \frac{1}{g(x)}$ b. $g(x) = x(f)$ c. $c. x$ d. $g \circ f(x) = f^{-1} \circ g(x)$
5. When a polynomial $p(x)$ is divided by its factor $(x - a)$, remainder R is:
a. $p(-a)$ b. 0 c. $p(-x)$ d. $p(x + a)$
6. If the degree of divisor is m and Quotient is $3m$, then what will be the degree of dividend?
a. $4m$ b. $3m$ c. $7m$ d. m
7. Add next two terms in the sequence $s, m, t, w, t, _, _.$
a. v, b b. f, s c. y, u d. $z,$
8. In the standard equation of parabola, $y = a(x - h)^2 + k$. If $k=0$, vertex of parabola lies on:
a. x -axis b. above x -axis c. below x -axis d. y -axis
9. Does a point $(2, -3)$ lie on the solution region of $2x + 3y \leq 2$ lie?
a. Yes b. No c. Maybe d. Insufficient data given

10. Which of the following example represents discontinuity?
 a. Movement of snake b. Growth of plants
 c. Graph of $y = \tan x$ d. Graph of $y = \sin x$
11. What is the determinant of $[-1]$?
 a. 0 b. 1 c. -1 d. cannot be determined
12. If the plane intersects a cone in such a way that it is parallel to the generator of cone, what is the name of conic section thus formed?
 a. Circle b. Ellipse c. Parabola d. Hyperbola
13. In a rhombus ABCD, diagonals AC and BD intersect at O, What will be the angular measurement of $\angle COD$?
 a. 180° b. 0°
 c. 90° d. varies according to the size of figure.
14. If the line $y=m_1x$ and $y=m_2x$ are at constant distance and never intersect, what is the relation between the slopes?
 a. $m_1 \times m_2 = -1$ b. $m_1 = m_2$ c. $m_1 \times m_2 = 1$ d. $m_1 = \frac{1}{m_2}$
15. What is the slope of a straight line if inclination is 0° ?
 a. 1 b. -2 c. -1 d. 0
16. The equation of straight line $\frac{x}{a} + \frac{y}{b} = 1$ is called equation of a straight line in _____ form.
 a. Slope-intercept b. Double-intercept
 c. Slope-point d. Two-point
17. The center of the circle having equation $(x - h)^2 + (y + k)^2 = r^2$ is:
 a. $(-h, -k)$ b. $(h, -k)$ c. $(-h, k)$ d. (h, k)
18. If $\cos A = \frac{\sqrt{3}}{2}$, what will be the value of $\cos 2A$?
 a. $\frac{1}{2}$ b. $\sqrt{3}$ c. $\frac{1}{\sqrt{2}}$ d. $\frac{\sqrt{3}}{2}$
19. If $\cos A = \sec A$, what is the possible value of A?
 a. 0° b. 45° c. 60° d. 90°
20. If $A+B = 100^\circ$, then what will be the value of $\sin (A+B)$?
 a. $\sin C$ b. $\cos C$ c. $-\sin C$ d. $-\cos C$
21. If $\vec{a} \cdot \vec{b} = -|\vec{a}||\vec{b}|$, What will be the angle between \vec{a} and \vec{b} ?
 a. 0° b. 90° c. 180° d. 360°
22. In daytime, the length of shadow of a tower is equal to its height. What is the altitude of the sun?
 a. 93 million miles b. 2.38855 million miles
 c. 150.96 miles d. 45°

35. One kilowatt is equal to:
a) 1000 J b) 100 c) 1000 W d) 10 W
36. Heat flows from:
a) Cold to hot b) Hot to cold c) Both ways d) Never flows
37. The temperature at which water boils at normal pressure is:
a) 0°C b) 50°C c) 100°C d) 212°C
38. Loudness of sound depends on:
a) Frequency b) Amplitude c) Wavelength d) Time period
39. Real images are always:
a) Upright b) Virtual c) Inverted d) Magnified
40. Angle between normal and incident ray is called:
a) Angle of reflection b) Angle of refraction
c) Angle of incidence d) Right angle
41. Where should an object be placed in front of convex lens to have magnification of convex lens to have magnification equals to 1?
a) at 2F b) between F & 2F c) at F d) between F & O
42. Which of the following is a unit of magnetic flux?
a) Tesla b) Weber c) Ampere d) Ohm
43. Up thrust is the _____ force experienced by an object immersed in a fluid.
a) downward b) horizontal c) upward d) gravitational
44. What is the mass of an object weighing 98 N ($g = 9.8 \text{ m/s}^2$)?
a) 10 kg b) 9.8 kg c) 98 kg d) 100 kg
45. What makes the diamond to shine?
a) Reflection of light b) Refraction of light
c) Total internal reflection d) Critical angle

CHEMISTRY [20 Marks]

46. Who is known as the father of the modern periodic table?
a) Mendeleev b) Dalton c) Dobereiner d) Newlands
47. Which of the following is an alkali metal?
a) Calcium b) Magnesium c) Sodium d) Aluminum
48. The reaction in which heat is released is called:
a) Endothermic b) Exothermic
c) Displacement d) Double displacement
49. A substance that speeds up a chemical reaction but is not consumed is:
a) Solute b) Catalyst c) Base d) Inhibitor

50. Which gas turns lime water milky?
 a) Oxygen b) Hydrogen c) Nitrogen d) Carbon dioxide
51. Which metal is extracted from bauxite ore?
 a) Iron b) Aluminum c) Zinc d) Copper
52. The reddish-brown gas released during the heating of lead nitrate is:
 a) NO b) NO₂ c) SO₂ d) CO₂
53. General formula of alkanes is:
 a) C_nH_{2n+2} b) C_nH_{2n} c) C_nH_{2n-2} d) C_nH_n
54. Which of the following is used as a fuel in welding?
 a) Ethane b) Propane c) Ethyne d) Methanol
55. Bleaching powder is chemically:
 a) CaCl₂ b) Ca(OH)₂ c) CaOCl₂ d) NaCl
56. Which of the following is main ore of copper?
 a) Chalcocite b) Cuprite c) Copper pyrite d) Malachite
57. What is the primary method of producing ammonia gas industrially?
 a) Haber process b) Solvay process
 c) Contact process d) Ostwald
58. In which reaction two or more reactants combine to form a single product?
 a) Combination b) Displacement
 c) Decomposition d) Acid-base
59. Halogens are kept in the group.....
 a) IA b) VIIIA c) IIA d) VIIA
60. Which gas is released by refrigerators?
 a) CFC b) Carbon monoxide c) CFI d) Nitrogen
61. Name the chemical compounds required for the laboratory preparation of carbon dioxide gas?
 a) Calcium carbonate and hydrochloric acid
 b) Ammonium chloride
 c) Sodium carbonate and nitric acid
 d) Magnesium chloride
62. What is the common name of calcium oxide?
 a) Quick lime b) Salked lime
 c) Lime water d) Calcium carbonate
63. In what temperature carbon dioxide is cooled to make dry ice?
 a) -78°C b) 78°C c) 100°C d) 38°C

64. Which of the following statement is wrong about detergent?
a) They are used in soft water only
b) They are used both in soft and hard water
c) They decrease the surface tension of water
d) They can be prepared from benzene sulphononic acid
65. If an atom of an element has three electrons in its outermost orbit, what will be its valency?
a) 1 b) 3 c) 8 d) 2

BIOLOGY [20 Marks]

66. Which of the following is the basic structural unit of life?
a) Atom b) Cell c) Tissue d) Organ
67. Heredity is the transmission of traits from:
a) Teachers to students b) Friends to friends
c) Parents to offspring d) Environment to organisms
68. 3. The layer of gases surrounding the earth is called:
a) Lithosphere b) Hydrosphere
c) Biosphere d) Atmosphere
69. Homo sapiens belong to which kingdom?
a) Animalia b) Plantae c) Fungi d) Protista
70. The queen honeybee lays how many eggs in a day
a) 10–50 b) 100–200 c) 500–1500 d) 1500–2000
71. Which of the following helps in photosynthesis?
a) Chloroplast b) Mitochondria c) Ribosome d) Lysosome
72. Which organ removes nitrogenous waste from the human body?
a) Liver b) Kidney c) Lungs d) Heart
73. Which part of the brain controls voluntary actions?
a) Cerebellum b) Medulla c) Cerebrum d) Spinal cord
74. Which of these is not a characteristic of living beings?
a) Reproduction b) Respiration c) Growth d) Rusting
75. Which gas is responsible for global warming?
a) Oxygen b) Nitrogen
c) Carbon dioxide d) Hydrogen

76. Which of the following tissue is responsible for transporting water in plants?
 a) xylem b) phloem c) parenchyma d) collenchyma
77. Plants of which division are known as amphibian plants?
 a) Bryophyta b) Tracheophyta c) Pteridophyta d) Algae
78. A multicellular animal possessing tentacles fall in which phylum?
 a) Mollusca b) Porifera c) Protozoa d) Coelenterata
79. Why are pines are kept in sub-division gymnosperm?
 a) It has needle shaped leaves. b) It has chlorophyll
 c) It has naked seed d) It has cone instead of fruit
80. Name the pores present in the body of porifera.
 a) Osculum b) Nephridia c) Ostia d) Spiracle
81. Name the term which is used to organism having both male and female reproductive organs in its body.
 a) Hermaphrodite b) Saprophyte
 c) Autotroph d) Heterotroph
82. How many chambered are there in the heart of frog?
 a) 4 chambered b) 3 chambered
 c) 2 chambered d) 5 chambered
83. Name the types of organisms which lay egg.
 a) viviparous b) oviparous
 c) carnivorous d) all of above
84. How many pair of chromosomes are there in housefly?
 a) 6 pairs b) 8 pairs c) 12 pairs d) 10 pairs
85. What is the full form of IVF?
 a) Internal fertilization c) In situ fertilization
 b) Invitro fertilization d) Invitro female

ENGLISH [20 Marks]

86. The correct passivization of "Are they painting the house?" is:
 (a) Is the house painted by them?
 (b) The house is painted by them.
 (c) Is the house being painted by them?
 (d) The house is being painted by them.

87. Do not open the window,... (Choose the correct question tag):
(a) do you? (b) don't you?
(c) will you? (d) won't you?
88. She asked, "Why are you crying?" → Indirect speech:
(a) She asked why I cried. (b) She asked why was I crying.
(c) She asked why I was crying. (d) She asked why had I cried.
89. Choose the grammatically correct sentence:
(a) The team of players are ready.
(b) Neither the boys nor the teacher are here.
(c) Every student have a notebook.
(d) A bunch of keys are lying on the table.
90. He drinks milk every night. The WH-question for this is:
(a) What does he drink every night?
(b) When does he drinks milk?
(c) Why does he drinks milk?
(d) How much he drinks every night?
91. They arrived late yesterday. The function of the underlined word is:
(a) Complement (b) Verb (c) Adverbial (d) Object
92. If she ___ more time, she would have completed the task.
(a) had (b) has (c) have (d) will have
93. The boy holding a green balloon waved at us. The word class of us is:
(a) Determiner (b) Pronoun (c) Preposition (d) Object
94. He is ... honest man. Complete the sentence:
(a) an (b) a (c) the (d) no article
95. A herd of elephants ... moving toward the river.
(a) is (b) are (c) have been (d) were
96. She is keen ... learning languages.
(a) for (b) about (c) on (d) in

97. Identify the sentence with a correctly used relative clause:
- (a) That is the man which helped me.
 - (b) The film who we watched was boring.
 - (c) I know the boy whose phone was lost.
 - (d) She met a girl whom name is Anna.
98. I had the plumber ____ the leaking pipe.
- (a) fixing
 - (b) fixed
 - (c) to fix
 - (d) fix
99. Eventually, he became an artist. The verb "became" is:
- (a) Transitive
 - (b) Linking
 - (c) Passive
 - (d) Causative
100. If analogy is dog: bark, then cow: ?
- (a) bray
 - (b) cry
 - (c) moo
 - (d) grunt

❖All the Best ❖

Entrance Model Questions-2082 (4)
Faculty of Science

Time: 2 Hrs Full Marks: 100

Pass Marks: 40

Choose the best option and cross-mark the right box available in the answer sheet.

MATHEMATICS [25 Marks]

- What is the range of function $y = \sin x$?
a. $(-1,1)$ b. $[-1,1)$ c. $(-1,1]$ d. $[-1,1]$
- What is the period of $y = \cos x$?
a. π^c b. $2\pi^c$ c. $3\pi^c$ d. $4\pi^c$
- Function $y = ax^3 + bx^2 + cx + d$ represents a quadratic function if:
a. $a < 0$ b. $a > 0$ c. $a = 0$ d. $c = 0$
- If $f(x) = \frac{3x-2}{5}$, then what is the value of $f^{-1}(x)$?
a. $\frac{2x-3}{5}$ b. $\frac{5x-2}{3}$ c. $\frac{3x+2}{5}$ d. $\frac{5x+2}{3}$
- When a polynomial $p(x)$ is divided by $(x - a)$, remainder R is:
a. $p(a)$ b. 0 c. $p(-a)$ d. $p(x + a)$
- If the degree of dividend is $4m$ and Quotient is $3m$, then what will be the degree of divisor?
a. $4m$ b. $3m$ c. $7m$ d. m
- Add next two terms in the sequence j, f, m, a, m, j, j, _ , _ .
a. k, o b. a, s c. t, s d. k, k
- In the standard equation of parabola, $y = a(x - h)^2 + k$. If $a < 0$, parabola opens:
a. upwar b. downward c. towards right d. towards left
- In which side from the line $x = 2$ is the solution region of $x \leq 2$ lie?
a. Right b. Left c. Up d. Down

37. The SI unit of temperature is:
 a) Celsius b) Kelvin c) Fahrenheit d) Calorie
38. The range of human hearing is:
 a) 20 – 2000 Hz b) 200 – 20000 Hz
 c) 20 – 20000 Hz d) 2000 – 20000 Hz
39. The speed of light in vacuum is:
 a) 3×10^5 m/s b) 3×10^8 m/s c) 3×10^6 m/s d) 3×10^4 m/s
40. Which mirror is used in solar cookers?
 a) Convex b) Concave c) Plane d) None
41. The refractive index of diamond is 2.42. If speed of light in vacuum is 3×10^8 m/s then what is the speed of light in diamond?
 a) 1.5×10^8 m/s b) 1.24×10^8 m/s
 c) 2×10^8 m/s d) 2.42×10^8 m/s
42. How much time does a stone take to reach on the surface of the earth dropped from the height of 20 m?
 a) 2 seconds b) 4 seconds c) 10 seconds d) 20 seconds
43. What is the unit of power of lens?
 a) Newton (N) b) Watt (W) c) Joule (J) d) Diopetre (D)
44. One complete cycle of motion is called:
 a) Vibration b) Period c) Oscillation d) Frequency
45. If the same magnitude of upthrust acts on the three cubical balls made up of different materials on keeping them in water, which one of the following quantities is equal for them?
 a) Density b) Weight c) Volume d) Mass

CHEMISTRY [20 Marks]

46. The vertical columns in the periodic table are called:
 a) Periods b) Groups c) Rows d) Series
47. Which of the following elements shows properties of both metals and non-metals?
 a) Sulfur b) Silicon c) Phosphorus d) Carbon
48. Which one is a physical change?
 a) Rusting of iron b) Melting of ice
 c) Burning of coal d) Digestion of food
49. Which gas is used in photosynthesis?
 a) Oxygen b) Hydrogen c) Carbon dioxide d) Nitrogen

50. Ammonia gas is basic because it:
 a) Turns red litmus blue b) Turns blue litmus red
 c) Burns in air d) Is colorless
51. Which one is not a property of metals?
 a) Good conductor b) Lustrous
 c) Brittle d) Ductile
52. The metal that reacts with cold water is:
 a) Copper b) Iron c) Sodium d) Silver
53. Which of the following is a saturated hydrocarbon?
 a) Ethene b) Ethyne c) Methane d) Benzene
54. Which of the following is a household base?
 a) HCl b) NaOH c) Vinegar d) Baking soda
55. Which of the following is used in cold packs?
 a) Ammonium chloride b) Urea
 c) Ammonium nitrate d) Sodium carbonate
56. Which process of concentration involves the use of water?
 a) Magnetic separation b) Froth floatation
 c) Chemical separation d) Gravity separation
57. General formula of alkyne is _____.
 a) C_nH_{2n} b) C_nH_{2n+2} c) C_nH_{2n+1} d) C_nH_{2n-2}
58. Which hydrocarbon is used in L.P.G.?
 a) Methane b) Ethane c) Propane d) Butane
59. Molecular formula of acetylene is _____.
 a) CH_2 b) CH_4 c) C_2H_2 d) C_2H_4
60. Which alcohol is used as thermometer liquid in thermometer?
 a) Methanol b) Ethanol c) Propanol d) Glycerol
61. Example of detergent is _____.
 a) Sodium Sterate b) Sodium Lauryl sulphate
 c) Sodium Oleate d) Sodium palmitate
62. Full form of B.H.C. is _____.
 a) Boron hexa chloride b) Butane hydro chloride
 c) Benzene hexa chloride d) Brominehydro chloride
63. Urea is an example of _____ rich fertilizer.
 a) Nitrogen b) Phosphorus
 c) Potassium d) Calcium
64. Bauxite is the main ore of _____ metal.
 a) Silver b) Iron c) Copper d) Aluminium

77. Which group of organisms are called prokaryotes?
 a) Fungi b) Protists c) Bacteria d) Algae
78. Which one is fertile female in the beehive?
 a) Queen bee b) Drone bee c) Worker bee d) All of above
79. Which of the following blood cells is without a nucleus?
 a) Neutrophil b) Lymphocyte c) Monocyte d) Platelet
80. Which disease is caused due to the deficiency of haemoglobin?
 a) Diabetes b) Anaemia c) Haemophilia d) Leukemia
81. A person feels thirstier, hungrier, dizzy and sometime faints, has frequent urination, blurred vision etc. What is her problem?
 a) High blood pressure b) Problem of uric acid
 c) High blood sugar in blood d) Anaemia
82. What is the term for a characteristic is passed down from generation to generation?
 a) Dominant character b) Recessive character
 c) Heredity character d) Imported character
83. Genotype ratio in F2 generation of
 a) 3:1 b) 1:2:1 c) 2:1:1 d) 1:3
84. Which type of chromosome has one very long & one very short arm?
 a) Acrocentric b) Metacentric
 c) Sub-metacentric d) Telocentric
85. Chromosome is made up of protein & _____.
 a) Carbohydrate b) Lipid c) Gene d) Hormone

ENGLISH [15 Marks]

86. The correct passivization of "Open the door " is:
 (a) Let him open the door.
 (b) The door should be opened.
 (c) Let the door be opened.
 (d) It's the time to open the door.
87. Let's go for a walk... (Choose the correct question tag):
 (a) will you? (b) won't you?
 (c) shall we? (d) shan't we?
88. She said to me, "I will ask you if I need help" → Indirect Speech
 (a) She told me she would ask me if she needed help.
 (b) She told me she will ask me if she needed help.

- (c) She told me she would have asked me if she needed help.
 (d) She told me she had asked me if she would have needed help.
89. Choose the grammatically correct sentence:
 (a) The man, along with his children, lives in Kathmandu.
 (b) Neither the boys nor the teacher are here.
 (c) Every student have a notebook.
 (d) A bunch of keys is lying on the table.
90. I am writing an essay for English assignment. The WH-question for this is:
 (a) What do you do? (b) What are you doing?
 (c) Why are you writing? (d) How are you writing?
91. Mr Richard is the president of this institution. The function of the underlined word is:
 (a) Subject (b) compliment (c) Adverbial (d) Object
92. If she ___ an opportunity, she will do well.
 (a) will get (b) got (c) found (d) gets
93. Alas! He is dead. The word class of Alas is:
 (a) Determiner (b) Pronoun (c) Preposition (d) Interjection
94. He lives in UK Complete the sentence:
 (a) the (b) a (c) an (d) no article
95. The pair of shoes ... mine.
 (a) is (b) are (c) have been (d) were
96. She does laundry Saturdays.
 (a) for (b) on (c) by (d) in
97. Identify the sentence with a correctly used relative clause:
 (a) That is the man which helped me.
 (b) The film that we watched was boring.
 (c) I know the boy who phone was lost.
 (d) She met a girl whom name is Anna.
98. I made my brother..... me with my homework.
 (a) help (b) helped (c) to help (d) helps
99. Eventually, he became an artist. The verb "became" is:
 (a) Transitive (b) Linking (c) Passive (d) Causative
100. If analogy is dog: puppy, then cow: ?
 (a) calf (b) cub (c) cattle (d) kitten

All the Best

Entrance Model Questions-2082 (5)

Faculty of Science

Time: 2 Hrs

Full Marks: 100

Pass Marks: 40

Choose the best option and cross-mark the right box available in the answer sheet.

MATHEMATICS [25 Marks]

- Which of the following fractions is smallest?
a) $\frac{5}{8}$ b) $\frac{7}{10}$ c) $\frac{3}{4}$ d) $\frac{9}{16}$
- When 8 is increased to 10, by what percentage does it increase)?
a) 25% b) 50% c) 75% d) 100%
- The difference between two positive numbers is 10 and the ratio between them is 5:3, Find the product of the two numbers.
a) 375 b) 175 c) 275 d) 125
- If the profit is 20% of cost price, what is the percentage profit of selling price?
a) 25% b) 16.67% c) 33.33% d) None
- The average of 8 numbers is 30. If two new numbers 40 and 50 are added, what is the new average?
a) 32.5 b) 33 c) 34 d) 35
- The simple interest on Rs. 3000 at 6% per annum for $1\frac{1}{2}$ years is:
a) 170 b) 270 c) 370 d) 470
- If $A = \{1, 3, 4\}$ and $B = \{x : x \in \mathbb{R} \text{ and } x^2 - 7x + 12 = 0\}$ then which of the following is true ?
a) $A=B$ b) $A \subset B$ c) $B \subset A$ d) A is equivalent to B
- In how many years will the population increase by 21% as compared to the base year at the compound annual growth rate of 10%?
a) 3 years b) 1 year c) 2 years d) Can't be determined

9. The buying rate and selling rate of 1 US dollar are Rs 139 and Rs 140 respectively. How much Nepali rupees will you need to exchange 1000 US dollars?
 a) Rs 139,000 b)Rs 140,000 c)Rs 139,500 d)Neither of these
10. What is the ratio of volume of a cylinder and cone having same radius and vertical height?
 a) 2:1 b)3:1 c)4:1 d) 3:2
11. A reflex angle is:
 a) More than 90 degrees b) Equal to 90 degrees
 c) More than 180 degrees d) Equal to 180 degrees
12. What is the LCM of the expressions $(a^3 - b^3)$, $(a^2 + ab + b^2)$ and $(a^4 + a^2b^2 + b^4)$?
 a) $(a^4 + a^2b^2 + b^4)$ b) $(a^4 + a^2b^2 + b^4)(a + b)$
 c) $(a^4 + a^2b^2 + b^4)(a - b)$ d) None
13. What is the value of $\left(\frac{243}{32}\right)^{-0.4}$?
 a) $\frac{4}{9}$ b) $-\frac{4}{9}$ c) $\frac{2}{3}$ d) $-\frac{2}{3}$
14. Which of the following statement is not true?
 a) Equal chords are equidistant from the center.
 b) Perpendicular bisector of the chord passes through the center of the circle.
 c) Angle in a semicircle are two right angles.
 d) Inscribed angle is half the central angle
15. What is the probability that you get two heads when a coin is tossed twice?
 a) $\frac{1}{2}$ b) $\frac{1}{3}$ c) $\frac{1}{4}$ d) 1
16. What is the inverse of the function $f(x) = \frac{3x-5}{2}$?
 a) $6x-5$ b) $2x+5/3$ c) $2x-5/3$ d) None
17. The next term of the sequence 5, 11, 23, 47, is:
 a) 92 b) 93 c) 94 d)95
18. The point on the line AB having points A(3,5) and B(5, -7) that divides the line in the ratio 1:2 internally is:
 a) $\left(\frac{11}{3}, 1\right)$ b) $\left(\frac{11}{3}, \frac{17}{3}\right)$ c) $\left(-\frac{11}{3}, 1\right)$ d) $\left(\frac{11}{3}, -1\right)$
19. Which of the inequalities contains the point (0,-2)?
 a) $2x - 3y \leq 5$ b) $2x - 3y \geq 5$
 c) $2x + 3y \leq 5$ d) $2x + 3y \geq 5$

20. Which of the formulae does not represent the scalar product of vectors?
- Work = Force \times Displacement
 - Pressure = $\frac{\text{Force}}{\text{Area}}$
 - Velocity = $\frac{\text{Displacement}}{\text{Time}}$
 - Power = Current \times Voltage
21. If $\sin A = \frac{1}{2}$, what is the value of $\sin 3A$
- 0
 - 1
 - $\frac{1}{2}$
 - None
22. If $A + B + C = 90^\circ$, what is the value of $\sin(B + C)$?
- $\cos A$
 - $-\cos A$
 - $\sin A$
 - $-\sin A$
23. A pair of lines is represented by an equation $mx^2 - 6xy + 9y^2$. If the lines are co-incident, what is the value of m ?
- 0
 - 1
 - 1
 - 4
24. What is the general equation of circle?
- $ax^2 + by^2 + 2gx + 2fy - c = 0$
 - $ax^2 + by^2 + 2gx + 2fy + c = 0$
 - $x^2 + y^2 + gx + fy + c = 0$
 - $x^2 + y^2 + 2gx + 2fy + c = 0$
25. Which of the following is the inverse of the matrix $\begin{bmatrix} 2 & 5 & 1 & 3 \end{bmatrix}$?
- $\begin{bmatrix} 2 & -5 & -1 & 3 \end{bmatrix}$
 - $\begin{bmatrix} 3 & -5 & -1 & 2 \end{bmatrix}$
 - $\begin{bmatrix} -2 & 1 & 5 & -3 \end{bmatrix}$
 - $\begin{bmatrix} 3 & -5 & 1 & 2 \end{bmatrix}$

PHYSICS [20 Marks]

26. Which one of the following physical quantity has the fundamental units; $\text{kg} \cdot \text{m}^2 \cdot \text{s}^{-2}$?
- Force
 - Pressure
 - Work done
 - Power
27. If a man can jump 1.5 m high on the surface of the earth then how much high can he jump on the lunar surface?
- 15 m
 - 9 m
 - 3 m
 - 1.5 m
28. What will be the change in the gravitational force between two bodies when the distance between their center is made halved?
- Force increases by two times
 - Force decreases by two times
 - Force increases by four times
 - Force decreases by four times.

29. The acceleration due to gravity on the surface of the earth is g . If mass and radius of the earth both are made halved then what is the new value of acceleration due to gravity on the earth surface?
 (a) g (b) $2g$ (c) $3g$ (d) $4g$
30. Two stones of mass 2 kg & 4 kg are dropped from top of a tower together then which one will reach the ground earlier ?
 (a) Stone having mass 2 kg. (b) Stone having mass 4 kg.
 (c) Both stone reach together. (d) They attract each other & do not fall.
31. On which law hydrometer is based on ?
 (a) Newton's Law (b) Pascal's Law
 (c) Archimedes' Law (d) Law of floatation
32. In the formula of liquid pressure; $P = dgh$, what the term 'd' indicates ?
 (a) Depth (b) Diameter (c) Distance (d) Density
33. If an object is immersed in liquid then which one of the following statement is correct about upthrust and weight of the body?
 (a) Upthrust acts in upward direction and weight of the body acts in downward direction.
 (b) Upthrust acts in downward direction and weight of the body acts in upward direction.
 (c) Upthrust and weight of the body both acts in downward direction.
 (d) Upthrust and weight of the body both acts in upward direction.
34. A ship going from sea to river has to displace more water to
 (a) change the buoyant force.
 (b) decrease the buoyant force.
 (c) maintain the same buoyant force.
 (d) increase the buoyant force.
35. The normal body temperature of a healthy person is 37°C . What is the corresponding value in Fahrenheit scale ?
 (a) 96°F (b) 96.8°F (c) 98°F (d) 98.6°F
36. What kind of thermometer has a thermistor at its end ?
 (a) Clinical thermometer (b) Infrared thermometer
 (c) Digital thermometer (d) Laboratory thermometer
37. What are the lower fixed points of the temperature in celsius, fahrenheit and kelvin scales respectively ?
 (a) 0°C , 0°F , 0°K (b) 0°C , 32°F , 273°K

- (c) 0°C , 180°F , 373°K (d) 0°C , 212°F , 373°K
38. How much heat energy is required to boil the water of 1500 gm in 10°C at sea level ?
(a) 63 KJ (b) 283.5 KJ (c) 567 KJ (d) 31.5 KJ
39. Where should an object be placed in front of convex lens to have magnification of convex lens less than 1 ?
(a) Beyond 2F (b) between F & 2F
(c) Exactly at F (d) between F & O
40. The refractive index of glycerine is 1.47, If speed of light in vacuum is $3 \times 10^8 \text{m/s}$ then what is the speed of light in glycerine ?
(a) $1.24 \times 10^8 \text{m/s}$ (b) $1.5 \times 10^8 \text{m/s}$
(c) $2.04 \times 10^8 \text{m/s}$ (d) $2.42 \times 10^8 \text{m/s}$
41. Absorption of which ray causes hotness ?
(a) I.R rays (b) U.V rays (c) X-rays (d) Gamma rays
42. What is the power of a concave lens having focal length of 10 cm?
(a) 0.1 D (b) -0.1 D (c) 10 D (d) -10 D
43. On which principle electromagnet is based on?
(a) Magnetic effect of current (b) Electromagnetic induction
(c) Motor effect of current (d) Mutual induction
44. What is the full form of LED ?
(a) Light emitting diode (b) Light emitting device
(c) Light emitting display (d) Light emitting drone
45. Which one of the following statement is incorrect about open universe ?
(a) It expands forever.
(b) Sum of triangle is more than 180° .
(c) Density of the universe is less than critical density.
(d) Its gravity is not strong.

CHEMISTRY [20 Marks]

46. What is an isotope?
a) Atoms with the same number of protons but different neutrons
b) Atoms with the same number of electrons but different protons
c) Atoms with the same number of neutrons but different protons
d) Atoms with the same mass but different charges

47. Which property distinguishes a suspension from a solution?
- Particles do not settle down
 - Particles are visible to the naked eye
 - It is transparent
 - It is homogeneous
48. Which of the following represents a polyatomic ion?
- Na^+
 - Cl^-
 - NH_4^+
 - H_2
49. How does the electronegativity of elements change as you move down a group?
- It increases due to larger atomic size
 - It decreases due to increased distance from the nucleus
 - It remains constant
 - It depends on the period
50. Which factor would most likely increase the rate of the reaction between hydrogen peroxide and light?
- Storing it in a dark container
 - Exposing it to sunlight
 - Decreasing the temperature
 - Reducing the concentration of hydrogen peroxide
51. What type of bond is found between carbon atoms in ethylene?
- Double covalent bond
 - Double coordinate covalent bond
 - Triple coordinate covalent bond
 - Triple covalent bond
52. Which compound is used to keep tobacco moist and prevent fruit decay?
- Methanol
 - Ethanol
 - Glycerol
 - Ethylene
53. Which chemical pesticide is banned in Nepal due to its environmental persistence?
- Malathion
 - DDT
 - Dimethoate
 - Cypermethrin
54. What is the chemical formula of baking soda?
- Na_2CO_3
 - NaHCO_3
 - CaCO_3
 - NaOH
55. Which metal is used to galvanize iron?
- Zinc
 - Copper
 - Silver
 - Aluminum

56. A student adds water to quick lime. Which observation is correct?
 a) The beaker becomes cold c) A gas is evolved
 b) Heat is produced d) No reaction occurs
57. When dilute sulfuric acid is poured on marble chips, which gas is released?
 a) H₂ b) O₂ c) CO₂ d) N₂
58. To test for hydrogen gas, we use:
 a) Glowing splint b) Burning splint
 c) Limewater d) Moist red litmus
59. When methane burns in air:
 a) Carbon and water are produced
 b) Carbon dioxide and water are produced
 c) Carbon monoxide is formed
 d) Ammonia is released
60. Which element is expected to show the least reactivity among the halogens?
 a) Fluorine b) Chlorine c) Bromine d) Iodine
61. Which of the following shows the most metallic character?
 a) Na b) Mg c) Al d) Si
62. Which of the following elements will form basic oxides?
 a) Cl b) Si c) Mg d) P
63. Which was a major limitation of Mendeleev's periodic table?
 a) No place for noble gases
 b) Inability to explain isotopes
 c) Incorrect order of atomic numbers
 d) All of the above
64. Which element violates the order in Mendeleev's table due to atomic mass mismatch?
 a) Ar and K b) Na and Mg c) H and He d) Zn and Cu
65. Which pair shows opposite trends across a period?
 a) Atomic size and electronegativity
 b) Ionization energy and electronegativity
 c) Atomic number and atomic size
 d) Valency and metallic character

BIOLOGY [20 Marks]

66. Which kingdom includes organisms with prokaryotic cells?
a) Protista b) Monera c) Fungi d) Plantae
67. What is a characteristic of organisms in the kingdom Protista?
a) They are multicellular b) They are unicellular
c) They lack a cell wall d) They are saprotrophic
68. What is the cell wall of algae made of?
a) Chitin b) Cellulose c) Peptidoglycan d) Silica
69. Which plants are classified as dioecious in Bryophyta?
a) Algae b) Moss c) Fern d) Pinus
70. What is the dominant phase in the life cycle of pteridophytes?
a) Gametophyte b) Sporophyte
c) Zygote d) Spore
71. Which of the following is a characteristic of gymnosperms?
a) They bear flowers b) They have naked seeds
c) They have fruits d) They lack vascular tissue
72. Why are ferns classified under Pteridophyta?
a) They have flowers
b) They have vascular tissue and no seeds
c) They lack chlorophyll
d) They have naked seeds
73. What is a gene?
a) A segment of RNA
b) A segment of DNA that codes for a specific trait
c) A type of chromosome
d) A protein molecule
74. In a cross between two heterozygous tall plants (Tt), what is the probability of getting a tall offspring?
a) 25% b) 50% c) 75% d) 100%
75. If a mutation occurs in a gamete, what is the likely outcome?
a) It affects only the parent
b) It may be passed to the offspring
c) It changes the phenotype immediately
d) It has no effect
76. Which phylum includes animals with stinging cells?
a) Coelenterata b) Platyhelminthes
c) Annelida d) Arthropoda

77. Which class of vertebrates has a two-chambered heart?
 a) Amphibia b) Reptilia c) Pisces d) Aves
78. Radial symmetry is found in:
 a) Starfish b) Earthworm c) Cockroach d) Snake
79. Why are bryophytes called amphibian plants?
 a) They live in water. b) They need water for fertilization
 c) They have vascular tissues. d) They reproduce by spores.
80. How does the presence of a notochord in chordates indicate evolutionary advancement?
 a) It is a primitive feature.
 b) It is replaced by a vertebral column in higher organisms.
 c) It is absent in vertebrates.
 d) It aids in photosynthesis.
81. What is the basic unit of classification in taxonomy?
 a) Kingdom b) Genus c) Species d) Phylum
82. What is the major difference between Monera and Protista?
 a) Cell wall structure b) Presence of nucleus
 c) Mode of reproduction d) Type of nutrition
83. A scientist discovers an organism with cell walls but no chlorophyll. Where is it likely classified?
 a) Animalia b) Plantae c) Fungi d) Protista
84. What is the full form of DNA?
 a) Deoxyribose Nucleic Acid b) Deoxyribonucleic Acid
 c) Double Helix Nucleic Acid d) Deoxygenated Nucleic Acid
85. What are the alternate forms of a gene called?
 a) Codons b) Traits c) Alleles d) Genotypes

ENGLISH [15 Marks]

86. Neither the teacher nor the students ____ prepared for the sudden quiz.
 a. was b. were c. is d. are
87. By the time the host arrived, the guests ____ dinner.
 a. have finished b. had finished
 c. finished d. will have finished
88. He ____ ride a bicycle when he was five.
 a. can b. could c. will d. should
89. If you ____ me earlier, I would have helped you.
 a. told b. had told c. will tell d. have told

Additionally, the online environment can become an echo chamber where people only see opinions similar to their own, limiting exposure to different perspectives. Whether as a force for community building or as a source of distraction, social media undeniably shapes modern communication. Understanding its influence is crucial for young adults navigating this landscape, encouraging them to use it responsibly and critically.

97. Which of the following best describes an example of social media’s positive impact, as mentioned in the passage?
- a. Encouraging people to donate to charity through a viral hashtag.
 - b. Causing anxiety from an overload of information.
 - c. Creating online echo chambers of similar opinions.
 - d. Helping spread misinformation quickly.
98. According to the passage, what can lead to anxiety and feelings of inadequacy for social media users?
- a. The need to organize online events.
 - b. The constant stream of information and comparison to others’ curated lives.
 - c. The lack of viral content in their feeds.
 - d. The global connections with distant friends.
99. What does the term “echo chamber” most nearly refer to in the context of this passage?
- a. A digital space that broadcasts sounds and music.
 - b. An online environment where only similar opinions are shared and reinforced.
 - c. A device that repeats the same message on social media.
 - d. A social media group that encourages hearing diverse views.
100. In paragraph 2, what is the meaning of the word “curated” as used in the phrase “others’ curated lives”?
- a. Carefully selected or presented
 - b. Random and disorganized
 - c. Untrue or fabricated
 - d. Hidden from public view

All the Best

Entrance Model Questions-2082 (6)
Faculty of Science

Time: 2 Hrs

Full Marks: 100

Pass Marks: 40

Choose the best option and cross-mark the right box available in the answer sheet.

MATHEMATICS [25 Marks]

1. If $154 \times 18 = 2772$, then $27.72 \div 1.8 = ?$
a) 1.54 b) 1.44 c) 15.4 d) 1.45
2. What number's 15% equals Rs. 60) ?
a) Rs 200 b) Rs 300 c) Rs 400 d) Rs 500
3. If the ratio of cost price and profit is 5:1, and the selling price is Rs 180. What is the cost price?
a.) Rs 200 b. Rs 150 c. Rs 160 d. None
4. The ratio of water and milk in a 30 liter mixture is 7:3. Find the quantity of water to be added to the mixture in order to make this ratio 6:1.
a) 30 b) 32 c) 33 d) 35
5. The average of 5 consecutive even numbers is 30. What is the largest number?
a) 32 b) 34 c) 36 d) 38
6. The sum of money at the rate of 5% per annum will yield an interest of Rs. 120 in 3 years is
a) 1200 b) 900 c) 1000 d) 800
7. How many proper subsets can be formed from a set with 3 elements?
a) 3 b. 6 c. 7 d. 8
8. The price of a computer is Rs 100(say). If it depreciates by 10% per annum compounded annually, what will be it's price after 2 years?
a) Rs 80 b. Rs 81 c. Rs 79 d.Rs 82

9. The buying rate and selling rate of 1 US dollar are Rs 139 and Rs 140 respectively. How much Nepali rupees can be exchanged with 1000 US dollars?
- a) Rs 139,000 c) Rs 140,000
b) Rs 139,500 d) Neither of these
10. What is the ratio of volume of a pyramid and cube having same base area and vertical height?
- a) 1:2 b. 1:3 c. 1:4 d. 3:4
11. An exterior angle of a triangle is 105° and its two interior opposite angles are equal. Each of these equal angles is:
- a) $37\frac{1}{2}^\circ$ b) $72\frac{1}{2}^\circ$ c) 75° d) $52\frac{1}{2}^\circ$
12. What is the HCF of the expressions $(a^3 - b^3)$, $(a^2 + ab + b^2)$ and $(a^4 + a^2b^2 + b^4)$?
- a) $(a^2 - ab + b^2)$
b) $(a^4 + a^2b^2 + b^4)$
c) $(a - b)$
d) $(a^2 + ab + b^2)$
13. What is the value of $\sqrt[4]{\sqrt{256}}$?
- a) 2 b) 4 c) 6 d) 8
14. Which of the following statement is true?
- a) Equal chords are equidistant from the circumference.
b) Perpendicular bisector of the chord passes through the center of the circle.
c) Angle at a center of a circle is two right angles.
d) Inscribed angle is double of the central angle.
15. What is the probability of getting a faced card or an Ace when a card is drawn from a well-shuffled deck of 52 cards?
- a) 1/13 b) 2/13 c) 3/13 d) 4/13
16. What is the necessary condition for a function to have it's inverse?
- a) One to one function
b) Many to one function
c) One to one and onto function
d) One to one and into function
17. Which term of the sequence $\frac{1}{8}, \frac{1}{4}, \frac{1}{2}, \dots \dots$ is 32?
- a) 7th term b. 8th term c. 10th term d. 9th term

18. Which of the given lines passes through the point $(-3,2)$?
- $2x = 3y$
 - $2x - 3y = 5$
 - $2x - 3y + 12 = 0$
 - None
19. The length of a rectangle is four times the breadth. If the minimum perimeter of the rectangle is 160 cm, then
- breadth > 16 cm
 - length < 20 cm
 - breadth ≥ 16 cm
 - length ≤ 20 cm
20. Two vectors $(3\vec{i} + 2\vec{j})$ and $(a\vec{i} - 3\vec{j})$ are orthogonal. What should be the value of a ?
- 2
 - 3
 - 2
 - 3
21. In a $90^\circ, 60^\circ, 30^\circ$ triangle, what is the ratio of length of perpendicular and hypotenuse with reference to the angle of 30° ?
- 1:2
 - 1:3
 - 2:1
 - 3:121.
22. Which of the following formulae is not correct?
- $\sin 2a = 2\sin a \cos a$
 - $\cos 2a = 1 + 2\sin^2 a$
 - $\sin(A+B) = \sin A \cos B + \cos A \sin B$
 - $\sin(A-B) = \sin A \cos B - \cos A \sin B$
23. What is the acute between the lines **having slopes 2 and -3**?
- 30°
 - 45°
 - 60°
 - 90°
24. What is the equation of the circle having center at $(1,0)$ and having radius 3 units?
- $x^2 + 2x + y^2 + 8 = 0$
 - $x^2 + 2x + y^2 - 8 = 0$
 - $x^2 - 2x + y^2 + 8 = 0$
 - $x^2 - 2x + y^2 - 8 = 0$
25. Identify is the transformation represented by the matrix $\begin{bmatrix} 1 & 0 \\ 0 & -1 \end{bmatrix}$
- Reflection by x- axis
 - Reflection by y-axis
 - Reflection by the line $y=x$
 - Reflection by the line $y=-x$

35. The normal body temperature of a healthy person is 37°C . What is the corresponding value in kelvin scale ?
(a) 207 K (b) 210 K (c) 307 K (d) 310 K
36. Which type of thermometer has both mercury & alcohol as thermometric liquid?
(a) Clinical thermometer (b) Infrared thermometer
(c) Digital thermometer (d) Maximum-Minimum thermometer
37. What are the upper fixed points of the temperature in celsius, fahrenheit and kelvin scales respectively ?
(a) 100°C , 212°F , 373°K (b) 180°C , 312°F , 273°K
(c) 100°C , 212°F , 273°K (d) 180°C , 312°F , 373°K
38. Which instrument is used to measure amount of heat energy ?
(a) Thermometer (b) Barometer
(c) Calorimeter (d) Seismometer
39. Where should an object be placed in front of convex lens to have magnification equals to 1?
(a) At $2F$ (b) between F & $2F$
(c) Exactly at F (d) between F & O
40. The refractive index of glass is 1.5, If speed of light in vacuum is $3 \times 10^8 \text{m/s}$ then what is the speed of light in glass ?
(a) $1.24 \times 10^8 \text{m/s}$ (b) $1.5 \times 10^8 \text{m/s}$
(c) $2 \times 10^8 \text{m/s}$ (d) $2.42 \times 10^8 \text{m/s}$
41. Which rays are present below visible light ?
(a) I.R rays (b) U.V rays
(c) X-rays (d) Gamma rays
42. What is the focal length of a concave lens having power 10 D?
(a) 0.1 Cm (b) -0.1 Cm (c) 10 Cm (d) -10 Cm
43. On which principle generator is based on?
(a) Magnetic effect of current
(b) Electromagnetic induction
(c) Motor effect of current
(d) Mutual induction
44. What is the full form of C.F.L ?
(a) Common Fluorescent Lamp (b) Crystal Fluid Lamp
(c) Compact Fluorescent Lamp (d) Cathode Fluid Lamp

- d) Atoms are rearranged, not destroyed
55. Why do ionic compounds conduct electricity in molten state?
 a) Free protons present b) Electrons are delocalized
 c) Ions are mobile d) Covalent bonds break
56. A hydrocarbon with molecular formula C_4H_6 is likely to be:
 a) Alkane b) Alkyne c) Alkene d) Alcohol
57. Which pair shows the same molecular formula but different structural formula?
 a) Butane and Isobutane b) Ethane and Ethene
 c) Ethyne and Propene d) Methane and Ethane
58. The main use of acetylene is in:
 a) Welding b) Fuel for cooking
 c) Solvent d) Perfume making
59. The mass of an electron is approximately:
 a) 1 amu b) $1/1836$ of a proton
 c) Equal to a neutron d) Negligible compared to neutron
60. In metallic bonding, the valence electrons are:
 a) Shared between two atoms b) Transferred to non-metals
 c) Delocalized and move freely d) Lost permanently
61. Ammonia is prepared in the lab by heating:
 a) Ammonium nitrate b) Urea and water
 c) Ammonia and water d) Ammonium chloride and slaked lime
62. Which pair of gases is collected by downward displacement of water?
 a) CO_2 and NH_3 b) O_2 and H_2
 c) NH_3 and CO_2 d) N_2 and NH_3
63. Which one is not used in the lab preparation of oxygen?
 a) Potassium chlorate b) Manganese dioxide
 c) Hydrogen peroxide d) Sodium chloride
64. Which element is expected to form the most acidic oxide?
 a) Na b) Mg c) Cl d) Al
65. A metal reacts vigorously with water and forms a strong alkaline solution. It is likely from:
 a) Group 2 b) Group 1 c) Group 13 d) Group 17

74. Which characteristic will help you differentiate between amphibians and reptiles?
- Laying of eggs
 - Cold-blooded nature
 - Presence of moist skin
 - Four-legged body
75. Where would you place a new organism that shows traits of both plants and animals?
- Fungi
 - Animalia
 - Protista
 - Plantae
76. What kingdom would an organism belong to if it is autotrophic, eukaryotic, and has vascular tissue?
- Monera
 - Plantae
 - Protista
 - Fungi
77. A biologist finds an organism with pseudopodia and no chloroplast. Which kingdom is most appropriate?
- Protista
 - Monera
 - Animalia
 - Plantae
78. Why is Mendel's work significant?
- He used statistical methods
 - He discovered DNA
 - He proposed evolution
 - He described mutation
79. Which of the following best explains homozygous condition?
- Two different alleles
 - One dominant and one recessive gene
 - Identical alleles
 - No alleles
80. Why are X-linked traits more common in males?
- Males have more chromosomes
 - Males inherit only one X chromosome
 - Females suppress recessive traits
 - Y chromosome promotes all traits
81. If phloem is damaged in a plant, what is affected?
- Water transport
 - Food transport
 - Gas exchanged
 - Photosynthesis
82. A blockage in a coronary artery can lead to:
- Brain damage
 - Heart attack
 - Kidney failure
 - Lung infection
83. Why are arteries thick-walled and elastic?
- To store oxygen
 - To withstand high pressure
 - To aid digestion
 - To prevent backflow

84. How do valves in veins help circulation?
 a. Increase pressure b. Prevent blood loss
 c. Prevent backflow d. Transport oxygen
85. Which brain part is indirectly involved in reflex actions like coughing or sneezing?
 a. Cerebrum b. Medulla oblongata
 c. Cerebellum d. Spinal cord

ENGLISH [15 Marks]

86. Each of the players ____ responsible for his own equipment.
 a. are b. were c. is d. have
87. She said she ____ the book twice already.
 a. read b. has read c. had read d. reads
88. You ____ see a doctor if the pain continues.
 a. might b. should c. can d. would
89. If he studies hard, he ____ pass the exam.
 a. will b. would c. shall d. had
90. I look forward to ____ from you soon.
 a. hear b. heard c. hearing d. hears
91. The manager was known for his astute decision-making. 'Astute' most nearly means:
 a. foolish b. clever c. slow d. stubborn
92. Which word is opposite in meaning to 'optimistic'?
 a. cheerful b. gloomy c. positive d. hopeful
93. His comments were so ____ that no one took them seriously.
 a. sarcastic b. profound c. logical d. witty
94. She always turns a blind eye to problems, meaning she:
 a. ignores them b. solves them
 c. understands them d. highlights them
95. 10. The witness gave a ____ account of the incident.
 a. vague b. vivid c. biased d. dull

Read the paragraphs and answer the following questions

Many people assume that success is the result of natural talent, but research shows that effort and perseverance play a bigger role. Psychologist Angela Duckworth coined the term 'grit' to describe a person's passion and sustained effort toward long-term goals. Grit

involves maintaining motivation even when faced with challenges and failures.

Studies reveal that students with high levels of grit perform better academically and are more likely to achieve their goals. Unlike intelligence, grit can be developed over time through experience, encouragement, and self-discipline. Cultivating grit means not giving up after a setback and continuing to work diligently despite difficulties.

96. What is 'grit' as described in the passage?
- a. A type of intelligence
 - b. Passion and perseverance for long-term goals
 - c. The ability to memorize quickly
 - d. Talent for academics
97. According to the passage, what contributes most to success?
- a. Natural talent
 - b. Family background
 - c. Hard work and determination
 - d. Luck
98. What does the passage suggest about grit?
- a. It is fixed and cannot be changed
 - b. It is a natural talent
 - c. It can be developed over time
 - d. It is only useful for students
99. What is a synonym for 'setback' as used in the passage?
- a. Failure
 - b. Opportunity
 - c. Breakthrough
 - d. Achievement
100. What is the main idea of the passage?
- a. Grit is more important than natural talent in achieving success
 - b. Intelligence determines all success
 - c. Success is impossible without talent
 - d. Grit is a genetic trait

All the Best

Entrance Model Questions-2082 (7)
Faculty of Science

Time: 2 Hrs Full Marks: 100

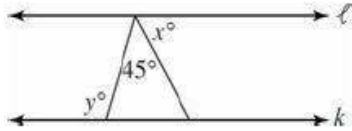
Pass Marks: 40

Choose the best option and cross-mark the right box available in the answer sheet.

MATHEMATICS [25 Marks]

1. Out of 120 employees in a company, one-third are female. $\frac{1}{5}$ of the females are married and half of the married females have a baby. How many married females have babies?
a) 4 b) 5 c) 3 d) 6
2. If an item is sold at Rs 960 after 4% loss, what should be the selling price with 20% profit?
a) Rs 1180 b) Rs 1200 c) Rs 1320 d) Rs 1080
3. The ratio of current age of father and son is 5:2. After 5 years, the ratio of their age will be 11:5. What is the present age of son?
a) 15 years b) 18 years c) 20 years d) 25 years
4. If 6 lemons are bought for Rs 1, how many lemons should be sold for Rs 1 to gain a profit of 20%?
a) 4 b) 5 c) 7 d) 8
5. What is the average of first 25 odd numbers?
a) 21 b) 23 c) 25 d) 26
6. The time and rate of simple interest of Rs 2000 are same. If Rs 980 is paid as interest, find the rate of interest.
a) 6% b) 7% c) 8% d) 9%
7. 40 people like coffee while 60 people like tea only. 20 people like both drinks while 10 people prefer none. How many people like at most one drink?
a) 100 b) 90 c) 110 d) 130

8. The ratio of initial price of car and its price after 2 years is 16:9. Calculate the rate of depreciation?
 a) 10% b) 15% c) 25% d) 30%
9. The buying rate and selling rate of 1 US dollar are Rs 139 and Rs 140 respectively. How much Nepali rupees can be exchanged with 1000 US dollars?
 a) Rs 139,000 b) Rs 140,000 c) Rs 139,500 d) Rs 13,90,000
10. The perimeter of base of a pyramid is 40 cm and vertical height is 12 cm. What is the area of triangular faces of pyramid?
 a) 160 sq. cm b) 260 sq. cm
 c) 360 sq. cm d) 480 sq. cm
11. In the figure below, lines l , k and are parallel. What is the value of $y - x$?



- a) 45 b) 60 c) 90 d) 135
12. At 3:00 A.M. the temperature was 13° below zero. By noon it had risen to 32° . What was the average hourly increase in temperature?
 a) $19/9$ degrees b) $19/6$ degrees
 c) 5 degrees d) 7.5 degrees
13. If $(7^a)(7^b) = \frac{7^c}{7^d}$, what is d in terms of a , b , and c ?
 a) $\frac{c}{ab}$ b) $c - a - b$
 c) $a + b - c$ d) $c - ab$
14. If the radius of a circle is increased by 10%, by what percent will it's area increase?
 a) 10% b) 20% c) $10\pi\%$ d) 21%
15. A dice is rolled and a card is drawn from a deck of 52 cards. What is the probability of getting 3 on a dice and a red card?
 a) $1/8$ b) $1/12$ c) $2/3$ d) $1/3$
16. Which of the following composite functions is an identity function?
 a) $f \circ f^{-1}(x)$ b) $(f \circ f)^{-1}(x)$ c) $f \circ f(x)$ d) $f \circ f\left(\frac{1}{x}\right)$

17. Which of the following does not exhibit the property of geometric sequence?
- Population growth
 - Compound amount for successive years
 - Radioactive decay
 - Filling water from the tap
18. By what ratio does the centroid divide the median drawn from the vertex to the base of the triangle?
- 2:1
 - 1:2
 - 1:3
 - 3:1
19. If the half plane with the boundary $2x-3y=6$ contains origin, how is the inequality represented?
- $2x - 3y \leq -6$
 - $2x - 3y \geq -6$
 - $2x - 3y \leq 6$
 - $2x - 3y \geq 6$
20. If the two vectors (\mathbf{a}, m) and (\mathbf{p}, m) are perpendicular to each other, which of the following is true?
- $ap - m^2 = 0$
 - $am + pm = 0$
 - $ap + m^2 = 0$
 - $am - pm = 0$
21. If $\mathbf{1} + \cos 2A = \mathbf{0}$, what is the value of $\sin \frac{2A}{3}$?
- 0
 - $\frac{\sqrt{3}}{2}$
 - $-\frac{1}{2}$
 - None
22. What is the value of $\sin 1650^\circ$?
- $\frac{1}{2}$
 - $\frac{1}{\sqrt{2}}$
 - $-\frac{1}{2}$
 - $-\frac{1}{\sqrt{2}}$
23. The single equation of pair of lines passing through origin and perpendicular to the lines represented by $\mathbf{ax^2 + 2hxy + by^2 = 0}$ is:
- $ax^2 + 2hxy + by^2 = 0$
 - $ax^2 + 2hxy - by^2 = 0$
 - $ax^2 - 2hxy + by^2 = 0$
 - $bx^2 - 2hxy + ay^2 = 0$
24. The radius of a circle is 5 units and touches the both-axis. What should be the center of the circle?
- (5,2)
 - (-5,2)
 - (5,5)
 - (2,5)
25. If the matrix $\begin{bmatrix} 1 & 3 \\ x^2 & 27 \end{bmatrix}$ is a singular matrix, what is the value of x?
- 3
 - 3
 - Neither of the two
 - Both a and b

PHYSICS [20 Marks]

26. Which one of the following physical quantity has the fundamental units; $\text{kg}\cdot\text{m}^2\cdot\text{s}^{-3}$?
(a) Force (b) Pressure (c) Work done (d) Power
27. If a man can lift 100 Kg mass on the surface of the earth then how much mass can he lift on the lunar surface ?
(a) 100Kg (b) 163 Kg (c) 600 Kg (d) 980 Kg
28. What will be the change in the gravitational force between two bodies when distance between their center is made one-fourth ?
(a) Force increases by four times
(b) Force decreases by four times .
(c) Force increases by sixteen times .
(d) Force decreases by sixteen times .
29. What is the correct S.I unit of universal Gravitational constant (G)?
(a) $\frac{N \cdot Kg}{m^2}$ (b) $\frac{N \cdot m^2}{Kg^2}$ (c) $\frac{N \cdot Kg^2}{m^2}$ (d) $\frac{N \cdot m}{s}$
30. If a coin & feather are dropped from same height on the lunar surface together then which one will reach the ground earlier ?
(a) Coin (b) Both coin & feather reach together.
(c) Feather (d) They attract each other & do not fall.
31. A ship floats on water because of _____ .
(a) the ship is made of light weight materials.
(b) the ship is hollow.
(c) the weight of the ship is less than buoyant force.
(d) the ship is supported by seafloor.
32. Which one of the following factor does not affect on the value of pressure exerted by liquid ?
(a) Diameter of vessel (b) Height of liquid
(c) Acceleration due to gravity (d) Density of liquid
33. Why ship can carry more load in sea water than in river water?
(a) Temperature of sea water is more than that of river water.
(b) Temperature of sea water is less than that of river water
(c) Density of sea water is more than that of river water.
(d) Density of sea water is less than that of river water.
34. Ram is trying to lift a load of 500 Newton by placing it on small piston of a hydraulic machine. Which one of the following suggestion helps ram to lift the load easily ?

- (a) Apply large amount of effort .
 - (b) Keep the load in large piston .
 - (c) Fill the hydraulic machine completely by liquid .
 - (d) Make the machine airtight .
35. The normal human body temperature of a healthy person in celcius scale is
- (a) 30°C (b) 37°C (c) 90°C (d) 98.6°C
36. Which kind of thermometer measures temperature of a body without coming in contact with the body ?
- (a) Clinical thermometer (b) Infrared thermometer
 - (c) Digital thermometer (d) Laboratory thermometer
37. Which of the following is an effect of high specific heat capacity ?
- (a) Objects heat up quickly.
 - (b) Objects cool down quickly.
 - (c) Objects do not absorb heat.
 - (d) Objects retain heat for longer periods.
38. What is the S.I unit of heat energy ?
- (a) Celcius (b) Kelvin (c) Joule (d) Calorine
39. If an object is placed between F & O in front of a convex lens then what is the nature of the image?
- (a) Real, Inverted & Magnified
 - (b) Real, Inverted & Equal
 - (c) Virtual, Erect & Magnified
 - (d) Virtual, Erect & Diminished
40. During the process of dispersion of light through a prism, which colour is seen at the bottom?
- (a) Indigo (b) Violet (c) Blue (d) Red
41. If the velocity of light in glass medium is 2×10^8 m/s then what is the value of refractive index of glass ?
- (a) 1 (b) 1.33 (c) 1.45 (d) 1.5
42. What is near point of normal human eye ?
- (a) 2.5 m (b) 25 m (c) 2.5 cm (d) 25 cm
43. Which device is used to convert electrical energy into mechanical energy ?
- (a) Electric motor (b) Generator
 - (c) Inverter (d) Transformer
44. What is the full form of E.M.F ?

- (a) Electro-magnetic field
 - (b) Electro-magnetic force
 - (c) Electro-motive field
 - (d) Electro-motive force
45. Which one of the following statement is incorrect about closed universe ?
- (a) It expands forever.
 - (b) Sum of triangle is less than 180° .
 - (c) Density of the universe is more than critical density.
 - (d) Its gravity is strong.

CHEMISTRY [20 Marks]

46. What is a substance that cannot be broken down into simpler substances by chemical means called?
- a) Mixture
 - b) Element
 - c) Compound
 - d) Solution
47. What is the technique used to separate two miscible liquids with different boiling points?
- a) Fractional distillation
 - b) Chromatography
 - c) Centrifugation
 - d) Separating funnel
48. What is the chemical formula of Ammonium bicarbonate?
- a) NaHCO_3
 - b) NH_4CO_3
 - c) NH_4HCO_3
 - d) NH_4HCO_3
49. Which of these metals would not displace hydrogen from an acid?
- a) Zinc
 - b) Copper
 - c) Magnesium
 - d) Calcium
50. Which type of bonding is responsible for the hardness of diamond?
- a) Metallic
 - b) Ionic
 - c) Covalent
 - d) Hydrogen
51. A student observes that a metal bends easily without breaking. This shows the metal is:
- a) Ductile
 - b) Elastic
 - c) Brittle
 - d) Malleable
52. Breaking bonds requires:
- a) Release of energy
 - b) No energy change
 - c) Absorption of energy
 - d) Catalyst presence
53. What is the purpose of activation energy in a chemical reaction?
- a) To cool down the system
 - b) To prevent side reactions

- c) To initiate the reaction d) To absorb product heat
54. Which metal reacts with cold water?
 a) Zinc b) Sodium c) Copper d) Silver
55. Which gas is released when acids react with metals?
 a) Oxygen b) Hydrogen
 c) Nitrogen d) Carbon dioxide
56. What happens in oxidation?
 a) Electrons are gained b) Electrons are lost
 c) Protons are shared d) Neutrons are lost
57. What is the pH of a salt formed from a strong acid and strong base?
 a) Less than 7 b) More than 7
 c) Around 7 d) Exactly 1
58. Which of the following is a basic salt?
 a) Sodium chloride b) Ammonium sulfate
 c) Sodium carbonate d) Potassium nitrate
59. Which of the following does not affect the rate of reaction?
 a) Surface area b) Temperature
 c) Mass of beaker d) Concentration
60. A catalyst affects a reaction by:
 a) Increasing activation energy
 b) Providing more energy
 c) Lowering activation energy
 d) Raising pH
61. What is the term for the minimum energy needed for a reaction to occur?
 a) Bond energy b) Reaction threshold
 c) Activation energy d) Equilibrium constant
62. What is the shape of an s orbital?
 a) Dumbbell b) Spherical c) Cloverleaf d) Linear
63. Which principle states that electrons occupy the lowest energy orbital available?
 a) Pauli Exclusion Principle b) Hund's Rule
 c) Aufbau Principle d) Heisenberg Uncertainty Principle
64. Which of the following orbitals can be found in the second energy level?
 a) 1s b) 2p c) 3d d) 4f
65. Which ion has the same electron configuration as neon?

- a) Na^+ b) F^-
c) O^{2-} d) All of the above

BIOLOGY [20 Marks]

66. Mitochondria is known as the:
a) Brain of the cell b) Powerhouse of the cell
c) Storage house d) Control center Ans: B
67. Which of the following determines the sex of a child?
a) X chromosome of father b) Y chromosome of father
c) X chromosome of mother d) Y chromosome of mother
68. Example of renewable resource is:
a) Coal b) Petroleum c) Wind d) Natural gas
69. Scientific name of human being is:
a) *Homo erectus* b) *Homo sapiens*
c) *Homo habilis* d) *Homo neanderthalensis*
70. The lifespan of a drone bee is:
a) 2–3 days b) Few weeks
c) Several years d) 5 months
71. Which part of the human digestive system absorbs nutrients?
a) Stomach b) Liver
c) Small intestine d) Large intestine
72. Which of the following is an organ of the circulatory system?
a) Lungs b) Brain c) Heart d) Kidney
73. The branch of science dealing with classification is:
a) Anatomy b) Ecology c) Taxonomy d) Cytology
74. Which of the following is a decomposer?
a) Cow b) Bacteria c) Tree d) Tiger
75. The life cycle of honeybee is an example of:
a) Incomplete metamorphosis b) Asexual reproduction
c) Complete metamorphosis d) Budding
76. Which organ in the human body produces insulin?
a) liver b) Pancreas c) Kidney d) stomach
77. Which of the following is recessive trait?
a) Curly hair b) Tongue rolling

- c) Attached earlobes d) Dimples
78. Chromosome is made up of protein & _____.
- a) Carbohydrate b) Lipid
c) Gene d) Hormone
79. Which one of the following nitrogen base is not found in R.N.A.?
- a) Adenine b) Thymine c) Cytosine d) Guanine
80. Human blood consists of ____ plasma & ____ blood corpuscles.
- a) 40% & 60% b) 45% & 55%
c) 50% & 50% d) 55% & 45%
81. Which one of the following is responsible for clotting of blood?
- a) Plasma b) Platelets c) W.B.C. d) R.B.C.
82. Which chamber of human heart collects pure (oxygenated) blood?
- a) Left auricle b) Left Ventricle
c) Right auricle d) Right Ventricle
83. Blood pressure of normal human body is _____.
- a) 100 / 80 mm of Hg b) 120/ 80 mm of Hg
c) 120/100 mm of Hg d) 140/100 mm of Hg
84. Which one of the following gas causes air pollution?
- a) CO₂ b) SO₂ c) NO₂ d) All of above
85. Which one of the following not the endangered animal in Nepal?
- a) Red panda b) Gharial
c) One horned rhino d) Bald eagle

ENGLISH [15 Marks]

86. The news _____ quite shocking.
- a. are b. were c. is d. have
87. I _____ him since he moved to London.
- a. haven't seen b. didn't see
c. don't see d. wasn't seeing
88. We _____ go to the beach if the weather improves.
- a. must b. would c. might d. need
89. If I _____ you, I would apologize.
- a. am b. were c. was d. be
90. She is interested in _____ a new language.
- a. learn b. to learn c. learned d. learning
91. Which word means the same as 'elated' ?

- a. depressed b. excited c. bored d. calm
92. The instructions were so ____ that no one understood them.
a. clear b. ambiguous c. precise d. direct
93. What is the antonym of 'generous'?
a. kind b. selfish c. thoughtful d. open-handed
94. He kept his cool during the debate, meaning he:
a. lost control b. shouted angrily
c. remained calm c. panicked
95. Her decision was based on ____ judgment.
a. rash a. wise c. narrow d. hesitant

Read the paragraph and answer the following questions

Books have always been a valuable source of knowledge and imagination. Unlike digital screens, reading a physical book offers a tactile and immersive experience. Research shows that people often retain information better when they read from print rather than a screen. Additionally, reading enhances vocabulary, focus, and critical thinking. Despite the rise of digital media, many still prefer printed books for leisure reading. They provide a break from screen time and help reduce eye strain. While e-books are convenient, the traditional book continues to have a unique charm and enduring value.

96. According to the passage, what is one benefit of reading physical books?
a. They are cheaper than e-books
b. They improve typing speed
c. They help retain information better
d. They are easier to edit
97. What does the passage suggest about digital media?
a. It is always better than books
b. It has replaced physical books
c. It causes people to read more
d. It can lead to eye strain
98. What is the tone of the passage?
a. Critical of books
b. Neutral
c. Supportive of reading
d. Uninterested
99. The phrase 'tactile and immersive' most nearly means:
a. Noisy and bright

- b. Boring and slow
 - c. Touch-based and deeply engaging
 - d. Visual and fast-paced
100. What is the main idea of the passage?
- a. Digital reading is better than print reading
 - b. Printed books remain valuable and beneficial despite digital alternatives
 - c. E-books have replaced all printed books
 - d. People no longer enjoy reading

All the Best

Entrance Model Questions-2082 (8)
Faculty of Science

Time: 2 hrs

Full Marks: 100

Pass Marks: 40

Choose the best option and cross-mark the right box available in the answer sheet.

MATHEMATICS [25 Marks]

1. A man saves Rs. 27000 monthly which is three-fifth of his total income.
What amount does he saves?
a) Rs. 15000 b) Rs. 18000 c) Rs. 25000 d) Rs. 27000
2. 40% of the greater number is equal to 60% of the smaller number. If their sum is 50, what is the smaller number?
a) 30 b) 16 c) 20 d) 40
3. If $a:b = 5:7$, and $c:d = 2a:3b$, then $ad:bc$ is?
a) 1:3 b) 2:3 c) 3:2 d) 4:5
4. If Ram sold an article for Rs. 1243 including 13% VAT, he had 10% Profit. What is his profit amount?
a) Rs. 100 b) Rs. 130 c) Rs. 90 d) Rs. 60
5. The average age of 5 sisters is 10 years. If the age of 4 sisters are 6, 9, 12, 13, what is the age of fifth one?
a) 11 b) 14 c) 10 d) 7
6. If Akshay wants to double his investment at the rate of 10% p.a. annual compound interest, for how many years at least he needs to invest his money?
a) 6 b) 7 c) 8 d) 9
7. In an election of a local level, 2500 votes were secured by candidate A, 3000 votes were secured by candidate B and 50 votes were invalid. If there were 6000 names in voters' list, how many people did not cast the vote?
a) 500 b) 450 c) 400 d) 350

19. The highest value of $\vec{a} \cdot \vec{b}$ can be obtained while angle between vectors \vec{a} and \vec{b} is
 a) 0° b) 90° c) 180° d) 45°
20. If $\sin A = \frac{1}{2}$, then what is the value of $\cos 2A$ if A is acute angle?
 a) $\frac{1}{2}$ b) $\frac{\sqrt{3}}{2}$ c) $-\frac{1}{2}$ d) None
21. What is the value of $\sin(270^\circ - 2A)$?
 a) $\sin 2A$ b) $-\sin 2A$ c) $-\cos 2A$ d) $\cos 2A$
22. The pair of lines represented by $ax^2 + 2hxy + by^2 = 0$ represent perpendicular lines if:
 a) $a - b = 0$ b) $h^2 + ab = 0$ c) $a + b = 0$ d) $h^2 - ab = 0$
23. A circle is represented by the equation $3x^2 + 3y^2 - 12x + 18y - 3 = 0$, its center is:
 a) $(-2, 3)$ b) $(2, 3)$ c) $(-2, -3)$ d) $(2, -3)$
24. The combined transformation of reflection through x axis followed by reflection through y axis is equivalent to which of the following transformations?
 a) Reflection through line $x + y = 0$
 b) Reflection through line $x - y = 0$
 c) Rotation $+90^\circ$ about origin
 d) Rotation 180° about origin
25. In interval notation, $3 \leq x < 5$, $x \in \mathbf{R}$ can be written as:
 a) $[3, 5]$ b) $(3, 5]$ c) $[3, 5)$ d) $(3, 5)$

PHYSICS [20 Marks]

26. Which one of the following is not a derived unit ?
 a). Ohm (b) Watt (c) Mole (d) Volt
27. What is the weight of a body having 50 kg mass on the moon?
 (a) 8.35 N (b) 83.5 N (c) 835 (d) 8355 N
28. What will be the change in the gravitational force between two bodies when they are taken from the earth to the lunar surface?
 (a) Force increases by six times . (b) Force decreases by six times
 . (c) Force remains same . (d) Force becomes zero .
29. A stone is dropped from top of a tower & it struck the ground after time 2 seconds then what is the height of the tower ?
 (a) 5 meter (b) 10 meter (c) 20 meter (d) 40 meter

30. What would be the weight of a body of mass 20 kg at the distance 12000 km from center of the earth of mass 6×10^{24} kg?
 (a) 25 N (b) 35 N (c) 45 N (d) 55 N
31. A life jacket works based on the principle of _____
 (a) Newton's law (b) Bernoulli's principle
 (c) Pascal's law (d) Archimedes' law
32. Upthrust is the force experienced by an object immersed in a liquid ?
 (a) downward (b) gravitational
 (c) upward (d) horizontal
33. Why do objects float more easily in sea water than in river water ?
 (a) Temperature of sea water is more than that of river water.
 (b) Temperature of sea water is less than that of river water.
 (c) Density of sea water is more than that of river water.
 (d) Density of sea water is less than that of river water.
34. In a hydraulic machine, area of big piston is 25 cm^2 & that of small piston is 4 cm^2 then how much effort should be applied in the small piston to overcome the load of 5000N in big piston ?
 (a) 600 N (b) 800 N (c) 1000 N (d) 1200 N
35. Boiling point of water in kelvin scale is.....
 (a) 300 K (b) 312 K (c) 332 K (d) 373 K
36. When a hot body is kept in contact with the cold body then the hot body loses heat to the cold body until they have same
 (a) mass (b) specific heat capacity
 (c) temperature (d) state
37. Which of the following is an effect of low specific heat capacity?
 (a) Objects heat up quickly.
 (b) Objects cool down slowly.
 (c) Objects do not absorb heat.
 (d) Objects retain heat for longer periods.
38. What is the S.I unit temperature ?
 (a) Celcius (b) Kelvin (c) Joule (d) Calorine
39. What type of image is formed when an object is placed at 30 Cm in front of a convex lens with the value of $2F$ as 80 Cm ?
 (a) Real and magnified (b) Real and diminished
 (c) Virtual and magnified (d) Virtual and diminished

40. During the process of dispersion of light through a prism, which colour is seen at the top?
 (a) Indigo (b) Violet (c) Blue (d) Red
41. If the velocity of light in water medium is 2.2×10^8 m/s then what is the value of refractive index of water ?
 (a) 1 (b) 1.33 (c) 1.45 (d) 1.5
42. Power of a lens is calculated by taking ... of its focal length (f) when it is in meter.
 (a) double (b) half (c) square root (d) reciprocal
43. Which device is based on the principle of mutual induction ?
 (a) Electric motor (b) Generator
 (c) Inverter (d) Transformer
44. What is the unit of electricity consumption ?
 (a) Watt hour (b) Kilowatt hour
 (c) Watt second (d) Kilowatt second
45. What is the meaning of 'd' in Hubble's principle $V = H.d$?
 (a) Density of galaxies . (b) Distance between galaxies .
 (c) Diameter of galaxies . (d) Depth of galaxies .

CHEMISTRY [20 Marks]

46. Which element is placed in group 1 and period 2?
 a) Hydrogen b) Lithium c) Sodium d) Potassium
47. The reaction: $Zn + HCl \rightarrow ZnCl_2 + H_2$ is a:
 a) Combination reaction b) Displacement reaction
 c) Decomposition reaction d) Neutralization
48. Which of the following is a decomposition reaction?
 a) $CaCO_3 \rightarrow CaO + CO_2$ b) $H_2 + O_2 \rightarrow H_2O$
 c) $Na + Cl_2 \rightarrow NaCl$ d) $Cu + AgNO_3 \rightarrow Ag + Cu(NO_3)_2$
49. Which gas is collected over water in the lab preparation of hydrogen?
 a) Oxygen b) Hydrogen c) Chlorine d) Carbon dioxide
50. Which metal is the most malleable?
 a) Iron b) Gold c) Zinc d) Copper
51. Which gas is used to make fertilizers?
 a) Oxygen b) Ammonia c) Hydrogen d) Carbon dioxide
52. Which compound is the main component of natural gas?
 a) Ethane b) Methane c) Propane d) Butane

53. Acetylene is also known as:
 a) Ethane b) Methane c) Ethyne d) Butene
54. Which compound is used as an antacid?
 a) H_2SO_4 b) NaOH c) $\text{Mg}(\text{OH})_2$ d) NaCl
55. Which chemical is used in making soaps?
 a) Sodium chloride b) Potassium hydroxide
 c) Calcium carbonate d) Sulphur dioxide
56. In which block of modern periodic table, inert gas are kept?
 a) S – block b) P – block c) d – block d) f - block
57. In modern periodic table, alkaline earth metals are kept in the group _____.
 a) I 'A' b) II 'A' c) VII 'A' d) VIII 'A'
58. Which one of the following is the most reactive non-metal?
 a) Fluorine b) Chlorine c) Bromine d) Iodine
59. Which chemical reaction is also known as neutralization reaction? A)
 a) Acid - base reaction b) Combination reaction
 c) Decomposition reaction d) Displacement reaction
60. Which one of the following factor is required in the reaction, $\text{N}_2 + 3\text{H}_2 \rightarrow 2\text{NH}_3$?
 a) Heat b) Pressure c) Catalyst d) All of above
61. When Ammonia gas is passed into the water containing phenolphthalein then it turns into
 a) red b) blue c) pink d) yellow
62. Which one of the following compounds is used as antacid?
 a) NaOH b) $\text{Ca}(\text{OH})_2$ c) $\text{NH}_4(\text{OH})$ d) $\text{Mg}(\text{OH})_2$
63. How many electrons can be accommodated in d-subshell?
 a) 2 b) 6 c) 10 d) 14
64. Which gas is not considered as greenhouse gas?
 a) Methane b) Carbon dioxide
 c) Oxygen d) Nitrous oxide
65. Which one of the following is not a coinage metal?
 a) Aluminium b) Copper c) Gold d) Silver

BIOLOGY [20 Marks]

66. In which group does sodium citrate lie?
a) Soap b) Detergent c) Insecticide d) Food preservative
67. Identify the group of insecticides?
a) DDT, sodium chloride, Aldrin
b) Dieldrin, DDT, methoxychloride
c) Potassium chloride, aldrin, malathion
d) Potassium chloride, aldrin, BHC
68. Which bee contains only 16 chromosomes?
a) Queen bee b) Worker bee
c) Drone bee d) Queen and worker bee
69. Which bee is formed when the larva is fed royal jelly continuously?
a) Queen b) Drone c) Workers d) Queen and worker bee
70. Where does the queen bee store the sperm received from the drone bee after the nuptial flight?
a) Pollen sac b) Ovary c) Sperm sac d) Egg sac
71. What is the main function of sex chromosomes?
a) To determine physical character
b) To determine sex
c) To increase immunity
d) To determine the structure of the eye
72. Which of the following is the genotypic ratio of monohybrid cross?
a) 1:2 b) 3:1 c) 1:2:1 d) 9:2:3:1
73. In order to produce good meat, farmers look for Boer goats and cross them with local goats. What kind of breeding method is this?
a) Artificial insemination b) Selective breeding
c) IVF d) Natural selection
74. Which of the following blood cells is without a nucleus?
a) Neutrophil b) Lymphocyte c) Monocyte d) Platelets
75. Which part of Bojo is used for medicinal purposes?
a) Rhizome b) Leaf c) Stem d) Flower
76. Rama has been coughing for a long time. For this, which medicinal plant helps to get relief from cough?
a) Boiled neem water b) Aloe vera juice
c) Boiled tulsi water d) Yatsagumba powder

77. Who is the founder of the binomial system of nomenclature?
 a) Carolus Linnaeus b) R.H. Whittaker
 c) Chatton d) Robert Koch
78. What characteristics make the *Euglena* different from other animals?
 a) Presence of chlorophyll b) Unicellular
 c) Feed in water d) Depend on other organisms
79. Which mushroom is used to prepare the medicine for the cancer?
 a) Red mushroom b) Dried mushroom
 c) Kanya mushroom d) Gobbe mushroom
80. What is the name of the sterile cell in hymenium?
 a) Basidium b) Trama c) Paraphysis d) Hypha
81. Which one is the example of homologous organs?
 a) Our hand and fore leg of the horse
 b) Our ear and rabbit ear
 c) Canine teeth of human and dog
 d) Our hand and elephant ivory
82. Where does the meristematic tissue lie in plants?
 a) Tip of root b) Tip of stem and branch
 c) Around the stem d) All parts of plant
83. Which one is the type of tissue with cell division capacity?
 a) Complex tissue b) Connective tissue
 c) Permanent tissue d) Meristematic tissue
84. Which part of the nervous system is in ash colour?
 a) Nerve fibers b) Cyton c) Axon d) Dendrites
85. Which hormone causes apical dominance?
 a) Cytokinin b) Auxin c) Ethylene d) Gibberellin

ENGLISH [15 Marks]

86. Passive: "They cleaned the room before we arrived."
 (a) The room was cleaned before we arrived.
 (b) The room is cleaned before we arrived.
 (c) The room has been cleaned before we arrived.
 (d) The room is being cleaned before we arrived.

87. Change into active: "Were you recognized by her?"
 (a) Does she recognize you? (b) Did she recognize you?
 (c) Had she recognized you? (d) Do you recognize her?
88. Indirect speech: He said, "I was tired."
 (a) He said he is tired. (b) He said he was tired.
 (c) He said he had been tired. (d) He said he would be tired.
89. Indirect speech: She said, "We are leaving now."
 (a) She said they are leaving now.
 (b) She said they had left.
 (c) She said they were leaving then.
 (d) She said we leave now.
90. WH-question: "She arrived at 6 p.m."
 (a) What did she arrive? (b) When did she arrive?
 (c) Why did she arrive? (d) How did she arrive?
91. If I ___ you, I wouldn't do that.
 (a) am (b) was (c) were (d) be
92. If we ___ now, we'll miss the bus.
 (a) don't leave (b) didn't leave
 (c) hadn't left (d) won't leave
93. She has ___ umbrella.
 (a) a (b) an (c) the (d) no article
94. I saw ___ stars in the sky.
 (a) a (b) an (c) the (d) no article
95. He is afraid ___ heights.
 (a) with (b) of (c) at (d) from
96. She's involved ___ a new project.
 (a) on (b) with (c) in (d) to
97. They heard her ___ a song.
 (a) to sing (b) sing (c) sang (d) singing
98. She got her house ___ last year.
 (a) paint (b) painted (c) painting (d) paints
99. Which modal expresses lack of necessity?
 (a) needn't (b) must (c) can (d) shall
100. Which modal expresses future certainty?
 (a) can (b) will (c) may (d) might

All the Best

Answer Sheet
Entrance Model Questions-2082 (1)
Faculty of Science

1	2	3	4	5	6	7	8	9	10
a	c	b	b	c	c	c	c	c	c
11	12	13	14	15	16	17	18	19	20
b	c	a	b	d	b	d	a	c	d
21	22	23	24	25	26	27	28	29	30
b	b	a	a	c	a	b	b	a	d
31	32	33	34	35	36	37	38	39	40
b	c	d	c	d	b	c	a	a	a
41	42	43	44	45	46	47	48	49	50
a	b	d	c	b	c	a	c	a	c
51	52	53	54	55	56	57	58	59	60
d	b	b	b	b	b	c	a	a	a
61	62	63	64	65	66	67	68	69	70
b	a	c	d	b	a	b	b	b	c
71	72	73	74	75	76	77	78	79	80
b	a	a	a	b	c	a	d	c	c
81	82	83	84	85	86	87	88	89	90
b	d	a	c	a	a	a	b	b	a
91	92	93	94	95	96	97	98	99	100
a	a	c	a	b	d	a	b	c	b

Answer Sheet
Entrance Model Questions-2082 (2)
Faculty of Science

1	2	3	4	5	6	7	8	9	10
a	d	c	d	c	b	c	a	d	d
11	12	13	14	15	16	17	18	19	20
b	a	b	a	c	b	d	d	b	b
21	22	23	24	25	26	27	28	29	30
a	b	d	d	a	d	b	c	a	a
31	32	33	34	35	36	37	38	39	40
a	d	d	c	d	c	b	b	b	c
41	42	43	44	45	46	47	48	49	50
b	c	a	b	d	c	b	b	a	c
51	52	53	54	55	56	57	58	59	60
b	a	a	b	b	c	c	b	a	c
61	62	63	64	65	66	67	68	69	70
c	a	b	a	c	d	d	a	a	d
71	72	73	74	75	76	77	78	79	80
a	a	a	a	b	c	a	d	c	c
81	82	83	84	85	86	87	88	89	90
a	a	b	c	c	c	c	c	b	a
91	92	93	94	95	96	97	98	99	100
c	a	b	a	a	c	c	d	b	c

Answer Sheet
Entrance Model Questions-2082 (3)
Faculty of Science

1	2	3	4	5	6	7	8	9	10
c	a	b	c	b	a	b	a	a	d
11	12	13	14	15	16	17	18	19	20
c	d	c	b	d	b	b	a	a	b
21	22	23	24	25	26	27	28	29	30
c	d	d	c	d	b	b	c	b	b
31	32	33	34	35	36	37	38	39	40
c	b	b	c	c	c	c	b	c	c
41	42	43	44	45	46	47	48	49	50
a	b	c	a	c	a	c	b	b	d
51	52	53	54	55	56	57	58	59	60
b	b	a	c	c	b	a	a	d	a
61	62	63	64	65	66	67	68	69	70
a	a	a	a	b	b	c	d	a	d
71	72	73	74	75	76	77	78	79	80
a	b	a	d	c	a	a	d	c	b
81	82	83	84	85	86	87	88	89	90
a	b	b	a	b	c	c	c	a	a
91	92	93	94	95	96	97	98	99	100
c	a	b	a	a	c	c	d	a	c

Answer Sheet
Entrance Model Questions-2082 (4)
Faculty of Science

1	2	3	4	5	6	7	8	9	10
a	b	b	d	a	d	b	b	b	b
11	12	13	14	15	16	17	18	19	20
a	c	a	a	c	b	b	a	b	c
21	22	23	24	25	26	27	28	29	30
d	c	d	d	b	c	c	b	b	c
31	32	33	34	35	36	37	38	39	40
a	b	a	c	b	c	b	c	b	b
41	42	43	44	45	46	47	48	49	50
b	a	d	c	c	b	d	b	c	a
51	52	53	54	55	56	57	58	59	60
c	c	c	d	c	b	d	c	c	b
61	62	63	64	65	66	67	68	69	70
b	c	a	d	b	a	b	b	a	c
71	72	73	74	75	76	77	78	79	80
b	b	b	d	b	c	b	a	d	b
81	82	83	84	85	86	87	88	89	90
c	c	b	a	c	c	c	a	a	b
91	92	93	94	95	96	97	98	99	100
b	d	d	a	a	b	b	a	a	a

Answer Sheet
Entrance Model Questions-2082 (5)

Faculty of Science

1	2	3	4	5	6	7	8	9	10
b	a	a	b	b	b	b	c	b	b
11	12	13	14	15	16	17	18	19	20
c	c	a	c	c	b	d	a	b	c
21	22	23	24	25	26	27	28	29	30
b	a	b	d	a	b	b	c	b	c
31	32	33	34	35	36	37	38	39	40
d	a	a	c	d	c	b	c	a	c
41	42	43	44	45	46	47	48	49	50
a	d	a	a	b	a	a	c	b	b
51	52	53	54	55	56	57	58	59	60
a	c	b	b	a	c	c	b	b	d
61	62	63	64	65	66	67	68	69	70
a	c	d	a	a	b	c	b	b	b
71	72	73	74	75	76	77	78	79	80
b	b	b	c	b	a	a	a	b	b
81	82	83	84	85	86	87	88	89	90
c	a	c	b	c	b	b	b	b	b
91	92	93	94	95	96	97	98	99	100
b	b	b	b	b	c	a	b	b	a

Answer Sheet
Entrance Model Questions-2082 (6)
Faculty of Science

1	2	3	4	5	6	7	8	9	10
c	c	b	c	b	d	c	b	a	b
11	12	13	14	15	16	17	18	19	20
d	d	a	b	d	c	d	c	c	a
21	22	23	24	25	26	27	28	29	30
a	b	b	c	a	b	a	c	d	a
31	32	33	34	35	36	37	38	39	40
a	c	d	c	d	d	d	c	a	c
41	42	43	44	45	46	47	48	49	50
a	b	c	a	c	a	b	c	d	a
51	52	53	54	55	56	57	58	59	60
c	b	d	d	c	b	a	a	b	b
61	62	63	64	65	66	67	68	69	70
b	a	d	c	b	b	c	c	b	b
71	72	73	74	75	76	77	78	79	80
c	c	b	c	c	b	a	a	c	b
81	82	83	84	85	86	87	88	89	90
b	b	b	c	b	c	b	b	a	c
91	92	93	94	95	96	97	98	99	100
b	b	a	a	a	b	c	b	a	a

Answer Sheet
Entrance Model Questions-2082 (7)
Faculty of Science

1	2	3	4	5	6	7	8	9	10
a	b	c	b	c	b	b	c	a	b
11	12	13	14	15	16	17	18	19	20
a	c	c	d	b	a	d	a	c	a
21	22	23	24	25	26	27	28	29	30
b	c	d	c	d	d	c	c	b	b
31	32	33	34	35	36	37	38	39	40
c	a	c	c	b	b	d	b	c	b
41	42	43	44	45	46	47	48	49	50
d	d	a	c	b	b	a	a	b	c
51	52	53	54	55	56	57	58	59	60
d	c	c	b	b	b	c	c	c	c
61	62	63	64	65	66	67	68	69	70
c	b	c	b	d	b	b	c	b	b
71	72	73	74	75	76	77	78	79	80
c	c	c	b	c	b	a	b	b	d
81	82	83	84	85	86	87	88	89	90
b	a	b	d	d	c	a	c	b	d
91	92	93	94	95	96	97	98	99	100
b	b	b	c	a	b	d	c	d	b

Answer Sheet
Entrance Model Questions-2082 (8)
Faculty of Science

1	2	3	4	5	6	7	8	9	10
b	c	c	a	c	c	b	b	a	c
11	12	13	14	15	16	17	18	19	20
d	a	d	b	c	c	b	d	a	a
21	22	23	24	25	26	27	28	29	30
c	c	d	d	c	c	b	b	c	d
31	32	33	34	35	36	37	38	39	40
d	c	c	b	d	c	a	b	a	d
41	42	43	44	45	46	47	48	49	50
b	d	d	b	b	b	b	a	b	b
51	52	53	54	55	56	57	58	59	60
b	b	c	c	b	b	b	a	d	d
61	62	63	64	65	66	67	68	69	70
b	d	c	c	a	d	b	c	a	c
71	72	73	74	75	76	77	78	79	80
b	c	b	d	a	c	a	a	d	c
81	82	83	84	85	86	87	88	89	90
a	d	a	b	b	a	b	c	c	b
91	92	93	94	95	96	97	98	99	100
c	a	b	c	b	c	b	b	c	b

Entrance Model Question -2082 (1)

Faculties of Management/Humanities/Law

Time: 2 Hrs

Full Marks: 100

Pass Marks: 40

Choose the best option and cross-mark the right box available in the answer sheet.

ENGLISH [45 Marks]

1. She is junior ____ me.
a) to b) than c) with d) by
2. They ____ him to cut wood.
a) got b) made c) had d) make
3. The letter was written ____ red ink.
a) in b) with c) on d) by
4. The teacher said to me, "You can do if you try."
a) The teacher told me that she could do if I tried.
b) The teacher told me that I could do if I tried.
c) The teacher told me that you can do if you try.
d) The teacher told me that I can do if I try.
5. Their ____ based on facts.
a) information is b) informations are
c) information are d) informations is
6. You'd better ____ a doctor.
a) seen b) to see c) see d) seeing
7. I have been teaching English ____ 1999.
a) for b) since c) from d) to
8. The correct spelling is:
a) karnel b) colonal c) colonel d) komel
9. She does not ____ money.
a) has b) have c) had d) gets
10. One of the girls ____ gone out.
a) have b) are c) has d) is

- d) You are not asked to close the door.
26. Hari says to me, "I am working on a project now."
 a) Hari told me that he was working on a project then.
 b) Hari told me if he is working on a project now.
 c) Hari tells me that he is working on a project then.
 d) Hari says that he is working on a project then.
27. Ramesh saw ___ ewe yesterday.
 a) an b) a c) the d) no article
28. Everyone has finished a report, ___?
 a) hasn't everyone b) hasn't they
 c) haven't they d) have they
29. The girl was dancing ___ I entered the room.
 a) after b) although c) when d) while
30. We took raincoats ___ we could not get wet.
 a) while b) so that c) that d) as
31. Neither Deepak nor I ___ going to the party.
 a) are b) is c) am d) none
32. I failed in the exam. I wish I ___ hard.
 a) work b) worked c) had worked d) was working
33. A person who feels shy and can't make more friends is:
 a) extrovert b) ambient c) introvert d) sociable
34. They have had a new house ____ .
 a) construct b) to construct
 c) constructed d) constructing
35. I always work in a dusty environment. It means I ____
 a) used to work in dust b) am used to work in dust
 c) am used to working in dust d) am used to being in dust
36. To write a letter ___ very difficult for them.
 a) is b) are c) were d) none
37. Deepa will not carry a heavy load.
 a) Neither will Hari do. b) Neither will Hari.
 c) So will Hari. d) Hari will not carry it, too.
38. Provided that Dinesh fulfills all the terms and conditions, __
 a) he will allow to join university.
 b) he will be allowed to join university.
 c) Depends
 d) will he allow to be joined

39. In the use of English, practice and advice are used as:
 a) noun and verb b) adjective and noun
 c) verb and verb d) noun and noun
40. The art of beautiful handwriting is called:
 a) calligraphy b) lexicography
 c) cartography d) photography
41. Grandma is ___ visiting her grandchildren.
 a) looking for b) looking into
 c) looking forward d) looking forward to
42. She ought to arrive in time, ___?
 a) ought not she? b) doesn't she?
 c) shouldn't she? d) mustn't she?
43. I hate people complimenting me. Its passive voice is:
 a) I hate being complemented.
 b) I hate having been completed
 c) I hate being completed me.
 d) I hate being complimented me by people.
44. Mumble is related to speak as stagger is related to:
 a) smile b) grin c) pip d) walk
45. No sooner ___ than the light went out.
 a) did she sit down to watch Bhadracol then
 b) he sat down to watch Bhadracol, the light went out
 c) had she sat down to watch Bhadracol when
 d) had she sat down to watch Bhadracol

MATHEMATICS [30 Marks]

46. If $f(x) = (x+1)/(x-1)$, $x \neq 1$, then $f(f(x)) =$
 a) $(x-1)/(x+1)$ b) $1/x$ c) x d) none
47. The quadratic equation having roots 2 and 3 is
 a) $x^2 - 5x + 6$ b) $x^2 + 5x + 6$
 c) $x^2 + 5x - 6$ d) $x^2 - 5x - 6$
48. Orders of matrices A and B are $m \times n$ and $n \times p$. Which of the following statements is not true?
 a) AB is defined b) BA is defined
 c) order of AB is $m \times p$ d) $A + B$ is not defined
49. Angle between the lines represented by $x^2 - 2xy \cot\theta - y^2 = 0$ is
 a) 30° b) 45° c) 60° d) 90°

50. Find the value of K in order that the point (K, 1), (5, 5) and (10, 7) may be collinear.
 a) -3 b) -4 c) -6 d) -5
51. If 80% of the adult population of a village is registered to vote, and 60% of those registered actually voted in a particular election, what percent of the adults in the village did not vote in that election?
 a) 40% b) 48% c) 50% d) 52%
52. If $\frac{3}{4}$ of a number is 7 more than $\frac{1}{6}$ of the number, what is the number?
 a) 20 b) 12 c) 18 d) 15
53. A shopkeeper fixed the marked price of his television to make a profit of 40%. Allowing 20% discount on the marked price of the television was sold, what percent profit will be made?
 a) 10% b) 12% c) 15% d) 11%
54. Value of x in $x - 2 = \sqrt{x}$ is
 a) 1 or 4 b) 1 only c) 4 only d) none
55. There are 3 red, 2 blue and 5 white balls in a box. A ball is taken out randomly. What is the probability of a ball being blue or white?
 a) $\frac{7}{10}$ b) $\frac{3}{10}$ c) $\frac{2}{7}$ d) $\frac{5}{7}$
56. An ant moves 4.4cm per second. How long will it take to go round a circular dish of radius 21cm?
 a) 30 sec b) 45sec c) 1minute d) $\frac{3}{2}$ minute
57. Simplify $4\sqrt{28} - \sqrt{63}$
 a) $8\sqrt{7}$ b) $7\sqrt{7}$ c) $6\sqrt{7}$ d) $5\sqrt{7}$
58. Find the compound interest on Rs. 50,000 invested for 2 years at rate of 4% per annum
 a) Rs. 4050 b) Rs. 4080 c) Rs. 4025 d) Rs. 4045
59. If the price of petrol oil increases by 25% by how much percent should a consumer reduce his consumption of petrol to maintain his previous expenditure?
 a) 0% b) 20% c) 25% d) 1%
60. What is the relation between the central angle with the angle at the circumference standing on the same arc?
 a) equal b) double c) three times d) four times
61. Given that 176 dollars = £100 and £1 = Rs. 119. Find in dollars for Rs. 8925
 a) \$122 b) \$132 c) \$134 d) \$140

62. $(x^p)(x^q)(x^r) = x^s$. Find s in terms of p, q & r .
 a) $r + p + q$ b) rpq c) $r - q - p$ d) none
63. The two ends of a diameter are $(-4,1)$ and $(2,1)$. Find area of the circle
 a) 3π b) 9π c) 6π d) 36π
64. After paying an income tax of 5% a man has Rs. 7600 left. What is his income?
 a) Rs.800 b) Rs. 8000 c) Rs.4000 d) Rs.16000
65. If $5x + 13 = 31$. Find $\sqrt{(5x + 31)}$
 a) 7 b) $\sqrt{173/5}$ c) 15 d) $\sqrt{13}$
66. The price of 50 books is Rs. 4000. If the price is increased by 25%, what will be the price of 36 books?
 a) 3500 b) 2500 c) 3600 d) 4000
67. $12p + 3q = 1$ and $7q - 2p = 9$. What is the average of p and q ?
 a) 0.1 b) 1 c) 0.5 d) 2.5
68. If $x - y = 5$, and $xy = 6$. Find the value of $x^3 - y^3$
 a) 219 b) 129 c) 215 d) 228
69. If $ab + bc + ca = 0$, $x^a \cdot x^b \cdot x^c = ?$
 a) 1 b) x^{a+b+c} c) 0 d) x
70. What percentage of 1 km 20m is 720m?
 a) 71% b) 70.58% c) 70% d) 85%
71. $x(x - 3) = x$, then $x =$
 a) 0, -4 b) 0, 4 c) -4, 4 d) 0, 3
72. $ax + b^2 = a^2 + bx$, then solve for x
 a) $a^2 - b^2$ b) $a + b$ c) $a - b$ d) 1
73. If the replacement set of the set of $5x - 1 \leq 9$ is $\{-2, -1, 0, 1, 2, 3, 4\}$. Find the solution
 a) $\{-2, -1, 0\}$ b) $\{-2, -1, 0, 1\}$
 c) $\{2\}$ d) $\{-2, -1, 0, 1, 2\}$
74. The locus of the point whose abscissa and ordinate are always equal is
 a) $x + y = 0$ b) $x - y = 0$ c) $x + y = 1$ d) $x - y = 1$
75. The point of intersection of perpendicular bisectors of the sides of a triangle is known as
 a) centre b) incentre c) orthocenter d) circumcenter

NEPALI [25 Marks] 2082 (1)

७६. 'उज्यालो यात्रा' कविताका लेखक को हुन ?
क) रामप्रसाद ज्ञवाली ख) शिवप्रसाद ज्ञवाली
ग) सत्यप्रसाद ज्ञवाली घ) श्यामप्रसाद ज्ञवाली
७७. 'उज्यालो यात्रा' कविताको शैली कस्तो छ ?
क) वर्णनात्मक ख) भावनात्मक ग) तर्कात्मक घ) व्यङ्ग्यात्मक
७८. रणबहादुर शाहकी आमाको नाम के हो ?
क) राज्यलक्ष्मी ख) राजेन्द्रलक्ष्मी ग) नरेन्द्रलक्ष्मी घ) धनलक्ष्मी
७९. आयुर्वेद चिकित्सा शास्त्रमा उपचारका कतिओटा शाखा छन् ?
क) पाँच ओटा ख) छ ओटा ग) सात ओटा घ) आठ ओटा
८०. 'यस्तो कहिल्यै नहोस्' मनोवादको पात्रको नाम के हो ?
क) भ्रूलकमान ख) गम्भीरमान ग) शुकमान घ) वीरमान
८१. यस्तो कहिल्यै नहोस् मनोवादको पात्र धन कमाएको कहाँ थियो ?
क) मलेसिया ख) अरब ग) कतार घ) भारत
८२. लक्ष्मीप्रसाद देवकोटा कति सालमा शिक्षा मन्त्री भएका थिए ?
क) वि.सं २०१३ ख) वि.सं २०११ ग) वि.सं २०१४ घ) वि.सं २०१२
८३. लक्ष्मीप्रसाद देवकोटाले लेखेको एक मात्र उपन्यासको नाम के हो ?
क) मुनामदन ख) चम्पा ग) कुञ्जिनी घ) सुलोचना
८४. विश्वेश्वरप्रसाद कोइरालाको जन्म कहिले भएको थियो ?
क) वि.सं. १९७१ भदौ २५ ख) वि.सं. १९७१ भदौ २२
ग) वि.सं. १९७१ भदौ २३ घ) वि.सं. १९७१ भदौ २४
८५. कवि मुकुन्दशरण उपाध्यायको कुन कृतिले मदन पुरस्कार पाएको थियो ?
क) प्राकृत पोखरा ख) मेरो पोखरा ग) राम्रो पोखरा घ) सुन्दर पोखरा
८६. फाल्गुनन्दले रचना गरेको किराँत समुदायको धार्मिक ग्रन्थको नाम के हो ?
क) त्रिपिटक ख) मुन्धुम ग) उपनिषद् घ) धम्मपद
८७. सन्दुक रुइतले तिलगङ्गा आँखा केन्द्रको स्थापना कहिले गरे ?
क) वि.सं. २०५२ साल ख) वि.सं. २०५१ साल
ग) वि.सं. २०५० साल घ) वि.सं. २०५३ साल
८८. सन्दुक रुइतले इसा अवार्ड कहिले प्राप्त गरे ?
क) सन् २०२३ ख) सन् २०२४ ग) सन् २०२२ घ) सन् २०२१
८९. 'आयाम' कथाकी पात्र सन्तमायाले पहिलो श्रीमान्को मृत्युपछि कोसँग विवाह गरिन् ?
क) सानो तामाङ ख) सालु तामाङ ग) सानु तामाङ घ) सन्देश तामाङ
९०. पिकासोले नौ वर्षको उमेरमा तयार पारेको चित्रको नाम के हो ?

- क) पिकाडोर ख) सिकडोर ग) रिकडोर घ) छिकडोर
९१. 'गरिब आयो ।' यस वाक्यमा । 'गरिब' कुन पदवर्गमा पर्छ ?
क) नाम ख) विशेषण ग) सर्वनाम घ) क्रियाविशेषण
९२. 'ध्वजा'को पर्यायवाची शब्द कुन हो ?
क) कागज ख) कपडा ग) झण्डा घ) ध्वनि
९३. 'मेरो भाइलाई उसले बजार पठायो ।' यस वाक्यमा उद्देश्य पद कुन हो ?
क) मेरो ख) भाइ ग) उसले घ) बजार
९४. 'ऊ डुङ्गाबाट पोखरीमा खस्यो ।' यस वाक्यमा 'डुङ्गाबाट' कुन कारक हो ?
क) करण ख) अपादान ग) अधिकरण घ) कर्म
९५. 'हामी कविताहरू लेखौं ।' यस वाक्यको कर्म वाच्य कुन हुन्छ ?
क) कविताहरू लेखियोस् । ख) कविताहरू लेखियोन् ।
ग) कविताहरू लेखोस् । घ) कविताहरू लेखिएलान् ।
९६. 'तिमी आए राम्रो हुन्थ्यो ।' यो कुन वाक्य हो ?
क) सामान्यार्थक ख) इच्छार्थक ग) आज्ञार्थक घ) सङ्केतार्थक
९७. 'कहिल्यै बुढो नहुने' को पर्यायवाची शब्द तलका मध्ये कुन हो ?
क) अमर ख) अजर ग) निरोगी घ) दीर्घजिवी
९८. तलका मध्ये कुन अनेकार्थी शब्द होइन ?
क) कस ख) बस ग) घस घ) रस
९९. लक्ष्मीप्रसाद देवकोटाकी पत्नीको नाम के थियो ?
क) चुनदेवी चालिसे ख) मनदेवी चालिसे
ग) मनमाया चालिसे घ) रमामाया चालिसे
१००. 'कर्तव्य' शब्दको विग्रह के हो ?
क) कृ +तव्य ख) कर +तव्य ग) कृ +तवय घ) कृ +तव्य

~ Best of Luck ~

Model Question for Entrance Examination-2082-2
Faculties of Management/Humanities/Law

Time: 2 hrs Full Marks: 100 Pass Marks: 40

Choose the best option and cross-mark the right box available in the answer sheet.

ENGLISH [45 Marks]

1. Rewrite the sentence “They constructed a modern museum last year” in the passive voice.
 - a) A modern museum is constructed by them last year.
 - b) A modern museum was constructed by them last year.
 - c) A modern museum has been constructed by them last year.
 - d) A modern museum is being constructed by them last year.
2. Which of the following sentences is written in the passive voice?
 - a) The committee approved the proposal yesterday.
 - b) The proposal was approved by the committee yesterday.
 - c) They are approving the new proposal.
 - d) The committee will approve the proposal tomorrow.
3. Choose the correct passive form of: “The professor will explain the theory.”
 - a) The theory is explained by the professor.
 - b) The theory will be explained by the professor.
 - c) The theory was explained by the professor.
 - d) The theory has been explained by the professor.
4. Select the correct transformation to passive voice for: “They can solve the problem.”
 - a) The problem can be solved by them.
 - b) The problem is solved by them.
 - c) The problem was solved by them.
 - d) The problem has been solved by them.

5. Convert the direct speech “He said, ‘I will travel abroad’” into indirect speech.
 - a) He said that he will travel abroad.
 - b) He said that he was traveling abroad.
 - c) He said that he would travel abroad.
 - d) He said that he has traveled abroad.
6. Which is the correct indirect speech version of: “She said, ‘I have completed my report’”?
 - a) She said that she completes her report.
 - b) She said that she had completed her report.
 - c) She said that she will complete her report.
 - d) She said that she is completing her report.
7. Identify the appropriate transformation of: “They said, ‘We are planning a celebration’”.
 - a) They said that they are planning a celebration.
 - b) They said that they were planning a celebration.
 - c) They said that they plan a celebration.
 - d) They said that they would plan a celebration.
8. Which sentence features a causative verb?
 - a) The musician practices diligently every day.
 - b) The manager got the report printed overnight.
 - c) They finished their homework on time.
 - d) The artist painted a beautiful portrait.
9. Choose the sentence that correctly utilizes a causative verb.
 - a) She has her car washed every week.
 - b) He helps his neighbor fix the fence.
 - c) They invited their friends to the party.
 - d) The teacher explained the experiment clearly.
10. Which sentence employs a causative form?
 - a) The gardener allowed the children to water the plants.
 - b) The chef is cooking dinner now.
 - c) They celebrated their victory enthusiastically.
 - d) She designed the new logo herself.
11. Select the sentence that uses a causative construction correctly.
 - a) He writes his essays neatly.
 - b) She got her hair styled for the occasion.
 - c) They observed the rare bird in the garden.
 - d) The student completed the assignment on time.

12. Which modal auxiliary is best suited to express a polite request?
a) Might b) Can c) Would d) Must
13. Choose the modal that expresses past ability or permission.
a) Shall b) Could c) Will d) Should
14. Which modal auxiliary verb is most appropriate for giving advice?
a) May b) Should c) Must d) Will
15. Identify the sentence that correctly represents the third conditional form.
a) If she wins the prize, she will celebrate.
b) If he had trained harder, he would have won the match.
c) If they are ready, they will start the exam.
d) If I see her, I tell her the news.
16. Select the sentence that is an example of the zero conditional.
a) If water reaches 100°C, it boils.
b) If he had eaten, he would not be hungry.
c) If she goes to the market, she buys fruits.
d) If they win, they celebrate.
17. Which sentence best demonstrates the first conditional tense?
a) If you drink too much coffee, you will feel jittery.
b) If he had left early, he wouldn't be late.
c) If they had prepared, they would have succeeded.
d) If she visited, she would see the changes.
18. Identify the sentence that correctly uses the second conditional.
a) If I win the lottery, I will buy a mansion.
b) If I were rich, I would travel around the world.
c) If she studies, she will pass the exam.
d) If he arrives, he gets a warm welcome.
19. What is a synonym for "exquisite"?
a) Ordinary b) Beautiful c) Common d) Rough
20. Select the word most similar in meaning to "energetic".
a) Lethargic b) Dynamic c) Passive d) Apathetic
21. Which word has a meaning most akin to "confident"?
a) Anxious b) Secure c) Unsure d) Timid
22. What is an antonym for "optimistic"?
a) Hopeful b) Depressed c) Cheerful d) Joyful
23. Choose the word that is opposite in meaning to "generous".
a) Stingy b) Giving c) Magnanimous d) Altruistic

24. What is the antonym of “victorious”?
a) Triumphant b) Defeated c) Successful d) Celebratory
25. What does the idiom “spill the beans” mean?
a) To hide a secret b) To reveal confidential information
c) To act impulsively d) To start a conversation
26. What is the meaning of the phrase “pull out all the stops”?
a) To give up easily b) To use every possible resource
c) To stop suddenly d) To remain indifferent
27. The idiom “kick the bucket” is best understood as:
a) To win a prize b) To begin a journey
c) To die d) To clean up thoroughly
28. Which sentence uses the article “an” correctly?
a) He is an honest person. b) She is an university student.
c) They are an honorable team. d) I met an European artist.
29. Which sentence is correct in terms of article usage?
a) My father is doctor. b) She adopted a cat and a dog.
c) They enjoyed a concert last night. d) My sister is engineer.
30. Identify the sentence with the correct article usage.
a) He went to a hospital for treatment.
b) She studies in an elite college.
c) They visited the museum on Saturday.
d) I will call you at evening.
31. Choose the preposition that best completes the sentence: “He is keen ____ learning languages.”
a) on b) for c) in d) about
32. Which preposition correctly fills in the blank: “She is fond ____ classical music.”
a) on b) of c) in d) at
33. Select the correct preposition: “The keys are ____ the drawer.”
a) in b) on c) at d) beside
34. Which question form correctly corresponds to the statement: “He is learning French”?
a) Does he learn French? b) Is he learning French?
c) Did he learn French? d) Has he learned French?
35. Transform the statement “They have completed the assignment” into a question.
a) Did they complete the assignment?
b) Have they completed the assignment?

- c) Do they complete the assignment?
 d) Had they completed the assignment?
36. What is the correct question form of: “She will attend the conference next week”?
 a) Will she attend the conference next week?
 b) Is she attending the conference next week?
 c) Did she attend the conference next week?
 d) Has she attended the conference next week?
37. Which sentence correctly demonstrates subject-verb agreement?
 a) The list of items are on the table.
 b) The bouquet of flowers smell lovely.
 c) The team of scientists is working on the project.
 d) The collection of paintings were sold.
38. Which of the following words contains a prefix?
 a) Running b) Unlikely c) Growing d) Singing
39. Which prefix means “before” or “prior to”?
 a) Dis- b) Pre- c) Mis- d) Re-
40. Which word does not have a prefix?
 a) Uncertain b) Inefficient c) Postpone d) Careful
41. What suffix in the word “childish” implies “characteristic of”?
 a) –ness b) –ly c) –ish d) –ment
42. Read the short text and tick the best answer given below. (4)
 Space exploration has expanded our understanding of the universe and led to numerous technological advancements. Satellites launched into space have improved global communication, weather forecasting, and navigation systems. Manned missions to the Moon and robotic missions to Mars have provided valuable data about our solar system. However, space missions are costly and involve significant risks. Despite the challenges, countries continue to invest in space programs, aiming to explore distant planets and even search for extraterrestrial life in the future. What is one benefit of space exploration mentioned in the passage?
 a) It reduces air pollution.
 b) It improves communication and navigation.
 c) It increases rainfall.
 d) It decreases global population.
43. What have missions to the Moon and Mars provided?
 a) Fuel for spaceships
 b) Maps of galaxies

56. The sum of two numbers is 16 and sum of their squares is 130.
Find the numbers?
a) 9, 7 b) 8, 8 c) 10, 6 d) 11, 5
57. If $\sqrt{2} \sin\theta = 1$, which of the followings is not the value of θ ?
a) 45° b) 135° c) 225° d) 405°
58. The population of a village was 7200. 5% of the population was migrated and 2% died due to different causes within a year. What would be the population of the village after a year?
a) 6669 b) 6966 c) 6696 d) 9666
59. If $x^2 - y^2 = 28$ and $x - y = 8$, what is the average of x and y ?
a) 1.75 b) 3.5 c) 7 d) 8
60. $0 < a < b < 1$. If $x = \sqrt{a+b}$ and $y = \sqrt{a} + \sqrt{b}$, then
a) $x > y$ b) $x < y$ c) $x = y$ d) none
61. If one type of rice costing Rs. 20 per kg and another type of rice costing Rs. 17 per kg are mixed in the ratio 1:2, what is the cost of the mixture per kg?
a) Rs. 17.50 b) Rs. 18 c) Rs. 18.50 d) Rs. 19
62. If $\sin\theta + \operatorname{cosec}\theta = 2$ then $\sin^2\theta + \operatorname{cosec}^2\theta$ is equal to
a) 1 b) 4 c) 2 d) 9
63. If the equation $x^2 + 2(k+2)x + 9k = 0$ has equal roots, then the value of k is
a) 1 b) 2 c) 3 d) 0
64. If $A \cap B = \emptyset$, then:
a) $A \subset \bar{B}$ b) $A \subset B$ c) $B \subset A$ d) $\bar{B} \subset \bar{A}$
65. The compound interest on a sum of money in 2 years at 5% p.a will be Rs. 120 more than the simple interest. Find the sum.
a) Rs. 40,000 b) Rs. 45,000 c) Rs. 48,000 d) Rs. 50,000
66. If the equation $x^2 + (k+2)x + 2k = 0$ has equal roots, find k .
a) 1 b) 2 c) 3 d) 4
67. Geometric mean between a and b is:
a) ab b) \sqrt{ab} c) a^2b^2 d) None
68. Sum of the squares of first 'n' natural numbers is:
a) $n(n+1)(2n+1)/6$ b) $n(n+1)(2n+1)$
c) $n(n^2+1)/(n+1)$ d) $n/2 [2a+(n-1)d]$
69. If $(4, y)$ divides the join of $(6, -1)$ and $(3, 2)$ in the ratio 2:1, then the value of y is:
a) 2 b) 8 c) 1 d) $\frac{1}{2}$

70. Two lines $y = m_1x + c_1$ and $y = m_2x + c_2$ will be co-incident if:
- a) $m_1/m_2 : m_2 = 1$ b) $m_1/m_2 = c_1/c_2 = 1$
c) $m_1/m_2 = 1$ d) $m_1m_2 = -1$
71. If $2x^3 = 54$, what is the value of $3x^2$?
- a) 9 b) 6 c) 27 d) 81
72. The value of $\alpha^2\beta + \alpha\beta^2$ if α and β are the roots of the equation $3x^2 - 2x - 6 = 0$.
- a) $-5/2$ b) $-4/3$ c) $-7/2$ d) $-9/2$
73. If A and B are mutually exclusive events, then:
- a) $P(A \cup B) = P(A) + P(B) - P(A \cap B)$
b) $P(A \cup B) = P(A) + P(B)$
c) $P(A \cup B) = P(A) \times P(B/A)$
d) None
74. What is 10% of 20% of 30%?
- a) 0.006 % b) 0.6% c) 6% d) 60%
75. If a sum of money will be half much again as it is in 10 years the rate of interest is...
- a) 5% b) 10% c) 15% d) neither one

NEPALI [25 Marks] 2082 (2)

76. आगन्तुक शब्द कुन होइन ?
- क) नजर ख) नमुना ग) दर्जन घ) साँप
77. 'सङ्कीर्ण' को विपरीतार्थी शब्द के हो ?
- क) उदार ख) कुरूप ग) दुर्गम घ) साँघुरो
78. अनेकार्थी शब्द कुन होइन ?
- क) सार ख) दाल ग) काल घ) हार
79. तलका मध्ये कुन तद्भव शब्द हो ?
- क) ईर्ष्या ख) कृष्ण ग) चाँदनी घ) हीनता
80. 'इतिश्री गर्नु' दुक्काको अर्थ के हो ?
- क) सुरु गर्नु ख) अन्त्य गर्नु ग) आराम गर्नु घ) विश्राम गर्नु
81. कवि रामप्रसाद ज्ञवालीको जन्म कहिले भएको हो ?
- क) वि. सं. २०२३ ख) वि. सं. २०२४
ग) वि. सं. २०२५ घ) वि. सं. २०२६

82. 'उज्यालो यात्रा' कविता कुन छन्दमा लेखिएको छ ?
 क) शिखरिणी ख) मन्दाक्रान्ता ग) अनुष्टुप घ) तोटक
83. अनुष्टुप छन्दमा एक पाउमा कति अक्षर हुन्छन् ?
 क) ६ अक्षर ख) ७ अक्षर ग) ९ अक्षर घ) ८ अक्षर
84. लक्ष्मीप्रसाद देवकोटा डा. के आई सिंहको मन्त्रीमण्डलमा कुन मन्त्री भएका थिए ?
 क) सूचना तथा सञ्चार ख) शिक्षा ग) खेलकुद घ) अर्थ तथा वाणिज्य
85. तलका मध्ये लक्ष्मीप्रसाद देवकोटाले लेखेको महाकाव्य कुन हो ?
 क) मुनामदन ख) कुञ्जिनी ग) लुनी घ) शाकुन्तल
86. देवकोटाले ६० घण्टामा लेखेको महाकाव्य कुन हो ?
 क) सुलोचना ख) प्रमिथस ग) वनकुसुम घ) महाराणा प्रताप
87. 'शत्रु' कथाका पात्र कृष्ण राय गाउँका को थिए ?
 क) मुखिया ख) मध्यस्थकर्ता ग) नेता घ) सदस्य
88. 'शत्रु' कथाका पात्र कृष्ण राय कति वर्षका थिए ?
 क) ४३ वर्ष ख) ४४ वर्ष ग) ४५ वर्ष घ) ४६ वर्ष
89. सन्दुक रुइतले कति सालमा प्रवेशिका उत्तीर्ण गरेका थिए ?
 क) वि. सं. २०२४ ख) वि. सं. २०२५
 ग) वि. सं. २०२६ घ) वि. सं. २०२७
90. 'गायक' शब्दको निर्माण प्रक्रिया दिइएका मध्ये कुन हो ?
 क) गाउ+अक ख) गा+यक ग) गै+अक घ) गीत+अक
91. 'कर्तव्य' कथाका पात्र गङ्गाधर के नाउँले प्रसिद्ध थिए ?
 क) जमिनदार ख) जमदार ग) जर्नेल घ) मुखिया बा
92. 'कर्तव्य' कथाका पात्र गङ्गाधरले लगालग कति दिन ज्वरो आएर संसार छोडे ?
 क) ८ दिन ख) ९ दिन ग) १० दिन घ) ११ दिन
93. पाब्लो पिकासोले 'पिकडोर' नामको आफ्नो पहिलो चित्र कति वर्षको हुँदा तयार पारेका थिए ?
 क) ८ वर्ष ख) १० वर्ष ग) ९ वर्ष घ) ११ वर्ष
94. पाब्लो पिकासोका सन् १८९० तिरका चित्रमा कुन शैलीको प्रयोग गरिन्थ्यो ?
 क) स्वच्छन्दतावादी शैली ख) प्रगतिवादी शैली
 ग) यथार्थवादी शैली घ) प्रयोगवादी शैली

95. विश्वेश्वरप्रसाद कोइराला कस्ता साहित्यकार हुन् ?
 क) प्रगतिवादी ख) मनोविश्लेषणवादी
 ग) स्वच्छन्दतावादी घ) भौतिकवादी
96. पाब्लो पिकासोले बनाएको 'द गुएर्निका चित्र' लाई के विरोधी चित्र मानिन्छ ?
 क) गरिबी विरोधी ख) धनी विरोधी
 ग) शान्ति विरोधी घ) युद्ध विरोधी
97. 'घरको माया' एकाङ्कीको सहायक पात्र को हो ?
 क) लाल ख) जमान ग) बतासे घ) कान्छो
98. भैरव अर्यालले लेखेको कृति कुन हो ?
 क) दाडिमको रुखनेर ख) नासो
 ग) लक्ष्मी निबन्ध सङ्ग्रह घ) इतिश्री
99. आयुर्वेद उपचारको विधिअनुसार रोगको उपचार गर्ने व्यक्तिलाई के भनिन्छ ?
 क) डाक्टर ख) वैद्य ग) भाँकी घ) कुनै पनि होइन
100. 'नेपाली भएपछि नेपाललाई माया गर्नुपर्छ।' यस वाक्यमा 'माया' कुन पदवर्गमा पर्छ ?
 क) नाम ख) विशेषण ग) सर्वनाम घ) क्रियाविशेषण

Model Question for Entrance Examination-2082-3**Faculties of Management/Humanities/Law****Time: 2 Hrs****Full Marks: 100****Pass Marks: 40**

Choose the best option and cross-mark the right box available in the answer sheet.

ENGLISH [45 Marks]

1. What is the passive form of "The chef prepared the meal"?
 - a) The meal was prepared by the chef.
 - b) The meal is prepared by the chef.
 - c) The meal has been prepared by the chef.
 - d) The meal prepares by the chef.
2. Which sentence is in passive voice?
 - a) The students solved the problem.
 - b) The problem was solved by the students.
 - c) The teacher explains the lesson.
 - d) They are playing football.
3. Choose the correct passive form: "They will announce the results tomorrow."
 - a) The results will be announced tomorrow.
 - b) The results are announced tomorrow.
 - c) The results were announced tomorrow.
 - d) The results have been announced tomorrow.
4. Passive form of "Someone has stolen my bicycle."
 - a) My bicycle has been stolen.
 - b) My bicycle was stolen.
 - c) My bicycle is stolen.
 - d) My bicycle had been stolen.
5. Indirect speech of "She said, 'I am reading a book.'"
 - a) She said that she was reading a book.
 - b) She said that she is reading a book.
 - c) She said that she read a book.
 - d) She said that she has been reading a book.

6. Choose the correct indirect speech: "He said, 'I will call you tomorrow.'"
 - a) He said that he would call me the next day.
 - b) He said that he will call me tomorrow.
 - c) He said that he would call me tomorrow.
 - d) He said that he will call me the next day.
7. Indirect speech of "They said, 'We have completed the project.'"
 - a) They said that they had completed the project.
 - b) They said that they have completed the project.
 - c) They said that they completed the project.
 - d) They said that they were completing the project.
8. Which is correct indirect speech? "John said, 'I can swim.'"
 - a) John said that he could swim.
 - b) John said that he can swim.
 - c) John said that he swam.
 - d) John said that he has swum.
9. Which sentence uses a causative verb?
 - a) She eats breakfast every morning.
 - b) He made his daughter clean her room.
 - c) They walked to the park.
 - d) The sun rises in the east.
10. Choose the correct causative form: "She ____ her hair cut yesterday."
 - a) made
 - b) had
 - c) let
 - d) got
11. Which sentence has a causative verb?
 - a) I had washed my car.
 - b) I had my car washed.
 - c) The car is clean.
 - d) The car needs washing.
12. Which is the correct causative sentence?
 - a) She got her brother to fix the computer.
 - b) She fixed the computer by her brother.
 - c) She fixes the computer herself.
 - d) The computer was fixing by her brother.
13. Which modal expresses possibility?
 - a) must
 - b) might
 - c) should
 - d) will
14. Choose the modal for advice:
 - a) can
 - b) shall
 - c) should
 - d) would
15. Which modal is used for past ability?
 - a) can
 - b) could
 - c) may
 - d) might

27. What does "Spill the beans" mean?
 a) To reveal a secret b) To clean up
 c) To cook beans d) To make a mess
28. What does "Hit the books" mean?
 a) To study hard b) To throw books
 c) To organize books d) To buy books
29. Which sentence uses "an" correctly?
 a) She is an honest person. b) He is an European.
 c) He works in an university. d) I saw an unicorn.
30. Choose the correct article: "She is ___ MBA graduate."
 a) a b) an c) the d) no article
31. Which sentence is correct without an article?
 a) He is president of the club. b) She is engineer.
 c) I saw movie yesterday. d) They went to school.
32. Choose the correct determiner: "I don't have ___ money."
 a) many b) much c) few d) a few
33. Correct preposition: "She is allergic ___ cats."
 a) to b) with c) of d) for
34. Fill in: "He succeeded ___ passing the exam."
 a) in b) at c) on d) by
35. Correct preposition: "The book is ___ the shelf."
 a) in b) on c) at d) under
36. Question form of "She has a car."
 a) Does she have a car? b) Has she a car?
 c) Do she have a car? d) Is she have a car?
37. Which is the correct question of "They were playing soccer"?
 a) Were they playing soccer? b) Did they play soccer?
 c) Are they playing soccer? d) Do they play soccer?
38. Question for: "He will arrive at 8 PM."
 a) When will he arrive? b) When does he arrive?
 c) When he will arrive? d) When is he arriving?
39. Which word has a prefix meaning 'not'?
 a) Unhappy b) Rerun c) Preview d) Polygamy
40. Which suffix means 'full of'?
 a) -less b) -ful c) -ness d) -ment

41. Which word contains a suffix?
 a) Replay b) Hopeful c) Mistake d) Under
42. Which relative clause is correct?
 a) The man which lives next door is a doctor.
 b) The man who lives next door is a doctor.
 c) The man he lives next door is a doctor.
 d) The man lives next door is a doctor.
43. Combine using a relative clause: "The book is on the table. It is mine."
 a) The book which is on the table is mine.
 b) The book on the table is mine.
 c) The book is on the table that is mine.
 d) The book, it is on the table, is mine.
44. Choose the correct verb: "The list of items ___ on the desk."
 a) is b) are c) were d) have
45. His behavior seems quite enigmatic. What does the underlined word mean?
 a. Mysterious b. Optimistic c. Irritating d. Harmful

MATHEMATICS [30 Marks]

46. If $f(x) = 2x^2 - 7$ and $g(x) = 9x + 2$, then $f \circ g(x) =$
 a) $2(9x + 2)^2 - 7$ b) $9(2x^2 - 7) + 2$ c) $6x^2 - 11$ d) None
47. There would be a loss of 15% if a pen is sold for Rs.51. What should be selling price to gain 20%?
 a) Rs.84 b) Rs.80 c) Rs.72 d) Rs.60
48. A certain fraction becomes 2 when 7 is added to its numerator and 1 when 2 is subtracted from denominator. What is the fraction?
 a) $\frac{4}{5}$ b) $\frac{3}{5}$ c) $\frac{4}{7}$ d) $\frac{3}{7}$
49. If a, b, c are three mutually perpendicular unit vectors, then $|a + b + c|$ is equal to:
 a) 1 b) 3 c) $2\sqrt{3}$ d) $\sqrt{3}$
50. If two circles touch, the point of contact lies on a:
 a) circle b) square c) parallelogram d) None
51. A sum of money is divided between Mary and David in the ratio 5:8. If Mary's share is Rs. 225, then the total amount of money will be:
 a) 300 b) 400 c) 585 d) None

52. A dealer gains the selling price of 10 radio sets by selling 6 sets. His percentage profit will be
 a) 10% b) 15% c) 20% d) None
53. A father is 2 times as old as his son. 16 years ago the age of the father was three times the age of the son what is the present age of the father?
 a) 64 years b) 10 years c) 80 years d) None
54. The cost of carpeting a room at Rs. 50 per square meter is Rs. 1000. Find the breadth of the room, if it's length is 5 m.
 a) 2 m b) 3 m c) 2.5 m d) 4 m
55. The market price of a watch is Rs. 640. What is the selling price if a discount of 15% is allowed?
 a) Rs. 736 b) Rs. 544 c) Rs. 625 d) Rs. 525
56. The angle of elevation of the top of a tree at a point 15 m from the tree is 30° . Find the foot of the tree
 a) 8.25 m b) 8.66 m c) 9.2 m d) 9.6 m
57. A garden is 25.50m wide and 35 m long. What is its perimeter?
 a) 892.5 m b) 121 m c) 105m d) 70 m
58. A quadrilateral with all sides equal is:
 a) parallelogram b) square c) rectangle d) rhombus
59. What is the probability of drawing a heart or an ace from a deck of 52 cards?
 a) $26/52$ b) $4/13$ c) $1/52$ d) $2/13$
60. Unit matrix is not a....
 a) Scalar matrix b) Diagonal matrix c) Square matrix d) Null matrix
61. If A and B are square matrices of the same order, which of the following statements may not be true?
 a) AB is defined b) BA is defined
 c) Order of AB and BA are same d) $AB = BA$
62. If one type of rice costing Rs. 20 per kg and another type of rice costing Rs. 17 kg are mixed in the ratio 1:2, what is the cost of the mixture per kg?
 a) Rs. 17.50 b) Rs. 18 c) Rs. 18.50 d) Rs. 19
63. If the point (x,2) is equidistant from (8,-2) and (2,-2), find the value of x.
 a) 3 b) 4 c) 5 d) 6

64. If the range and co-domain of a function are equal, then the function is called
 a) onto b) one-to one c) into d) None
65. If 120% of 'a' is equal to 80% of 'b', which of the following is equal to $a+b$?
 a) $1.5a$ b) $2a$ c) $2.5a$ d) $3a$
66. If $a - b = 1$, $b - c = 2$ and $c - a = d$, what is the value of d ?
 a) -3 b) -1 c) 1 d) 3
67. From 1980 to 1990, Michael's weight increased by 25%. If his weight was 80 kilograms in 1990. What was it in 1980?
 a) $1.75W$ b) $1.25 W$ c) $1.20W$ d) $0.80 W$
68. The average of 10 numbers is -10 . If the sum of six of them is 100, what is the average of the other four?
 a) -100 b) -50 c) 0 d) 50
69. What is the largest prime factor of 255?
 a) 5 b) 15 c) 17 d) 51
70. If 120% of a is equal to 80% of b , which of the following is equal to $a+b$?
 a) $1.5a$ b) $2a$ c) $2.5a$ d) $3a$
71. Father is 5 times the son. In 5 years time he will be thrice as much as his son. Find the son age
 a) 6 b) 5 c) 8 d) 10
72. When an article is sold for Rs. 2,000 there is a loss of 10%. To earn a gain of 10% the article must be sold for
 a) Rs. 2444.44 b) Rs. 2420 c) Rs. 300 d) Rs. 60
73. The simple interest on Rs. 600 at 6% for six month is
 a) Rs. 218 b) Rs. 21.80 c) Rs. 35 d) Rs. 18
74. In sum of Rs. 5000 became Rs. 6000 in 3 years at a certain te of compound interest, what will the sum be in 6 years
 a) Rs. 7200 b) Rs.1100 c) Rs. 7000 d) Rs. 6600
75. Salary was first increased by 10% and then decreased by 10%. What is the total percentage change in salary?
 a) 2.2% b) 1.5% c) 1% d) 3%

NEPALI [25 Marks] 2082 (3)

76. 'नन्दन' शब्दको अर्थ के हो ?
क) शत्रुता ख) स्वर्गको बगैँचा ग) वास्ना घ) आकर्षक
77. 'घरभंगडा' कुन विषय वस्तुमा आधारित कथा हो ?
क) वर्णनात्मक ख) भावनात्मक
ग) ऐतिहासिक घ) व्यङ्ग्यात्मक
78. 'उज्यालो यात्रा' कवितामा प्रयोग गरिएको छन्द कुन हो ?
क) लोक ख) अनुष्टुप ग) शिखरिणी घ) मन्दाक्रान्ता
79. 'तिलान्जली' शब्दको अर्थ के हो?
क) दया ख) प्रेम ग) त्याग घ) कविता
80. मनोवादमा कुन कथन शैली उपयोग गरिएको छ ?
क) प्रथम पुरुष ख) द्वितीय पुरुष ग) तृतीय पुरुष घ) कुनै पनि होइन
81. संसारको सबैभन्दा महँगोमा बिक्री भएको चित्र 'वुमन अफ अल्लिजयर्स'
कति मिलियन डलरमा बिक्री भएको थियो ?
क) १८० मिलियन डलर ख) १६० मिलियन डलर
ग) १५० डलर घ) १७० डलर
82. 'घरको माथि चरा छ।' वाक्यमा 'माथि' कुन पदवर्गमा पर्छ ?
क) नाम ख) विशेषण ग) सर्वनाम घ) क्रियाविशेषण
83. 'मनसाय' शब्दको पर्यायवाची शब्द कुन हो ?
क) कागज ख) कपडा ग) भण्डा घ) विचार
84. 'मेरो भाइ बजार गयो।' वाक्यमा विधेय पद कुन हो ?
क) मेरो ख) गयो ग) क घ) बजार
85. 'ऊ पोखरीमा खस्यो।' वाक्यमा 'पोखरीमा' कुन कारक हो ?
क) करण ख) अपादान ग) अधिकरण घ) कर्म
86. 'मेरो छोरो किनमेल गर्न बजार गयो।' वाक्यमा उद्देश्य पद कुन हो ?
क) मेरो ख) गयो ग) छोरो घ) बजार
87. 'म विद्यालय जान्छु।' वाक्य कुन प्रकारको हो ?
क) सामान्यार्थक ख) इच्छार्थक ग) आज्ञार्थक घ) सङ्केतार्थक
88. 'कानमा तेल हाल्नु' शब्दको अर्थ के हो?
क) चुप लागेर बस्नु ख) अजर ग) निरोगी घ) दीर्घजीवी
89. 'तलका मध्ये कुन अनेकार्थी शब्द होइन ?
क) कर ख) तर ग) भात घ) रस

90. डाक्टर दम्पतीले कस्तो कामदारको अपेक्षा गरेका थिए ?
 क) इमान्दारीका साथ काम गरिदिने ख) ठग
 ग) दयालु घ) कामको विचार नगर्ने
91. 'आधुनिक' शब्दको विग्रह के हो ?
 क) अधुना+ ईक ख) आध + इक
 ग) अधुना + इक घ) आधा + ईक
92. 'सीता आई ।' वाक्यमा 'सीता' कुन पदवर्गमा पर्छ ?
 क) नाम ख) विशेषण ग) सर्वनाम घ) क्रियाविशेषण
93. 'सरसहयोग' शब्द कुन समास हो?
 क) द्वित्व ख) बहुव्रीही ग) कर्मधार्य घ) कुनै पनि होइन्
94. 'दाइले भाइलाई बजार पठाउनु भयो ।' यो कुन वाक्य हो ?
 क) प्रेरणार्थक ख) प्रत्यक्ष कथन ग) अकरण वाक्य घ) मिश्र वाक्य
95. 'गाउँमाथि एउटा कविता' का लेखक को हुन् ?
 क) रामप्रसाद ज्ञवाली ख) दिनेश अधिकारी
 ग) लक्ष्मीप्रसाद देवकोटा घ) भुपिन
96. 'घरको माया' एकाङ्कीमा सबैभन्दा बढी माया कस्को हुनुपर्छ भनिएको छ ?
 क) आमाको ख) बाबाको ग) राष्ट्रको घ) साथीको
97. 'तिमी राम्रो काम गर ।' वाक्य कुन प्रकारको हो ?
 क) सामान्यार्थक ख) इच्छार्थक ग) आज्ञार्थक घ) अभ्यस्त
98. सन्दुक रुइतकी बहिनीको निधन कुन रोगबाट भयो ?
 क) क्षयरोग ख) भाडापखला ग) दादुरा घ) ठेउला
99. सन्दुक रुइतका कति सन्तान छन् ?
 क) चार ख) तीन ग) पाँच घ) एक
100. 'शत्रु' कथाका प्रमुख पात्र को हुन् ?
 क) रामे ख) कृष्ण राय ग) व्यापारी घ) साहु

Model Question for Entrance Examination-2082-4
Faculties of Management/Humanities/Law

Time: 2 Hrs Full Marks: 100 Pass Marks: 40

Choose the best option and cross-mark the right box available in the answer sheet.

ENGLISH [45 Marks]

1. She not only gave us a fine dinner drove us back home.
(a) but (b) but also (c) also (d) as
2. there is no demand for this type of book, I cannot place an order.
(a) Since (b) As (c) Because of (d) Both a and b
3. If you spoke less and listened more, you _____ more aware of what people really felt.
(a) are being (b) would be (c) be (d) being
4. The laptop was on but nobody it.
(a) is using (b) was using
(c) has been using (d) had been using
5. She _____ visit her grandparents' house during holidays.
(a) dare to (b) ought to (c) can (d) might
6. If I get the required assistance, I _____ pass the exam in the first attempt.
(a) will (b) can not (c) might (d) could
7. He _____ be shy during his college days.
(a) used to (b) need to (c) ought to (d) could
8. The correct passive form of "Can you accomplish it now?"
(a) Can it been accomplished by you now?
(b) Could it being accomplished by you now?
(c) Can it be accomplished by you now?
(d) Could it be accomplished by you now?
9. If you _____ lied to me before, I would have _____ you today.
(a) have- trusted (b) hadn't- believe
(c) hadn't- believed (d) hasn't- not believed

10. The correct passive form of “Let her write an inspirational story.”
 (a) Let an inspirational story been written by her.
 (b) Let an inspirational story written her.
 (c) Let an inspirational story be written by her.
 (d) Let an inspirational story being written by her.
11. Choose the correct antonym of the Heterogeneous:
 (a) Colourful (b) Different (c) Similar (d) Homogeneous
12. She made her boyfriend an iPhone.
 (a) bought (b) buy (c) to buy (d) buying
13. Shall I got her office dress?
 (a) washed (b) wash (c) to wash (d) washing
14. Donald Trump..... in the White House.
 (a) has been living (b) used to live
 (c) lives (d) is living
15. Choose the correct antonym of Transmit.
 (a) Televisе (b) Withhold (c) Reply (d) Show
16. He has justin the store. He has to purchase lots of groceries.
 (a) arrived (b) been (c) went (d) go
17. The minister will be going abroad the end of this month.
 (a) by (b) in (c) on (d) at
18. If we _____ an office in Tokyo, we'd both _____.
 (a) open - benefited (b) opened – benefited
 (c) opened – be benefited (d) Show
19. Everyone being acknowledged for their smart attempts.
 (a) prefer (b) prefers
 (c) is preferring (d) are preferred
20. Parshuram struggled very hard to be MLA in the last election.
 (a) the (b) a (c) an (d) no article
21. Find the meaning of the idiom “Let the grass grow under one’s feet”
 (a) To remain idle (b) To be trifled with
 (c) To engage in useless talk (d) To accept responsibility

22. If you did your documentation electronically, you _____ paper.
 (a) were saved (b) saved
 (c) would save (d) would have saved article
23. He said to the teacher, 'May I ask a question?'
 (a) He said to the teacher that he may ask a question.
 (b) He asks to the teacher that may he ask question.
 (c) He asked the teacher if he might ask a question.
 (d) He asked to the teacher that he might be ask a question.
24. Find the meaning of the idiom "To get in hot water"
 (a) to be in a confused state of mind
 (b) to be so impatient as to take bath with hot water before it gets cool
 (c) to enter waters heated by the sun
 (d) to get into trouble
25.is the synonym of "DELICATE".
 (a) Sturdy (b) Fragile (c) Tough (d) Fragment
26.is the synonym for "MEMORANDUM".
 (a) Momentum (b) Massive (c) Extensive (d) Directive
27. Identify the meaning of the idiom 'Shedding Crocodile tears'
 (a) be in trouble (b) insincere display of emotions
 (c) be nervous (d) find the hidden meaning
28. A leader says, "A country cannot be peaceful until good education is provided to each child."
 (a) A leader says that a country could not be peaceful until good education is provided to each child.
 (b) A leader says that a country cannot been peaceful until good education was provided to each child.
 (c) A leader says that a country cannot peaceful until good education will be provided to each child.
 (d) A leader says that a country cannot be peaceful until good education is provided to each child.
29. Nancy and I [5%] _____ go out for group studies together.
 (a) never (b) frequently (c) occasionally (d) rarely
30. The correct reported speech of -I said to him, "Why are you working so hard?"
 (a) I asked him why he was working so hard.
 (b) I asked him why was he working so hard.
 (c) I asked him why had he been working so hard.

- (d) I asked him why he had been working so hard.
31. Guess the meaning of the idiom “The inspector was caught red handed.”
- (a) found with hands tied
 (b) caught with red hands
 (c) caught in the act of committing the crime
 (d) quickly
32. We should read ___ Bhagavad Gita.
- (a) a (b) an (c) the (d) None of above
33. _____ President of the United States will be visiting Australia next week.
- (a) a (b) an (c) the (d) None
34. Sudha had a maid servant _____ the kitchen.
- (a) to clean (b) cleaning (c) clean (d) cleaned
35. _____ President of the United States will be visiting Australia next week.
- (a) a (b) an (c) the (d) None
36. The correct passivization of “They have informed me, about their late arrival.”
- (a) I have informed by them, about their late arrival.
 (b) I had informed by them, about their late arrival.
 (c) I have been informed by them, about their late arrival.
 (d) I had been informed by them, about their late arrival.
37. Amit got his Ipad _____ at the service center.
- (a) to repair (b) repaired (c) to be repaired (d) repairing
38. The teacher _____ the students _____ on the bench as they had come without home-work.
- (a) makes, standing (b) made, stand
 (c) made, standing (d) make, stood
39. Father divided his propertyfour sons.
- (a) between (b) among (c) of (d) in
40. I have a pen to write.....
- (a) with (b) to (c) by (d) no preposition
41. I’ve justto the shops. I’ve to shop lots of things.
- (a) arrived (b) been (c) went (d) go
42. I will be going away the end of this week.
- (a) by (b) in (c) on (d) at

43. Everyone being appreciated for their attempts.
 (a) prefer (b) prefers (c) is preferring (d) are preferred
44. Her mother struggled very hard to beMP in the last election.
 (a) the (b) a (c) an (d) no article
45. If you printed on both sides, you _____ paper.
 (a) were saved (b) saved
 (c) would save (d) would have saved

MATHEMATICS [30 Marks]

46. $\sin 3A = \frac{\sqrt{3}}{2}$, the value of $\sin 3A$ is
 (a) $\frac{1}{2}$ (b) 0 (c) 1 (d) $\frac{\sqrt{3}}{2}$
47. $\tan \theta = \cot \theta$ when the value of θ is
 (a) 0° (b) 30° (c) 45° (d) 90°
48. The value of $\vec{a} \cdot \vec{b}$ when $\vec{a} = \begin{pmatrix} 3 \\ 2 \end{pmatrix}$, $\vec{b} = \begin{pmatrix} -2 \\ 3 \end{pmatrix}$ is
 (a) 0 (b) 12 (c) -12 (d) 10
49. When Standard Deviation = 10, mean = 40, then the coefficient of variation is
 (a) 40% (b) 25% (c) 50% (d) 100%
50. If $f(x) = 2x$ and $g(x) = 3x + 2$, the value of $f \circ g(1)$ is
 (a) 20 (b) 15 (c) 5 (d) 10
51. The sum of two numbers is 40 and difference is 10. Find the ratio of two numbers.
 a) 5:4 (b) 5:3 (c) 3:2 (d) 2:5
52. Matrix $\begin{pmatrix} -1 & 0 \\ 0 & 1 \end{pmatrix}$ is associated with
 (a) reflection of $x = y$ (b) reflection on $x - axis$
 (c) reflection on line $x = 0$ (d) reflection on $y = 1$

53. Slope of line $px + qy + c = 0$ is
 (a) $\frac{p}{q}$ (b) $\frac{q}{p}$ (c) $-\frac{p}{q}$ (d) $-\frac{q}{p}$
54. If the third term of A.P. is 3, sum of first five terms is
 (a) 8 (b) 12 (c) 15 (d) 18
55. If $\cos A = \frac{1}{2}$ and $\cos B = \frac{\sqrt{3}}{2}$, the value of $\cos (A + B)$ is
 (a) 0 (b) 1 (c) $\frac{1}{\sqrt{2}}$ (d) -1
56. If $n(A) = 11$, $n(B) = 20$, what is the possible maximum value of $n(A \cap B)$?
 (a) 0 (b) 11 (c) 18 (d) 29
57. The interest compounded semi-annually on Rs. P for T years at R% p.a. is
 (a) $P \left[\left(1 + \frac{R}{100} \right)^T - 1 \right]$ (b) $P \left[\left(1 + \frac{R}{200} \right)^{2T} - 1 \right]$
 (c) $P \left[\left(1 + \frac{R}{200} \right)^T - 1 \right]$ (d) $P \left[\left(1 + \frac{R}{100} \right)^{2T} - 1 \right]$
58. Ganesh bought a mobile for Rs. 40,000 last year but this year its value has been depreciated to Rs. 37,600. What is the rate of depreciation?
 (a) 5% (b) 6% (c) 7% (d) 10%
59. The exchange rate of 1 Euro is NPR 130.40. What will be the new rate if the Nepali currency is devaluated by 5% in comparison to Euro?
 (a) NPR 123.88 (b) NPR 117.36
 (c) NPR 143.44 (d) NPR 136.92
60. The relationship among the radius a, height h and slant height l in a cone is?
 (a) $a^2 + h^2 = l^2$ (b) $a^2 - h^2 = l^2$
 (c) $h^2 - a^2 = l^2$ (d) $l^2 + a^2 = h^2$
61. The last mean or nth mean (g_n) of a G.P. is given by
 (a) ar^n (b) br (c) ar^{n-1} (d) Both (a) and (b)

62. In a two digit number, the sum of digits is 5 & the product of the digits is 6, the number is
 (a) 56 (b) 32 (c) 23 (d) Both (b) and (c)
63. What value of x makes the expression $\frac{x^2 - 4}{x^2 - 8x + 12}$ undefined?
 (a) 2 (b) 6 (c) 4, 6 (d) 2, 6
64. The length of sides of a triangle are $\frac{2}{x}$, $\frac{3}{2x}$ & $\frac{1}{x+1}$. The perimeter of the triangle is
 (a) $\frac{7x+9}{2x(x+1)}$ (b) $\frac{7x+10}{2x(x+1)}$
 (c) $\frac{9x+7}{2x(x+1)}$ (d) $\frac{9x+5}{2x(x+1)}$
65. For what value of y the equation $6y - 2$ equals to 1?
 (a) 0 (b) 1 (c) $1/2$ (d) $1/3$
66. Which of the following values of x satisfy the equation $2^{x+1} + 2^x = 24$?
 (a) 1 (b) 2 (c) 3 (d) 4
67. $\triangle ABC$ & $\triangle BCD$ lying between the lines AD & BC have equal area, the relation between AD & BC is
 (a) $AD = BC$ (b) $AD \parallel BC$ (c) $AD \perp BC$ (d) $AD \leq BC$
68. The degree measure of an angle at the centre of a circle is _____ the degree measures of its opposite arc
 (a) equal to (b) half of (c) less than (d) greater than
69. The average which divides the arranged data into two equal parts is
 (a) mean (b) median (c) mode (d) first quartile
70. The first quartile divides the data in the ratio of
 (a) 1 : 2 (b) 1 : 3 (c) 1 : 4 (d) 2 : 3
71. The empirical relationship between mean, median & mode is:
 (a) $\text{Mean} > \text{Median} > \text{Mode}$ (b) $\text{Mean} = \text{Median} = \text{Mode}$
 (c) $\text{Mode} = 3 \text{ Median} - 2 \text{ Mean}$ (d) $\text{Mode} = 3 \text{ Mean} - 2 \text{ Median}$
72. The probability scale of any event E is
 (a) $0 < P(E) < 1$ (b) $1 < P(E) < 0$
 (c) $0 \leq P(E) \leq 1$ (d) $1 \leq P(E) \leq 0$
73. For any event E, $P(E')$ is equal to
 (a) $-P(E)$ (b) $1 - P(E)$ (c) $P(E) - 1$ (d) $P(E)$

74. What is the altitude of the sun when the length of shadow of a vertical pole is equal to its height?
 (a) 30^0 (b) 45^0 (c) 60^0 (d) None of above
75. A tree 18 m high is broken by the wind. So, its top touches the ground. If the length of broken part of the tree is 12 m, the angle made by the top of the tree with the ground is
 (a) 45^0 (b) 30^0 (c) 60^0 (d) 75^0

NEPALI [25 Marks] (4)

76. नाटककार भीमनिधि तिवारीले कुन कृतिका लागि मदन पुरस्कार प्राप्त गरेका थिए ?
 क) देशको माटो ख) घरको माया ग) विस्फोट घ) टीका
77. 'पखोस' निबन्धका लेखक को हुन् ?
 क) भैरव अर्याल ख) बिना थिङ्ग
 ग) भीमनिधि तिवारी घ) मुकुन्दशरण उपाध्याय
78. महान् प्रतिभाशाली कलाकार पिकासोले आफ्नो जीवनकालमा कति पटक अन्तर्राष्ट्रिय लेलिन पुरस्कार पाएका थिए ?
 क) एक पटक ख) दुई पटक ग) तीन पटक
 घ) चार पटक
79. नेपाल सरकारले डाक्टर सन्दुक रुइतलाई उज्ज्वल कीर्तिमय राष्ट्रदीप पुरस्कारले कुन वर्ष सम्मान गरेको थियो ?
 क) वि.सं २०६८ ख) वि.सं २०६९ ग) वि.सं २०७० घ) वि.सं २०७१
80. घरको माया एकाङ्कीको पात्र गाउँभरको छट्टु पोक्चे कसको छोरो हो ?
 क) धामी ख) भौँक्री ग) वैद्य घ) कविराज
81. कर्तव्य कथाका पात्र श्रीधरकी सानी छोरीको नाम के हो ?
 क) समा ख) रमा ग) कमला घ) शशी
82. नेपाली कथा साहित्यमा आधुनिकताको श्रीगणेश गर्ने कृति कुन हो ?
 क) छिमेकी ख) अभागी ग) नासो घ) कर्तव्य
83. 'घरको माया' एकाङ्कीकी पात्र बतासे कसको प्रेमिका हुन् ?
 क) लालबहादुर ख) जमानसिंह ग) कान्छो घ) आमा
84. आयाम कथाकी पात्र आमाले आफ्नो पतिबिना कति वर्ष बिताएकी थिइन् ?
 क) १८ वर्ष ख) २० वर्ष ग) १७ वर्ष घ) १९ वर्ष

85. 'शत्रु' कथाका प्रमुख पात्र कृष्ण रायले कति वर्षदेखि गाउँमा पाइला राखेका थिएनन् ?
 क) ११/१२ ख) १२/१३ ग) १०/१२ घ) १०/११
86. 'घरेलु' शब्दको निर्माण प्रक्रिया कुन सही हो ?
 क) घरे+लु ख) घर +एलु ग) घर +एलु घ) घरे +एलु
87. शब्दकोशको वर्णानुक्रमअनुसार 'ज्ञ' वर्ण कुन वर्णपछि आउँछ ?
 क) त्र ख) ग ग) ज घ) क
88. 'नादानी' शब्दको अर्थ के हो ?
 क) दान नगर्ने ख) दान गर्ने ग) कमजोर घ) अबुझ
89. 'नूतन' को पर्यायवाची शब्द कुन हो ?
 क) पुरातन ख) सनातन ग) प्राचीन घ) नवीन
90. तलका मध्ये कुन द्वित्व प्रक्रियाबाट बनेको शब्द हो ?
 क) अभ्युदय ख) ऐँचोपैँचो ग) सुटुक्क घ) बोलक्कड
91. 'उनीहरू विद्यालय गएछन्।' यो वाक्य भूतकालको कुन पक्षको हो ?
 क) अज्ञात भूत ख) पूर्ण भूत ग) सामान्य भूत घ) अभ्यस्त भूत
92. 'तिमीहरू घर गयो।' यस वाक्यलाई तृतीय पुरुषमा परिवर्तन गर्दा कुन ठिक हुन्छ ?
 क) ऊ घर गयो। ख) उनी घर गए।
 ग) उनीहरू घर गए। घ) उनी घर गइन्।
93. 'अनुज' को पर्यायवाची शब्द कुन हो ?
 क) आमा ख) भाइ ग) दाजु घ) पिता
94. 'म पोखरा जान्छु।' यस वाक्यको भाववाच्य कुन ठिक हुन्छ ?
 क) मद्वारा पोखरा गइन्छ। ख) आफूद्वारा पोखरा गइन्छ।
 ग) आफू पोखरा गइन्छ। घ) म पोखरा गइन्छ।
95. 'ऊ भापा गयो।' यस वाक्यको स्त्रीलिङ्ग कुन ठिक हो ?
 क) उनी भापा गए। ख) उनी भापा गई।
 ग) ऊ भापा गई। घ) उनी भापा गइन्।
96. तलका मध्ये कुन समस्त शब्द हो ?
 क) कवीन्द्र ख) दोबाटो ग) मायालु घ) घरघर
97. 'आमाले थालमा खाना पस्कनुभयो।' यस वाक्यमा थालमा कुन कारक हा?
 क) अधिकरण ख) करण ग) सम्प्रदान घ) कुनै पनि होइन

98. 'गरिबलाई राज्यले विशेष ध्यान दिनुपर्छ।' यस वाक्यमा प्रयोग भएको गरिब शब्दले कुन पदवर्गलाई बुझाउँछ ?
क) विशेषण ख) नाम ग) क्रियायोगी घ) सर्वनाम
99. महाकवि लक्ष्मीप्रसाद देवकोटाले एकै रातमा लेखेको खण्डकाव्य कुन हो?
क) मुनामदन ख) लुनी
ग) कुञ्जिनी घ) राजकुमार प्रभाकर
100. तलका मध्ये कुन आगन्तुक शब्द होइन ?
क) पसल ख) पटुका ग) कानुन घ) अश्रु

All the Best

Model Question for Entrance Examination-2082- 5

Faculties of Management/Humanities/Law

Time: 2 Hrs

Full Marks: 100

Pass Marks: 40

Choose the best option and cross-mark the right box available in the answer sheet.

ENGLISH [45 Marks]

1. What is the passive form of the sentence "She painted a wall during summer"?
 - a) A wall was painted during summer by her.
 - b) A wall had been painted during summer by her.
 - c) A wall has been painted during summer by her.
 - d) A wall is painted during summer by her.
2. Which sentence is in the passive voice?
 - a) She has been painting the wall by herself.
 - b) The project will be finished by tomorrow.
 - c) He had completed the task by noon.
 - d) He will have learnt to drive a car by this month
3. Choose the correct passive form of the sentence: "The coach will train the team."
 - a) The team was trained by the coach.
 - b) The team will be trained by the coach.
 - c) The team will have been trained by the coach.
 - d) The team is trained by the coach.
4. Which option correctly transforms the sentence into passive voice: "Rahul will submit the report tomorrow"?
 - a) The report is submitted by Rahul tomorrow.
 - b) The report will be submitted by Rahul tomorrow.
 - c) The report will have been submitted by Rahul tomorrow.
 - d) The report submits by Rahul tomorrow.

5. What is the indirect speech of "Supriya said, 'I am preparing for the exam'"?
 - a) Supriya said that she is preparing for the exam.
 - b) Supriya said that she was preparing for the exam.
 - c) Supriya said that she will prepare for the exam.
 - d) Supriya said that she has prepared for the exam.
6. Choose the correct indirect speech of "Suman said, 'I have completed my project.'"
 - a) Suman said that she had completed her project.
 - b) Suman said that she has completed her project.
 - c) Suman said that she completes her project.
 - d) Suman said that she will complete her project.
7. Which sentence correctly represents the indirect speech of "They said, 'We are watching a movie tonight'"?
 - a) They said that they were watching a movie tonight.
 - b) They said that they will watch a movie tonight.
 - c) They said that they are watching a movie tonight.
 - d) They said that they would watch a movie tonight.
8. Which sentence contains a causative verb?
 - a) She writes poems in her free time.
 - b) They had the mechanic repair their car.
 - c) We swam in the pool all afternoon.
 - d) The baby giggled at the funny faces.
9. Which option demonstrates the correct use of a causative verb?
 - a) She lets her brother borrow her bicycle.
 - b) He got his car washed at the new service station.
 - c) They watched a movie last night.
 - d) The flowers bloomed beautifully in the garden.
10. Choose the sentence with a causative verb
 - a) Snow covers the mountains in winter.
 - b) The teacher had the students rewrite their essays.
 - c) Dolphins swim gracefully in the ocean.
 - d) We enjoy hiking on weekends.
11. What sentence uses a causative verb?
 - a) She bakes cookies every weekend.
 - b) He made his brother clean the room.
 - c) They swam in the lake yesterday.
 - d) The dog barked at the mailman.

12. Which modal auxiliary verb is used to express past ability or permission?
 a) Could b) May c) Will d) Must
13. Which modal auxiliary verb is used to express polite requests or offers?
 a) Shall b) Can c) Would d) Should
14. Which modal auxiliary verb is used to express advice or recommendation?
 a) Will b) Should c) Could d) Shall
15. Which sentence represents the third conditional tense?
 a) If Chunika practices daily, she will improve her singing.
 b) If Chunika had taken the job, she would have moved abroad.
 c) If Chunika calls me, I will answer immediately.
 d) If Chunika feels tired, she should rest.
16. What is an example of the zero conditional tense?
 a) If Shuvam had studied more, he would have scored higher.
 b) If Shuvam heats ice, it melts.
 c) If Shuvam comes early, we will go for coffee.
 d) If Shuvam were rich, he would travel the world.
17. Which sentence uses the first conditional tense?
 a) If she practices daily, she improves her skills.
 b) If he had left on time, he would have caught the train.
 c) If they invite us, we will attend the party.
 d) If I were you, I would take that job.
18. What represents the second conditional tense?
 a) If it rains, the streets get wet.
 b) If I won the lottery, I would travel the world.
 c) If she had studied, she would have passed.
 d) If he arrives late, we will leave without him.
19. Which word is a synonym for "furious"?
 a) Calm b) Angry c) Peaceful d) Mild
20. Which word is a synonym for "miserable"?
 a) Joyful b) Depressed c) Cheerful d) Happy
21. Which word is most similar in meaning to "exquisite"?
 a) Rough b) Beautiful c) Ordinary d) Flawed"
22. What is the antonym of "ancient"?
 a) Old b) Modern c) Historic d) Aged

23. Which word is an antonym for "Charitable"?
- a) Stingy b) Benevolent c) Liberal d) generous
24. What is the opposite of "optimistic"?
- a) Hopeful b) Pessimistic c) Positive d) Confident
25. What does the idiom "burn the midnight oil" mean?
- a) To stay up late working or studying b) To waste time
c) To light candle d) To have a fire accident
26. What does the idiom "let the cat out of the bag" mean?
- a) To free an animal b) To reveal a hidden truth
c) To lose something important d) To clean up quickly
27. What does the idiom "when pigs fly" mean?
- a) Something is very likely to happen
b) Something will never happen
c) Something is happening right now
d) Something is delayed
28. Which sentence uses the article "an" correctly?
- a) He saw an one-eyed pirate in the movie.
b) She had to get an X-ray after the accident.
c) They adopted an European puppy from the shelter.
d) He wants to become an university professor someday.
29. Which sentence requires no article?
- a) She is a doctor at the hospital.
b) He bought a new phone yesterday.
c) My father is an architect.
d) She became a president of the company.
30. Which sentence uses the correct article?
- a) He is studying to be the engineer.
b) They traveled to the Japan last year.
c) They visited the Eiffel Tower last summer
d) She is studying at an university in London"
31. Which preposition correctly completes the sentence: "He is jealous ___ his brother's success"?
- a) of b) about c) with d) at
32. What preposition should be used in the sentence: "He apologized ___ being late"?
- a) for b) about c) on d) at
33. Choose the correct preposition: "She is afraid ___ spiders"?
- a) of b) at c) by d) with

34. Which question corresponds to the statement: "They are going to the concert tonight."?
- Are they going to the concert tonight?
 - Do they go to the concert tonight?
 - Did they go to the concert tonight?
 - Will they go to the concert tonight?
35. What is the correct question form of the statement: "You should check the weather before leaving."?
- Should you check the weather before leaving?
 - Do you check the weather before leaving?
 - Are you checking the weather before leaving?
 - Did you check the weather before leaving?
36. What is the correct question form of: "He will visit his parents tomorrow."?
- Will he visit his parents tomorrow?
 - Is he visiting his parents tomorrow?
 - Did he visit his parents tomorrow?
 - Was he visiting his parents tomorrow?
37. You have had a long journey. You be tired.
- May
 - Might
 - Must
 - Can't
38. Which of the following words contains a prefix?
- Disagree
 - Faster
 - Playing
 - Orange
39. Which prefix means "before" or "in advance"?
- Mis-
 - Pre-
 - Sub-
 - Anti-
40. Which of the following words does NOT contain a prefix?
- Unhappy
 - Return
 - Begin
 - Overcook
41. Which suffix means "full of" or "having the quality of"?
- ness
 - ful
 - er
 - tion
42. Read the short text and tick the best answer given below. (4)
- Wisdom: The Light of the Mind
- Wisdom, often regarded as the guiding light of human thought, plays a crucial role in shaping meaningful and balanced lives. Unlike knowledge, which is the accumulation of facts, wisdom involves deep understanding, sound judgment, and the ability to apply experience thoughtfully. Throughout history, wise individuals—philosophers, leaders, and elders—have helped societies navigate complex challenges by offering insight and perspective. However, in the modern world, the pursuit of instant

gratification and superficial information often overshadows the value of true wisdom. Cultivating wisdom requires patience, reflection, and a willingness to learn from both successes and failures.

42. What is the key difference between wisdom and knowledge according to the passage?
- a) Wisdom is faster to acquire than knowledge.
 - b) Wisdom involves deep understanding and judgment, while knowledge is just facts.
 - c) Wisdom is only gained through formal education.
 - d) Knowledge is more important than wisdom.
43. Which of the following is mentioned as a challenge to cultivating wisdom in the modern world?
- a) Lack of access to information
 - b) The pursuit of instant gratification
 - c) Too many wise leaders
 - d) Excessive focus on deep learning
44. According to the passage, what does wisdom require for its development?
- a) Memorizing large amounts of data
 - b) Patience, reflection, and learning from experience
 - c) Avoiding mistakes at all costs
 - d) Relying only on academic studies
45. What role have wise individuals played throughout history?
- a) They have focused only on personal success.
 - b) They have helped societies navigate challenges with insight.
 - c) They have discouraged learning from failures.
 - d) They have replaced the need for knowledge.

MATHEMATICS [30 Marks]

46. If $f(x) = (x+1)/(x-1)$, $x \neq 1$, then $(ff)(x) =$
- a) $(x-1)/(x+1)$
 - b) $1/x$
 - c) x
 - d) none
47. The quadratic equation having roots 2 and 3 is
- a) $x^2 - 5x + 6$
 - b) $x^2 + 5x + 6$
 - c) $x^2 + 5x - 6$
 - d) $x^2 - 5x - 6$

48. Orders of matrices A and B are $m \times n$ and $n \times p$. Which of the following statements is not true?
 a) AB is defined b) BA is defined
 c) order of AB is $m \times p$ d) $A + B$ is not defined
49. Angle between the lines represented by $x^2 - 2xy \cot\theta - y^2 = 0$ is
 a) 30° b) 45° c) 60° d) 90°
50. Find the value of K in order that the point (K, 1), (5, 5) and (10, 7) may be collinear.
 a) -3 b) -4 c) -6 d) -5
51. If 80% of the adult population of a village is registered to vote, and 60% of those registered actually voted in a particular election, what percent of the adults in the village did not vote in that election?
 a) 40% b) 48% c) 50% d) 52%
52. If $\frac{3}{4}$ of a number is 7 more than $\frac{1}{5}$ of the number, what is the number?
 a) 20 b) 12 c) 18 d) 15
53. A shopkeeper fixed the marked price of his television to make a profit of 40%. Allowing 20% discount on the marked price of the television was sold, what percent profit will be made?
 a) 10% b) 12% c) 15% d) 11%
54. Value of x in $x - 2 = \sqrt{x}$ is
 a) 1 or 4 b) 1 only c) 4 only d) none
55. There are 3 red, 2 blue and 5 white balls in a box. A ball is taken out randomly. What is the probability of a ball being blue or white?
 a) $\frac{7}{10}$ b) $\frac{3}{10}$ c) $\frac{2}{7}$ d) $\frac{5}{7}$
56. An ant moves 4.4cm per second. How long will it take to go round a circular dish of radius 21cm?
 a) 30 sec b) 45sec c) 1minute d) $\frac{3}{2}$ minute
57. Simplify $4\sqrt{28} - \sqrt{63}$
 a) $8\sqrt{7}$ b) $7\sqrt{7}$ c) $6\sqrt{7}$ d) $5\sqrt{7}$

58. Find the compound interest on Rs. 50,000 invested for 2 years at rate of 4% per annum
 a) Rs. 4050 b) Rs. 4080 c) Rs. 4025 d) Rs. 4045
59. If the price of petrol oil increases by 25% by how much percent should a consumer reduce his consumption of petrol to maintain his previous expenditure?
 a) 0% b) 20% c) 25% d) 1%
60. What is the relation between the central angle with the angle at the circumference standing on the same arc?
 a) equal b) double c) three times d) four times
61. Given that 176 dollars = £100 and £1 = Rs. 119. Find in dollars for Rs. 8925
 a) \$122 b) \$132 c) \$134 d) \$140
62. $(x^p)(x^q)(x^r) = x^s$. Find s in terms of p, q & r.
 a) $r + p + q$ b) rpq c) $r - q - p$ d) none
63. The two ends of a diameter are (-4,1) and (2,1). Find area of the circle
 a) 3π b) 9π c) 6π d) 36π
64. After paying an income tax of 5% a man has Rs. 7600 left. What is his income?
 a) Rs.800 b) Rs. 8000 c) Rs.4000 d) Rs.16000
65. If $5x + 13 = 31$. Find $\sqrt{5x + 31}$
 a) 7 b) $\sqrt{173/5}$ c) 15 d) $\sqrt{13}$
66. The price of 50 books is Rs. 4000. If the price is increased by 25%, what will be the price of 36 books?
 a) 3500 b) 2500 c) 3600 d) 4000
67. $12p + 3q = 1$ and $7q - 2p = 9$. What is the average of p and q?
 a) 0.1 b) 1 c) 0.5 d) 2.5
68. If $x - y = 5$, and $xy = 6$. Find the value of $x^3 - y^3$
 a) 219 b) 129 c) 215 d) 228
69. If $ab + bc + ca = 0$, $x^a \cdot x^b \cdot x^c = ?$
 a) 1 b) x^{a+b+c} c) 0 d) x
70. What percentage of 1 km 20m is 720m?
 a) 71% b) 70.58% c) 70% d) 85%

71. $x(x - 3) = x$, then $x =$
 a) 0, -4 b) 0, 4 c) -4, 4 d) 0, 3
72. $ax + b^2 = a^2 + bx$, then solve for x
 a) $a^2 - b^2$ b) $a + b$ c) $a - b$ d) 1
73. If the replacement set of the set of $5x - 1 \leq 9$ is $\{-2, -1, 0, 1, 2, 3, 4\}$. Find the solution
 a) $\{-2, -1, 0\}$ b) $\{-2, -1, 0, 1\}$
 c) $\{2\}$ d) $\{-2, -1, 0, 1, 2\}$
74. The locus of the point whose abscissa and ordinate are always equal is
 a) $x + y = 0$ b) $x - y = 0$ c) $x + y = 1$ d) $x - y = 1$
75. The point of intersection of perpendicular bisectors of the sides of a triangle is known as
 a) centre b) incentre c) orthocenter d) circumcenter

NEPALI [25 Marks]

76. इच्छार्थको क्रियापदमा यदि तिमी भए धातु पछाडि कुन प्रत्यय लाग्छ ?
 क) ओस् ख) एस् ग) औँ घ) ए
77. पदवर्ग कतिओटा हुन्छन् ?
 क) छ ख) सात ग) आठ घ) नौ
78. 'तिमी घरमा जाऊ ।' वाक्यमा घर कुन पदवर्गमा पर्छ ?
 क) विशेषण ख) नाम ग) क्रियाविशेषण घ) क्रियापद
79. संयुक्त वाक्यमा प्रयोग हुने संयोजक कुन हो ?
 क) अनि ख) भने ग) भन्ने घ) जब-तब
80. कपालको समूहवाची शब्द कुन हो ?
 क) लप्को ख) विटो ग) मुस्लो घ) गुजुल्टो
81. 'आकाशको फल आँखा तरी मर' उखानको अर्थ कुन हो ?
 क) असम्भव कुरामा हात हाल्नु ख) सहयोग दुईतर्फि हुनुपर्छ
 ग) भएपछि फाइदा, नभएमा घाटा हुँदैन
 घ) काम कम गरे पनि गफचाहिँ धेरै गर्नु
82. 'फत्ते गर्नु' टुक्काको अर्थ कुन हो ?
 क) पूरा गर्नु ख) इज्जत फाल्नु ग) चोर्नु घ) सुरु गर्नु
83. क्रियाको अर्थ वा भाव कति प्रकारका हुन्छन् ?
 क) पाँच ख) चार ग) तीन घ) दुई

84. 'मैले दिएको चामल माग्नेले भोलामा राख्यो ।' भन्ने वाक्यमा भोलामा कुन कारक हो ?
 क) कर्ता कारक ख) अधिकरण कारक ग) कर्म कारक घ) सम्प्रदान कारक
85. 'भापामा बस्ने रोहन धेरै पढेर आउँछ ।' भन्ने वाक्यमा विधेय कुन हो ?
 क) भापा ख) रोहन ग) पढेर घ) आउँछ
86. सन्दुक रुइतले कति सालमा विवाह गरे ?
 क) वि. सं. २०४३ ख) वि. सं. २०४४
 ग) वि. सं. २०४५ घ) वि. सं. २०४२
87. आयाम कथाकी पात्र कमलकी आमाले कति वर्ष एकलो जीवन बिताएकी थिइन् ?
 क) २० वर्ष ख) १९ वर्ष ग) १७ वर्ष घ) ८८ वर्ष
- १३) अभिनव शब्दको अर्थ कुन होइन ?
 क) नयाँ ख) नवीन ग) ताजा घ) अभिनय
89. रणबहादुर शाहको हजुरबुबाको नाम के हो ?
 क) प्रतापसिंह शाह ख) बहादुर शाह
 ग) पृथ्वीनारायण शाह घ) प्रताप मल्ल
90. 'घरको माया' एकाङ्कीमा लेखकको विचार प्रस्तुत गर्ने पात्र को हो ?
 क) कान्छो ख) बतासे ग) लाल घ) जमान
91. खेतको सिमाना छुट्याउन वा पानी अडिने बनाउन चारैतिर केही उठाइएको माटोको ढिललाई के भनिन्छ ?
 क) जाली ख) समाहा ग) आली घ) निकास
92. 'घरको माया' एकाङ्कीको छट्टु पात्र को हो ?
 क) पोक्चे ख) धामी ग) लाल घ) जमान
93. 'घरसर शब्द कुन समास हो ?
 क) द्वित्व ख) बहुव्रीही ग) कर्मधार्य घ) कुनै पनि होइन्
94. 'तिमी घरमा बस ल ।' यो कुन वाक्य हो ?
 क) सामान्यार्थक ख) इच्छार्थक ग) आज्ञार्थक घ) सङ्केतार्थक
95. पानी नलाग्ने खेतबारीमा रोपिने एक किसिमको धानलाई के भनिन्छ ?
 क) साबित्री ख) मन्सुली ग) वार घ) घैया
96. 'सयवर्षको अवधिलाई बुझाउने' पदावलीको सिङ्गो शब्द कुन हो ?
 क) सहस्राब्दी ख) दसक ग) शताब्दी घ) प्राचीन

97. पाब्लो पिकासोको अवसान कहिले भयो ?
क) ६ जुन १९७३ ख) ८ अप्रिल १९७३
ग) ६ मे १९७३ घ) ६ अगष्ट १९७३
98. 'राम घरमा आयो र खाजा खायो ।' वाक्यमा 'र' कुन पदवर्गमा पर्छ ?
क) नाम ख) विशेषण ग) संयोजक घ) क्रियाविशेषण
99. पाब्लो पिकासोकी बहिनीको नाम के हो ?
क) सोन्चिटा ख) कोन्चिटा ग) मोन्चिटा घ) होन्चिटा
100. पाब्लो पिकासोको जन्म कहिले भएको थियो ?
क) सन् १८८१ अक्टोबर २५ ख) सन् १८८२ अक्टोबर २५
ग) सन् १८८३ अक्टोबर २५ घ) सन् १८८१ अक्टोबर २६

❧ Best of Luck ❧

Entrance Model Question -2082 (1)

Answer Key:

1	2	3	4	5	6	7	8	9	10
a	a	a	b	a	c	b	c	b	c
11	12	13	14	15	16	17	18	19	20
b	a	a	d	b	a	b	d	a	a
21	22	23	24	25	26	27	28	29	30
c	c	a	b	b	c	a	c	c	b
31	32	33	34	35	36	37	38	39	40
c	c	c	c	c	a	b	b	d	a
41	42	43	44	45	46	47	48	49	50
b	a	a	d	d	c	a	b	d	d
51	52	53	54	55	56	57	58	59	60
d	b	b	a	a	a	d	b	b	b
61	62	63	64	65	66	67	68	69	70
b	a	b	b	a	c	c	c	b	b
71	72	73	74	75	76	77	78	79	80
b	b	d	b	d	a	क	ख	घ	ग
81	82	83	84	85	86	87	88	89	90
ख	क	ख	घ	क	ख	ख	क	ग	क
91	92	93	94	95	96	97	98	99	100
क	ग	ग	ख	ख	घ	ख	ग	ख	क

Entrance Model Question -2082 (2)

Answer Key:

1	2	3	4	5	6	7	8	9	10
b	b	b	a	c	b	b	b	a	a
11	12	13	14	15	16	17	18	19	20
b	c	b	b	b	a	a	b	b	b
21	22	23	24	25	26	27	28	29	30
b	b	c	b	b	b	c	a	b	c
31	32	33	34	35	36	37	38	39	40
a	b	a	b	b	a	c	b	b	d
41	42	43	44	45	46	47	48	49	50
c	b	c	c	c	a	b	b	b	d
51	52	53	54	55	56	57	58	59	60
b	b	a	d	a	a	c	c	a	a
61	62	63	64	65	66	67	68	69	70
b	c	a	a	c	b	b	a	c	b
71	72	73	74	75	76	77	78	79	80
c	b	b	b	a	घ	क	ख	ग	ख
81	82	83	84	85	86	87	88	89	90
ख	ग	घ	ख	घ	क	ख	ग	ख	ग
91	92	93	94	95	96	97	98	99	100
घ	ख	ग	ग	ख	घ	घ	घ	ख	क

Entrance Model Question -2082 (3)

Answer Key:

1	2	3	4	5	6	7	8	9	10
a	b	a	a	a	a	a	a	b	d
11	12	13	14	15	16	17	18	19	20
b	a	b	c	b	d	a	b	b	b
21	22	23	24	25	26	27	28	29	30
a	b	a	a	b	b	a	a	a	b
31	32	33	34	35	36	37	38	39	40
d	b	a	a	a	a	a	a	a	b
41	42	43	44	45	46	47	48	49	50
b	b	a	a	a	a	c	b	d	a
51	52	53	54	55	56	57	58	59	60
c	c	a	d	b	b	b	d	b	d
61	62	63	64	65	66	67	68	69	70
d	b	c	a	c	a	d	b	c	c
71	72	73	74	75	76	77	78	79	80
b	a	d	a	c	ख	ग	ख	ग	क
81	82	83	84	85	86	87	88	89	90
क	घ	घ	ख	ग	ग	क	क	ग	क
91	92	93	94	95	96	97	98	99	100
ग	क	क	क	ख	ग	ग	क	ख	ख

Entrance Model Question -2082 (4)

Answer Key:

1	2	3	4	5	6	7	8	9	10
b	d	b	b	d	a	a	c	c	c
11	12	13	14	15	16	17	18	19	20
d	b	a	c	b	a	d	c	b	c
21	22	23	24	25	26	27	28	29	30
a	c	c	d	b	d	b	d	d	a
31	32	33	34	35	36	37	38	39	40
c	c	c	a	c	c	b	b	b	d
41	42	43	44	45	46	47	48	49	50
a	d	b	c	c	d	c	a	b	d
51	52	53	54	55	56	57	58	59	60
b	c	c	c	a	b	b	b	a	a
61	62	63	64	65	66	67	68	69	70
a	d	d	c	c	c	b	b	b	b
71	72	73	74	75	76	77	78	79	80
c	c	b	b	b	ग	क	ख	ख	क
81	82	83	84	85	86	87	88	89	90
ख	ग	ख	घ	ग	ख	ग	ग	घ	ख
91	92	93	94	95	96	97	98	99	100
क	ग	ख	ग	ग	ख	क	ख	ग	घ

Entrance Model Question -2082 (5)

Answer Key:

1	2	3	4	5	6	7	8	9	10
a	b	b	b	b	a	a	b	b	b
11	12	13	14	15	16	17	18	19	20
b	a	c	b	b	b	c	b	b	b
21	22	23	24	25	26	27	28	29	30
b	b	a	b	a	b	b	b	d	c
31	32	33	34	35	36	37	38	39	40
a	a	a	a	a	a	c	a	b	c
41	42	43	44	45	46	47	48	49	50
b	b	b	b	b	c	a	b	d	d
51	52	53	54	55	56	57	58	59	60
d	b	b	a	a	a	d	b	b	b
61	62	63	64	65	66	67	68	69	70
b	a	b	b	a	c	c	c	b	b
71	72	73	74	75	76	77	78	79	80
b	b	d	b	d	घ	घ	ग	क	घ
81	82	83	84	85	86	87	88	89	90
क	क	क	ख	घ	क	ख	घ	ग	ख
91	92	93	94	95	96	97	98	99	100
ग	क	क	ग	घ	ग	ख	ग	ख	क