



**Manaslu Aptitude Test (MAT)- 2081
Management(A)**

English

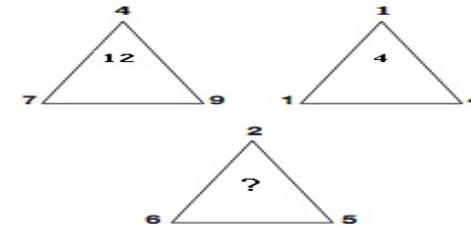
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A. speaks B. speak C. spoken D. is spoken
2. **Ram hardly ever cooks, ...?**
A. isn't he B. he doesn't C. doesn't he D. does he
3. **Please help me.**
A. You were requested to help me. B. You are being requested to help me.
C. You are requested to help me. D. You have been requested to help me.
4. **He said to me, "Where is the post office?"**
A. He wanted to know where the post office is.
B. He asked me that where the post office was.
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5. **Person who does not believe in the existence of God:**
A. Theist B. Heretic C. Atheist D. Fanatic
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A) up B) along C) at D) above
12. **... , Bijaya had already written his first composition.**
A) His age was six B) By the age of six C) He was six D) Six years old

13. **I ... Play football when I was young.**
A) must B) used to C) have to D) should
14. **She ... happy.**
A) Seem B) looks like C) looks D) looks as if
15. **Hemanta, ... was driving, kept his foot pressed hard down on the accelerator.**
A) who B) which C) Whom D) when
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A) generous B) mean C) kind D) serious
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25. **The new protest movement ... a lot of support from students.**
A) is likely to get B) is likely will get
C) will likely get D) will likely to get

General Knowledge

- 26. Which is the largest river in the world?**
 A) Nile B) Amazon C) Karnali D) Sarada
- 27. Who is the founder of "Face book"?**
 A) Larry Page & Sergey Brin B) Mark Elliot Zuckerberg
 C) Chad Hurley, Steve Chen & Jawed Karim D) Steve Jobs
- 28. Which of the following is used in pencils?**
 A) Graphite B) Silicon C) Charcoal D) Phosphorus
- 29. What is the full form of "KFC"?**
 A) Kathmandu Fried Chicken B) Kenya Fried Chicken
 C) Kentucy Fried Chicken D) Korean Fried Chicken
- 30. When was the last federal election conducted in Nepal?**
 A) 4th Mangshir 2078 B) 4th Mangshir 2079
 C) 3rd Bhadra 2079 D) 3rd Ashoj 2079
- 31. The author of "Hamlet" is ?**
 A) Harriet B. Stowe B) Nathaniel Hawthorne
 C) John Fawles D) Shakespear
- 32. Who was the last Malla King Kathmandu?**
 A) Tej Nar Singh Malla B) Pratap Malla
 C) Jaya Prakash Malla D) Ranajit Malla
- 33. What is the full form of "HD video"?**
 A) High Demand video B) High Definition Video
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- 34. Which country hosted FIFA World Cup 2022?**
 A) USA and Mexico B) USA and Canada C) Qatar D) Russia
- 35. Who is the founder of "Google"?**
 A) Larry Page & Sergey Brin B) Mark Elliot Zuckerberg
 C) Chad Hurley, Steve Chen & Jawed Karim D) Bill Gates
- 36. How many hearts does an octopus have?**
 A) 1 B) 2 C) 3 D) 4
- 37. What is the name of the present speaker of the house of representative of Nepal ?**
 A) Dev Raj Ghimire B) Ram Chandra Poudel
 C) Narayan Prasad Dahal D) Agni Prasad Sapkota
- 38. Sandeep Lamichhane belongs to which IPL team in 2019?**
 A) MI B) RCB C) DC D) RR

- 39. The author of "Jeevan Kanda Ki Phool" is**
 A) Parijat B) Manjushree Thapa
 C) Jhamak Kumari Ghimire D) Dev Kumari Thapa
- 40. Fifth generation digital computer will be**
 A) Artificial Intelligence (B) Extremely low cost
 (C) Very expensive (D) Versatility
- 41. Insert the missing number 1, 4, 9, 16, 25, 36, 49, (....)**
 A) 54 B) 56 C) 64 D) 81
- 42. A is two years older than B who is twice as old as C. If the total of the ages of A, B and C be 27, then how old is B?**
 A) 7 B) 8 C) 9 D) 10
- 43. A man buys a watch for Rs. 1950 in cash and sells it for Rs. 2200 at a credit of 1 year. If the rate of interest is 10% per annum, the man:**
 A) gains Rs 55 B) gains Rs. 50 C) loses Rs. 30 D) gains Rs. 30
- 44. Find the odd man out. 41, 43, 47, 53, 61, 71, 73, 81**
 A) 61 B) 71 C) 73 D) 81
- 45. Which number replaces the question mark?**



- A) 5 B) 9 C) 6 D) 13
- 46. The gas promonantly responsible for global warming**
 A) Carbon dioxide B) Carbon monoxide
 C) Nitrous oxide D) Nitrogen Peroxide
- 47. In which year did the Titanic sink?**
 A) 1912 B) 1914 c) 1916 D) 1918
- 48. Who is known as the "Father of the Internet"?**
 A) Edvard Munch B) Vinton Cerf C) Homer D) Jane Austen
- 49. Which planet is known as the "Red Planet"?**
 A) Earth B) Venus C) Mars D) Jupiter
- 50. A Microsoft windows is a(n)**
 A) Operating system B) Graphic program
 B) Word processing D) Database Program

Mathematics

51. When $f(x) = x^5 - 3x^2 + 2x - 1$ is divided by $g(x) = x - 1$ then the remainder is
 A) 0 B) 1 C) -1 D) 2
52. The length & breadth of a rectangle are in the ratio 4:3, Find the perimeter if the area is 108 cm^2 ?
 A) 20 cm B) 40 cm C) 42 cm D) 24 cm
53. Which one is incorrect for the triangles to be congruent?
 A) RHS B) SAS C) ASA D) ASS
54. If $a = 10^x$, $b = 10^y$ & $a^y b^x = 100$, what is the value of xy
 A) 2 B) 1 C) 10 D) 5
55. If $m^2 + \frac{1}{m^2} = 18$ then the value of $m - \frac{1}{m}$ is
 A) 4 B) 5 C) -4 D) both A & C
56. Which one is not measure of central tendency?
 A) Range B) mean C) median D) mode
57. If x is an even integer & y is an odd integer, then which of the following is an even integer?
 A) $x^2 + y$ B) $x^2 - y$ C) $x^2 y$ D) $x + y$
58. A man purchased an article of Rs 25 and sold it at Rs. 20. The % of loss on cost is
 A) 20 B) 25 C) 5 D) 22.5
59. 9 is what percent of 20?
 A) 40% B) 45% C) 50% D) 55%
60. If $3:4 = x:12$, the value of x is
 A) 6 B) 9 C) 7 D) 3
61. Two dice are rolled simultaneously, the probability of getting sum 12 is
 A) $\frac{1}{36}$ B) $\frac{1}{18}$ C) $\frac{1}{12}$ D) $\frac{1}{6}$
62. If A is a matrix of order 3×4 , then how many will there be in each column of A ?
 A) 3 B) 4 C) 12 D) None of them
63. In terms of π , what is the radius of a circle whose perimeter is $2\pi^2 + 2\pi\sqrt{2}$
 A) $2\pi + 2\sqrt{2}$ B) $\pi + 2\sqrt{2}$ C) $\pi - \sqrt{2}$ D) $\pi + \sqrt{2}$
64. The area of a triangle ABC is
 A) $\frac{1}{2} a \sin B \sin C$ B) $\frac{1}{2} a \sin B \cos C$
 C) $\frac{1}{2} ab \sin C$ D) $\frac{1}{2} abc$
65. The possible number of subsets of a Set $A = \{ a, b, c, d \}$ is
 A) 8 B) 12 C) 16 D) 32
66. The total surface area of cylinder is given by
 A) $2\pi rh$ B) $2\pi r(r+h)$ C) $2\pi r^2 h$ D) None of above
67. The cost price be denoted by C.P. & profit percent be denoted by $p\%$ then selling price (S.P) will be
 A) $\frac{100}{100+P} \times SP$ B) $\frac{100+P\%}{100} \times SP$
 C) $\frac{100+P\%}{100} \times CP$ D) $\frac{100}{100+P\%} \times CP$
68. If $\vec{a} = \begin{pmatrix} -2 \\ 1 \end{pmatrix}$ & $3\vec{a} + 2\vec{b} = \begin{pmatrix} -1 \\ -1 \end{pmatrix}$ then \vec{b} is
 A) $\begin{pmatrix} -5/2 \\ 2 \end{pmatrix}$ B) $\begin{pmatrix} 5/2 \\ -2 \end{pmatrix}$ C) $\begin{pmatrix} 5 \\ 2 \end{pmatrix}$ D) $\begin{pmatrix} -5 \\ 2 \end{pmatrix}$
69. The A.M. of 5 items is 30 & the A.M. of another 4 items is 40, the AM of all items taken together is
 A) 35 B) 34 C) 34.44 D) 36.66
70. If A & B are non empty sets such that $n(A \cup B) = n(A) + n(B)$, then
 A) A is subset of B B) B is subset of A
 C) A and B are disjoint sets D) A and B are overlapping
71. In $\triangle ABC$ $AB = 6 \text{ cm}$, $BC = 8 \text{ cm}$ and angle B is 30° then area of $\triangle ABC$ is.....
 A) 12 cm B) 12 sq.cm C) 24 sq.cm D) 48 sq.cm

72. The charge of electricity is Rs 80 for the first 20 units and Rs 6.50 per unit for additional consumption. The total charge for the consumption of 50 units is Rs.....

- A) 50 B) 275 C) 375 D) 405

73. If 4 is subtracted from the square of a number, then the result is 60. The number is.....

- A) -8 B) 0 C) 8 D) -8 or 8

74. A right circular cone is 84 cm high and the radius of its base is 35cm, the area of the curved surface of the cone iscm²

- A) 1001 B) 5005 C) 13860 D) 10010

75. A rectangular box has a length of 8 cm, width of 6 cm, and height of 10 cm. What is the volume of the box?

- A) 4.8 m³ B) 0.48 m³ C) 0.0048 m³ D) 0.00048 m³

नेपाली

प्र.नं. ७६ “सलिल” शब्दको अर्थ तलका मध्ये कुन हो ?

- क) सललख) पानी ग) आगो घ) घाम

प्र.नं. ७७ “दारुण” शब्दको अर्थ तलका मध्ये कुन हो ?

- क) दया ख) करुणा ग) कठोर घ) सफा

प्र.नं. ७८ “व्योम” शब्दको पर्यायवाची शब्द तलका मध्ये कुन हो?

- क) आकाश ख) बादलग) व्यायाम घ) व्याज

प्र.नं. ७९ “आदि” शब्दको विपरीतार्थक शब्द तलका मध्ये कुन हो?

- क) आधा ख) मध्य ग) सुरु घ) अन्त्य

प्र.नं. ८० “दिदीले कुटनुभयो भनेर भाइ रोयो”।यो वाक्यमा भनेर शब्दको पदवर्ग के हो ?

- क) संयोजक ख) क्रियाविशेषण ग) विशेषण घ) क्रियापद

प्र.नं. ८१ भाइले धेरै पढेर आएछ। यो वाक्यमा धेरै शब्दको पदवर्ग तलका मध्ये कुन हो ?

- क) विशेषण ख) क्रियाविशेषण ग) संयोजक घ) नाम

प्र.नं. ८२ “विदेश” शब्द तलका मध्ये कुन निर्माण प्रक्रियाबाट बनेको हो ?

- क) द्वित्व ख) प्रत्यय ग) समास घ) उपसर्ग

प्र.नं. ८३ “मामाघर” कुन निर्माण प्रक्रियाबाट बनेको शब्द हो ?

- क) समास ख) प्रत्यय ग) उपसर्ग घ) द्वित्व

प्र.नं. ८४ तल दिइएका शब्दमध्ये शुद्ध रूप कुन हो?

- क) जिवन ख) जीवन ग) जीवन् घ) जिवन

प्र.नं. ८५ “भाइ चम्चाले खाना खान्छ”। यो वाक्यमा चम्चाले कुन कारक हो?

- क) कर्ता ख) कर्म ग) अधिकरण घ) करण

प्र.नं. ८६ “हामी मनास्लुमा पढ्ने छौं।” यो वाक्य कुन कालको वाक्य हो?

- क) वर्तमान ख) भविष्यत ग) भूत घ) अज्ञात

प्र.नं. ८७ “हामी परीक्षा दिदै छौं।” यो वाक्यमा कालअन्तर्गत कुन पक्षको प्रयोग गरिएको छ ?

- क) पूर्ण ख) सामान्य ग) अपूर्ण घ) अभ्यस्त

प्र.नं. ८८ “म गृहकार्य गर्छु।” यो वाक्यको वाच्य परिवर्तनको शुद्ध रूप कुन हो ?

- क) मद्वारा गृहकार्य गरिन्छन्। ख) मद्वारा गृहकार्य गरिन्थ्यो।

- ग) मद्वारा गृहकार्य गरिदै छ। घ) मद्वारा गृहकार्य गरिन्छ।

प्र.नं. ८९ “विद्यार्थीहरु परीक्षा लेख्दै छन्।” यो वाक्य तलका मध्ये कुन वाक्य हो ?

- क) सरल ख) मिश्र ग) संयुक्त घ) जटिन

प्र.नं. ९० “आज पानी पर्ला।” यो वाक्य तलका मध्ये कुन भाव / अर्थको वाक्य हो ?

- क) सामान्यार्थ ख) सम्भावनार्थ ग) आज्ञार्थ घ) इच्छार्थ

प्र.नं. ९१ बुढी निकै खोक्छिन्, बुढी कुन शब्द वर्गमा पर्छ ?

- क) नाम ख) सर्वनाम ग) विशेषण घ) क्रियापद

प्र.नं. ९२ रमेशले गृहकार्य गरेछ। कुन पक्षका वाक्य हो ?

- क) सामान्य भूत ख) पूर्ण भूत ग) अज्ञात भूत घ) अभ्यस्त भूत

प्र.नं. ९३ उज्यालो यात्रा कविताका लेखक को हुन्?

- क) माधवप्रसाद ज्ञवाली ख) लक्ष्मीप्रसाद देवकोटा

- ग) रामप्रसाद ज्ञवाली घ) गुरुप्रसाद मैनाली

प्र.नं. ९४ लक्ष्मीप्रसाद देवकोटाको मृत्यु कहिले भएको थियो?

- क) वि.सं. २००३ ख) वि.सं. २०१३ ग) वि.सं. २०१६ घ) वि.सं. २०२१

प्र.नं. ९५ सुन्तलाको सानो अंश बुझाउने शब्द कुन हो ?

- क) केस्रो ख) गोडो ग) कोसो घ) घरी

प्र.नं. ९६ अतिदृष्टिको विपरीतार्थी शब्द कुन हो?

- क) खण्डवृष्टि ख) अनावृष्टि ग) दृष्टि घ) वृष्टि

प्र.नं. ९७ तल दिइएको शब्दको शुद्ध रूप कुन हो ?

- क) चिरन्जीवी ख) चीरञ्जीवी ग) चिरञ्जीवी घ) चिरञ्जीवि

प्र.नं. ९८ यो () कुन चिह्न हो ?

- क) योजक चिह्न ख) प्रश्न चिह्न ग) कोष्ठक चिह्न घ) उद्धरण चिह्न

प्र.नं. ९९ शत्रु कथाका लेखक को हुन् ?

- क) बालकृष्ण सम ख) विश्वेश्वर प्रसाद कोइराला

- ग) सिद्धिचरण श्रेष्ठ घ) गुरुप्रसाद मैनाली

प्र.नं. १०० अनिता स्कुल गई। कुन कालको वाक्य हो ?

- क) वर्तमान ख) भविष्य ग) भूत घ) अनिकाल

“ Do your Best ”



**Manaslu Aptitude Test(MAT)– 2081
Management(B)**

English

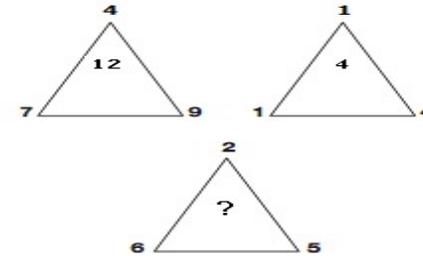
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39. **Which of the following is used in pencils?**
 A. Graphite B. Silicon C. Charcoal D. Phosphorus
40. **When was the last federal election conducted in Nepal?**
 A. 4th Mangshir 2078 B. 4th Mangshir 2079
 C. 3rd Bhadra 2079 D. 3rd Ashoj 2079
41. **Which is the largest river in the world?**
 A. Nile B. Amazon C. Karnali D. Sarada
42. **A Microsoft Windows is a(n)**
 A. Operating system B. Graphic program
 C. Word processing D. Database Program
43. **Which number replaces the question mark?**



- A) 5 B) 9 C) 6 D) 13
44. **Insert the missing number 1, 4, 9, 16, 25, 36, 49, (...)**
 A) 54 B) 56 C) 64 D) 81
45. **Who was the last Malla King of Kathmandu?**
 A) Tej Nar Singh Malla B) Pratap Malla
 C) Jaya Prakash Malla D) Ranajit Malla
46. **Find the odd man out. 41, 43, 47, 53, 61, 71, 73, 81**
 A) 61 B) 71 C) 73 D) 81
47. **In which year did the Titanic sink?**
 A. 1912 B. 1914 C. 1916 D. 1918
48. **What is the full form of "KFC"?**
 A) Kathmandu Fried Chicken B) Kenya Fried Chicken
 C) Kentucky Fried Chicken D) Korean Fried Chicken
49. **Fifth generation digital computer will be**
 A) Artificial Intelligence B) Extremely low cost
 C) Very expensive D) Versatility

50. **If A is two years older than B, and B is twice as old as C, if the total of the ages of a, b, and c is 27, then how old is b?**
 A) 7 B) 8 C) 9 D) 10

Math

51. **If $m^2 + \frac{1}{m^2} = 18$ then the value of $m - \frac{1}{m}$ is**
 A) 4 B) 5 C) -4 D) both A & C
52. **9 is what percent of 20?**
 A) 40% B) 45% C) 50% D) 55%
53. **If $f(x) = x^5 - 3x^2 + 2x - 1$ is divided by $g(x) = x - 1$, then the remainder is**
 A) 0 B) 1 C) -1 D) 2
54. **The total surface area of a cylinder is given by**
 A) $2\pi rh$ B) $2\pi r(r+h)$ C) $2\pi r^2 h$ D) None of above
55. **If $a = 10^x$, $b = 10^y$ & $a^y b^x = 100$, what is the value of xy**
 A) 2 B) 1 C) 10 D) 5
56. **Which one is not a measure of central tendency?**
 A) Range B) Mean C) Median D) Mode
57. **Two dice are rolled simultaneously, the probability of getting sum 12 is**
 A) $\frac{1}{36}$ B) $\frac{1}{18}$ C) $\frac{1}{12}$ D) $\frac{1}{6}$
58. **If A & B are non empty sets such that $n(A \cup B) = n(A) + n(B)$, then**
 A) A is a subset of B B) B is a subset of A
 C) A and B are disjoint sets D) A and B are overlapping
59. **The area of a triangle ABC is**
 A) $\frac{1}{2} a \sin B \sin C$ B) $\frac{1}{2} a \sin B \cos C$ C) $\frac{1}{2} ab \sin C$ D) $\frac{1}{2} abc$
60. **The length & breadth of a rectangle are in the ratio 4:3. Find the perimeter if the area is 108 cm^2 .**
 A) 20 cm B) 40 cm C) 42 cm D) 24 cm
61. **The cost price be denoted by C.P. & profit percent be denoted by p% then selling price (S.P) will be**
 A) $\frac{100}{100+P} \times SP$ B) $\frac{100+P\%}{100} \times SP$

- C) $\frac{100+P\%}{100} \times CP$ D) $\frac{100}{100+P\%} \times CP$
62. **If x is an even integer & y is an odd integer, then which of the following is an even integer?**
 A) $x^2 + y$ B) $x^2 - y$ C) $x^2 y$ D) $x + y$
63. **The possible number of subsets of a Set A = {a, b, c, d} is**
 A) 8 B) 12 C) 16 D) 32
64. **The A.M. of 5 items is 30 & the A.M. of another 4 items is 40, the A.M. of all items taken together is**
 A) 35 B) 34 C) 34.44 D) 36.66
65. **In terms of π , what is the radius of a circle whose perimeter is $2\pi^2 + 2\pi\sqrt{2}$**
 A) $2\pi + 2\sqrt{2}$ B) $\pi + 2\sqrt{2}$ C) $\pi - \sqrt{2}$ D) $\pi + \sqrt{2}$
66. **If A is a matrix of order 3×4 , then how many will there be in each column of A?**
 A) 3 B) 4 C) 12 D) None of them
67. **Which one is incorrect for the triangles to be congruent?**
 A) RHS B) SAS C) ASA D) ASS
68. **A right circular cone is 84 cm high and the radius of its base is 35 cm. The area of the curved surface of the cone is cm^2**
 A) 1001 B) 5005 C) 13860 D) 10010
69. **A rectangular box has a length of 8 cm, width of 6 cm, and height of 10 cm. What is the volume of the box?**
 A) 4.8 m^3 B) 0.48 m^3 C) 0.0048 m^3 D) 0.00048 m^3
70. **If $3:4 = x:12$, the value of x is**
 A) 6 B) 9 C) 7 D) 3
71. **The charge of electricity is Rs 80 for the first 20 units and Rs 6.50 per unit for additional consumption. The total charge for the consumption of 50 units is Rs.....**
 A) 50 B) 275 C) 375 D) 405
72. **If $\vec{a} = \begin{pmatrix} -2 \\ 1 \end{pmatrix}$ & $3\vec{a} + 2\vec{b} = \begin{pmatrix} -1 \\ -1 \end{pmatrix}$ then \vec{b} is**
 A) $\begin{pmatrix} -5/2 \\ 2 \end{pmatrix}$ B) $\begin{pmatrix} 5/2 \\ -2 \end{pmatrix}$ C) $\begin{pmatrix} 5 \\ 2 \end{pmatrix}$ D) $\begin{pmatrix} -5 \\ 2 \end{pmatrix}$

73. A man purchased an article for Rs. 25 and sold it for Rs. 20. The percentage of loss on cost is
A) 20 B) 25 C) 5 D) 22.5
74. In ΔABC $AB = 6cm, BC = 8cm$ and angle B is 30° then area of ΔABC is
A) 12 cm B) 12 sq.cm C) 24 sq.cm D) 48 sq.cm
75. If 4 is subtracted from the square of a number, then the result is 60. The number is.....
A) -8 B) 0 C) 8 D) -8 or 8

नेपाली

- प्र.नं. ७६ “दिदीले कुट्टनुभयो भनेर भाइ रोयो” । यो वाक्यमा भनेर शब्दको पदवर्ग के हो ?
क) संयोजक ख) क्रियाविशेषण ग) विशेषण घ) क्रियापद
- प्र.नं. ७७ “व्योम” शब्दको पर्यायवाची शब्द तलका मध्ये कुन हो?
क) आकाश ख) बादल ग) व्यायाम घ) व्याज
- प्र.नं. ७८ “भाइ चम्चाले खाना खान्छ” । यो वाक्यमा चम्चाले कुन कारक हो?
क) कर्ता ख) कर्म ग) अधिकरण घ) करण
- प्र.नं. ७९ “आदि” शब्दको विपरीतार्थक शब्द तलका मध्ये कुन हो?
क) आधा ख) मध्य ग) सुरु घ) अन्त्य
- प्र.नं. ८० “सलिल” शब्दको अर्थ तलका मध्ये कुन हो ?
क) सलल ख) पानी ग) आगो घ) घाम
- प्र.नं. ८१ “विदेश” शब्द तलका मध्ये कुन निर्माण प्रक्रियाबाट बनेको हो ?
क) द्वित्व ख) प्रत्यय ग) समास घ) उपसर्ग
- प्र.नं. ८२ “दारुण” शब्दको अर्थ तलका मध्ये कुन हो ?
क) दया ख) करुणा ग) कठोर घ) सफा
- प्र.नं. ८३ “मामाघर” कुन निर्माण प्रक्रियाबाट बनेको शब्द हो ?
क) समास ख) प्रत्यय ग) उपसर्ग घ) द्वित्व
- प्र.नं. ८४ “हामी मनास्लुमा पढ्ने छौं ।” यो वाक्य कुन कालको वाक्य हो?
क) वर्तमान ख) भविष्यत ग) भूत घ) अज्ञात
- प्र.नं. ८५ रमेशले गृहकार्य गरेछ । कुन पक्षका वाक्य हो ?
क) सामान्य भूत ख) पूर्ण भूत ग) अज्ञात भूत घ) अभ्यस्त भूत
- प्र.नं. ८६ भाइले धेरै पढेर आएछ । यो वाक्यमा धेरै शब्दको पदवर्ग तलका मध्ये कुन हो ?
क) विशेषण ख) क्रियाविशेषण ग) संयोजक घ) नाम
- प्र.नं. ८७ “हामी परीक्षा दिदै छौं ।” यो वाक्यमा कालान्तर्गत कुन पक्षको प्रयोग गरिएको छ ?
क) पूर्ण ख) सामान्य ग) अपूर्ण घ) अभ्यस्त
- प्र.नं. ८८ सुन्तलाको सानो अंश बुझाउने शब्द कुन हो ?

- क) केश्रो ख) गेडो ग) कोसो घ) घरी
- प्र.नं. ८९ “म गृहकार्य गर्छु।” यो वाक्यको वाच्य परिवर्तनको शुद्ध रूप कुन हो ?
क) मद्वारा गृहकार्य गरिन्छन् । ख) मद्वारा गृहकार्य गरिन्थ्यो ।
ग) मद्वारा गृहकार्य गरिदै छ । घ) मद्वारा गृहकार्य गरिन्छ ।
- प्र.नं. ९० शत्रु कथाका लेखक को हुन् ?
क) बालकृष्ण सम ख) विश्वेश्वर प्रसाद कोइराला
ग) सिद्धिचरण श्रेष्ठ घ) गुरुप्रसाद मैनाली
- प्र.नं. ९१ “विद्यार्थीहरु परीक्षा लेख्दै छन् ।” यो वाक्य तलका मध्ये कुन वाक्य हो ?
क) सरल ख) मिश्र ग) संयुक्त घ) जटिल
- प्र.नं. ९२ बुढी निकै खोक्छिन्, बुढी कुन शब्द वर्गमा पर्छ ?
क) नाम ख) सर्वनाम ग) विशेषण घ) क्रियापद
- प्र.नं. ९३ उज्यालो यात्रा कविताका लेखक को हुन्?
क) माधवप्रसाद ज्ञवाली ख) लक्ष्मीप्रसाद देवकोटा
ग) रामप्रसाद ज्ञवाली घ) गुरुप्रसाद मैनाली
- प्र.नं. ९४ “आज पानी पर्ला।” यो वाक्य तलका मध्ये कुन भाव / अर्थको वाक्य हो ?
क) सामान्यार्थ ख) सम्भावनार्थ ग) आज्ञार्थ घ) इच्छार्थ
- प्र.नं. ९५ अनिता स्कुल गई । कुन कालको वाक्य हो ?
क) वर्तमान ख) भविष्य ग) भूत घ) अनिकाल
- प्र.नं. ९६ लक्ष्मीप्रसाद देवकोटाको मृत्यु कहिले भएको थियो?
क) वि.सं. २००३ ख) वि.सं. २०१३ ग) वि.सं. २०१६ घ) वि.सं. २०२१
- प्र.नं. ९७ तल दिइएको शब्दको शुद्ध रूप कुन हो ?
क) चिरन्जीवी ख) चीरञ्जीवी ग) चिरञ्जीवी घ) चिरञ्जीवि
- प्र.नं. ९८ तल दिइएका शब्दमध्ये शुद्ध रूप कुन हो?
क) जिवन ख) जीवन ग) जीवन घ) जिवन
- प्र.नं. ९९ यो () कुन चिह्न हो ?
क) योजक चिह्न ख) प्रश्न चिह्न ग) कोष्ठक चिह्न घ) उद्धरण चिह्न
- प्र.नं. १०० अतिदृष्टिको विपरीतार्थी शब्द कुन हो?
क) खण्डवृष्टि ख) अनावृष्टि ग) दृष्टि घ) वृष्टि

"BEST OF LUCK"



Physics

- The unit of power of lens is**
 - Metre
 - Centimeter
 - Diopter
 - M^{-1}
 - The angle of incidence for a ray of light having zero reflection angle is**
 - 0
 - 30°
 - 45
 - 90°
 - For a real object, which of the following can produce a real image?**
 - Plane mirror
 - Concave mirror
 - Concave lens
 - Convex mirror
 - Which of the following mirror is used by a dentist to examine a small cavity?**
 - Convex mirror
 - Plane mirror
 - Concave mirror
 - Combination of convex and concave mirror
 - Convex lens focus a real, point sized image at focus, the object is placed**
 - At focus
 - Between F and 2F
 - At infinity
 - At 2F
 - What should be the core of an electromagnet?**
 - soft iron
 - hard iron
 - rusted iron
 - none of above
 - The direction of induced current in a conductor moving in a magnetic field can be predicted by applying**
 - Faraday's law.
 - Maxwell's screw rule.
 - Fleming's left hand rule.
 - Fleming's right hand rule.
 - If velocity of an object is doubled, its kinetic energy will be increased by**
 - three times
 - four times
 - six times
 - eight times
 - A cork held under water rises to the surface when released because the upthrust on it is**
 - greater than the weight.
 - less than the weight.
 - equal to the weight.
 - equal to the weight of water displaced.
 - A solid, Q, sinks deeper in liquid, N, than in liquid, M, because the**
 - Up thrust on the solid is greater in liquid N than in M.
 - Density of liquid M is greater than that of N
 - Density of liquid N is greater than that of M.
 - Surface tension of liquid N is less than that of M.
 - An alpha particle is diverted towards west is deflected towards north by a field. The field is magnetic. What will be the direction of field?**
 - Towards south
 - towards east
 - downward
 - upward
 - Which one of the following statements is true when a stone of mass 2 kg and that of 1 kg are released from the same point at the same time?'**
 - Both masses will hit the ground at the same time.
 - The 2 kg mass will hit the ground first.
 - The 1 kg mass will hit the ground first
 - They fall with different speeds.
 - Force is given by the product of**
 - Displacement and velocity.
 - Displacement and mass.
 - Acceleration and mass.
 - Velocity and mass.
 - A cyclist travelling at a constant acceleration of 2 ms^{-2} passes through two points A and B in a straight line. If the speed at A is 10 ms^{-1} and the points are 75 m apart, find the speed at B.**
 - 15.8 ms^{-1}
 - 17.3 ms^{-1}
 - 20.0 ms^{-1}
 - 400.0 ms^{-1}
 - A straight line through the origin of a velocity-time graph shows that the**
 - velocity is uniform.
 - distance is increasing uniformly
 - acceleration is uniform
 - motion is retardation.
 - A vibrator produces a sound wave that travels 900m in 3s. If the wavelength of the wave is 10 m, find the frequency of the vibrator.**
 - 30Hz
 - 270Hz
 - 300Hz
 - 3000 Hz.
 - The radius of curvature of a mirror is 20cm the focal length is**
 - 20cm
 - 10cm
 - 40cm
 - 5cm
 - Inter molecular force of attractions is negligible in**
 - Solids
 - Liquids
 - Gases.
 - All the above
 - The most important safety method used for protecting home appliances from short circuiting or overloading is by**
 - earthing
 - Use of fuse
 - Use of stabilizers
 - Use of electric meter
 - Unit of electric power may also be expressed as**
 - volt ampere
 - kilowatt hour
 - watt second
 - Joule second
- ## Chemistry
- On passing CO_2 through limewater turns milky due to formation of**
 - Insoluble CaSO_4
 - Insoluble CaCO_3
 - Soluble $\text{Ca}(\text{HCO}_3)_2$
 - Soluble $\text{Ca}(\text{HSO}_3)_2$

22. Which one of the following statements is not correct about the trends in the properties of the elements of a period on going from left to right?
- The oxides become more acidic
 - The elements become less metallic
 - There is an increase in the number of valence electrons
 - The atoms lose their electrons more easily
23. What type of chemical reactions take place when electricity is passed through acidified water?
- Displacement
 - Combination
 - Decomposition
 - Double displacement
24. Which of the following gases can be used for storage junk food in plastic packets?
- Carbon dioxide or Oxygen
 - Nitrogen or Oxygen
 - Carbon dioxide or Helium
 - Helium or Nitrogen
25. Which one of the following salts does not contain water of crystallisation?
- Blue vitriol
 - Baking soda
 - Washing soda
 - Gypsum
26. Which of the following is isobar?
- C and O
 - S and Ar
 - N and C
 - Ar and Ca
27. Molecular formula of lime stone is
- CaSO₄
 - CaCO₃
 - CaCl₂
 - Ca (NO₃)₂
28. Formula of compound formed by X²⁺ and Y³⁻
- X₃Y₂
 - X₂Y₃
 - XY
 - XY₃
29. The bronze medals are made up of
- Cu and Zn
 - Zn and Ni
 - Cu and Sn
 - Cu, Zn, Tn
30. A greenish coating develops on copper utensils due to formation of
- CuCo₃
 - Cu (OH)₂
 - Cu (OH)₂. CuCO₃
 - CuO
31. Identify the wrong sequence of the elements in a group
- Ca, Br, Ba
 - Cu, Au, Ag
 - N, P, As
 - Cl, Br, I
32. Which method is used to separate the mixture of sand and water?
- Sublimation
 - Decantation
 - Crystallization
 - Chromatography
33. Which one has the smallest size among the following?
- Na⁺
 - Mg⁺⁺
 - Al³⁺
 - F⁻
34. The elements X (atomic no. 12) and Y (atomic no. 17) combine to form the molecule
- XY
 - XY₂
 - X₂Y
 - X₂Y₃

35. C₂H₆O is
- alcohol
 - aldehyde
 - ether
 - both a and c
36. A mixture of base and phenolphthalein is
- Yellow colour
 - Pink colour
 - Orange colour
 - Colorless
37. The electron is discovered by
- Millikan
 - JJ Thomson
 - Einstein
 - Newton
38. Oxidation no. of oxygen in F₂O is
- +2
 - 2
 - +1
 - 1
39. Which of the following is an insecticide?
- Bakelite
 - TNP
 - BHC
 - Aspirin
40. Which of the following has highest electron affinity?
- F
 - Cl
 - Br
 - I

Biology

41. Osmoregulatory organ in human being is
- Heart
 - liver
 - kidney
 - none
42. The plant that propagates through leaf is:
- Potato
 - Sweet potato.
 - Bryophyllum.
 - Sugarcane
43. The point where sister chromatids are joined together is called:
- Centriole.
 - Centromere.
 - Centrosome.
 - Chromatin.
44. Crossing over occurs in _____ of meiosis-I
- Leptotene
 - Zygotene.
 - Pachytene.
 - Diakinesis.
45. The number of meiotic divisions required to produce 200 daughter cells from one parent cell is:
- 100
 - 150.
 - 250.
 - 50
46. How many bones are present in human skull?
- 12
 - 14
 - 18
 - 22
47. Tendon connects
- Bone to bone.
 - Skin to muscles
 - Muscles to muscles.
 - Muscles to bones.
48. A hereditary condition in which the blood clots extremely slowly is
- Leukemia
 - Anemia
 - Hemophilia
 - HIV/AIDS
49. Mosquito moves away from light due to
- Positive chemotaxis.
 - Negative phototaxis.
 - Positive phototropism.
 - Positive geotropism.
50. The slow process to form new species from the pre-existing forms by slow genetic variation is called as:
- Mutation
 - Hybridization
 - Genetic
 - Evolution

51. Which region of the alimentary canal absorbs the digested food?
a. Stomach b. Small intestine c. Large intestine d. Liver
52. Name the pores in a leaf through which respiratory exchange of gases takes place.
a. Lenticels b. Vacuoles c. Xylem d. Stomata
53. The respiratory pigment in human beings is:
a. carotene b. chlorophyll c. haemoglobin d. mitochondria
54. Name the tube which connects the kidneys to the urinary bladder.
a. Urethra b. Nephron c. Tubule d. Ureter
55. The procedure used for cleaning the blood of a person by separating urea from it is called:
a. osmosis b. filtration c. dialysis d. double circulation
56. Which plant hormone promotes cell division?
a. Auxin b. Gibberellin c. Cytokinin d. Abscisic acid
57. Thyroid stimulating hormone is secreted by
a. Thyroid gland b. adrenal gland c. parathyroid gland d. none
58. High annual productivity
a. tropical rain forest b. tropical deciduous
c. temperate forest d. temperate deciduous
59. What is vitamin C?
a. Folic acid b. Nicotinic acid c. ascorbic acid d. Citric acid
60. Diagnostic feature of 'Porifera' is
a. Present of water vascular system b. Presence of water canal system
c. diploblastic d. tentacles

Mathematics

61. The circumferences of two concentric circles are 176 m and 132 m respectively. What is the difference between their radii?
a. 5m b. 7m c. 8m d. 44m
62. If the volumes of two cubes are in the ratio 8: 1, the ratio of their edges is
a. 8: 1 b. 1: 2 c. 4: 1 d. 2 :1
63. Which is not a measure of dispersion?
a. standard deviation b. range c. mode d. quartile deviation
64. The period of the function $f(x) = \tan x$ is
a. π b. 2π c. 3π d. 4π

65. The formula for determining the area of a triangle having sides of lengths a, b, c is

$$a. (s-a)(s-b)(s-c) \quad b. \sqrt{s(s-a)(s-b)(s-c)}$$

$$c. s(s-a)(s-b)(s-c) \quad d. \sqrt{s(s+a)(s+b)(s+c)}$$

66. What is the equation of the line passing through the origin and equally inclined to the axes?
a. $y = x$ b. $y = -x$ c. $y = \pm x$ d. none of these
67. If the slope of the line joining the points (1, y) and (-2, 3) is -2, then the value of y is
a. -2 b. -3 c. 2 d. 3
68. The locus of a point whose distance from the x-axis is twice its distance from the y-axis has the equation
a. $x + 2y = 0$ b. $x = 2y$ c. $y = 2x$ d. $x - 2 = y$
69. The point at which the medians of a triangle meet are called
a. in-center b. circum-center c. ortho-center d. centroid
70. The n^{th} term of an A.P. is given by $a_n = 3 + 4n$. The common difference is
a. 7 b. 3 c. 4 d. 1
71. If one zero of the quadratic polynomial $x^2 + 3x + k$ is 2, then the value of k is
a. 10 b. -10 c. 5 d. -5
72. If $x^3 + 11$ is divided by $x^2 - 3$, then the possible degree of remainder is
a. 0 b. 1 c. 2 d. less than 2
73. If the circumference of a circle and the perimeter of a square are equal, then
a. area of the circle = area of the square
b. area of the circle > area of the square
c. area of the circle < area of the square
d. nothing definite can be said about the relation between the areas of the circle and square.
74. If angle of sector is 60° , radius is 3.5 cm then length of the arc is
a. 3 cm b. 3.5 cm c. 3.66 cm d. 3.8 cm
75. If A and B are square matrices of the same order, which of the following statement may not be true?
a. AB is defined b. BA is defined
c. Order of AB and BA are same d. $AB=BA$

76. The value of $\text{Cosec } 35^\circ - \text{Sec } 55^\circ$ will be:
 a. 0 b. -1 c. 10 d. None
77. Obtuse angles between the line pair $x^2 - 4xy + y^2$ is
 a. 135° b. 120° c. 150° d. 175°
78. Find the value of k if vector $\mathbf{a} = 3\mathbf{i} - 5\mathbf{j}$ and vector $\mathbf{sb} = 9\mathbf{i} + \mathbf{kj}$ are perpendicular.
 a. $12/5$ b. $23/5$ c. $27/5$ d. $32/5$
79. 20 teachers of a school either teach mathematics or physics. 12 of them teach mathematics while 4 teach both subjects. Then the number of teachers teaching physics only is:
 a. 12 b. 8 c. 16 d. None
80. 20 years ago father's age was 5 times that of his son. At present father's age is 10 years more than double the age of his son. What were their ages 20 years ago?
 a. 25 and 5 b. 30 and 6 c. 55 and 11 d. 50 and 10

English

81. Walking at 3 o'clock, I heard the.....of thunder.
 a. Clank b. Crackle c. Rumble d. ripple
82. The word 'acknowledgement' has..... syllables.
 a. Three b. Four c. five d. six
83. In the word 'education', the stress falls in.....syllable.
 a. First b. Second c. third d. fourth
84. /raɪs/ is the phonetic transcription of:
 a. rise b. rice c. raise d. risk
85. Which of the following pairs has a similar vowel sound /u:/?
 a. boom/book b. foot/loose c. room/sooth d. but/put

In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, four words are suggested, one of which fits the blank appropriately. Find out the appropriate words.

In human life, there's always a feeling of want. It is this which makes man (86) Man yearns for things which he cannot get and feels sad looking back upon the past and looking forward (87)future. This preoccupation with the past and future does not allow man to live (88)in the present. Thus, there's always a pain in man's laughter, always a sense of (89)in the moment of enjoyment. That's why, the poetry of man is the poetry of sorrow. 'Our sweetest songs are those that tell of (90)thoughts', has been rightly said.

86. a. sad b. disappointed c. unhappy d. mundane
 87. a. into b. to c. the d. for
 88. a. carelessly b. blissfully c. happily d. honorably
 89. a. want b. loss c. fulfillment d. scarcity
 90. a. saddest b. loftiest c. happiest d. sorrowful

GK and IQ

91. Which river is known as sorrow of Asia?
 a. Hwang river b. Ganga c. Nile d. Amazon
92. Deepest valley of the world is?
 a. Arun valley b. Kaligandaki valley c. Koshi Valley d. Death valley
93. The smallest ocean is?
 a. Artic Ocean b. Atlantic Ocean c. Pacific Ocean d. Indian Ocean
94. What is the National flower of Japan?
 a. Rose b. Marygold c. Tsubaki d. Cherry blossom
95. Which city is known as city of Fashion?
 a. Moscow b. Paris c. London d. Newyork
96. Human right day is celebrated on?
 a. 10th December b. 19th December c. 10th December d. 12th December
97. It was Sunday on Jan 1, 2006. What was the day of the week Jan 1, 2010?
 a. Sunday b. Saturday c. Friday d. Wednesday
98. Running at the same constant rate, 6 identical machines can produce a total of 270 bottles per minute. At this rate, how many bottles could 10 such machines produce in 4 minutes?
 a. 684 b. 1800 c. 2700 d. 10800
99. Three unbiased coins are tossed. What is the probability of getting at most two heads?
 a. $\frac{3}{4}$ b. $\frac{1}{4}$ c. $\frac{3}{8}$ d. $\frac{7}{8}$
100. In how many ways can the letters of the word 'LEADER' be arranged?
 a. 72 b. 144 c. 360 d. 720

"Do Your Best"



Manaslu Aptitude Test(MAT) – 2081
Science(B)

- What should be the core of an electromagnet?**
a. soft iron b. hard iron c. rusted iron d. none of above
- An alpha particle is diverted towards west is deflected towards north by a field. The field is magnetic. What will be the direction of field?**
a. Towards south b. towards east c. downward d. upward
- If velocity of an object is doubled, its kinetic energy will be increased by**
a. three times b. four times c. six times d. eight times
- Convex lens focus a real, point sized image at focus, the object is placed**
a. At focus b. Between F and 2F c. At infinity d. At 2F
- Which of the following mirror is used by a dentist to examine a small cavity?**
a. Convex mirror b. Plane mirror
c. Concave mirror
d. Combination of convex and concave mirror
- The unit of power of lens is**
a. Metre b. Centimeter c. Diopter d. M^{-1}
- The direction of induced current in a conductor moving in a magnetic field can be predicted by applying**
a. Faraday's law. b. Maxwell's screw rule.
c. Fleming's left hand rule. d. Fleming's right hand rule.
- For a real object, which of the following can produce a real image?**
a. Plane mirror b. Concave mirror c. Concave lens d. Convex mirror
- Unit of electric power may also be expressed as**
a. volt ampere b. kilowatt hour c. watt second d. Joule second
- A cyclist travelling at a constant acceleration of 2 ms^{-2} passes through two points A and B in a straight line. If the speed at A is 10 ms^{-1} and the points are 75 m apart, find the speed at B.**
a. 15.8 ms^{-1} b. 17.3 ms^{-1} c. 20.0 ms^{-1} d. 400.0 ms^{-1}
- The radius of curvature of a mirror is 20cm the focal length is**
a. 20cm b. 10cm c. 40cm d. 5cm
- Which one of the following statements is true when a stone of mass 2 kg and that of 1 kg are released from the same point at the same time?**
a. Both masses will hit the ground at the same time.
b. The 2 kg mass will hit the ground first.
c. The 1 kg mass will hit the ground first
d. They fall with different speeds.
- Force is given by the product of**
a. Displacement and velocity. b. Displacement and mass.
c. Acceleration and mass. d. Velocity and mass.
- A solid, Q, sinks deeper in liquid, N, than in liquid, M, because the**
a. Up thrust on the solid is greater in liquid N than in M.
b. Density of liquid M is greater than that of N
c. Density of liquid N is greater than that of M.
d. Surface tension of liquid N is less than that of M.
- A straight line through the origin of a velocity-time graph shows that the**
a. velocity is uniform. b. distance is increasing uniformly
c. acceleration is uniform d. motion is retardation.
- A vibrator produces a sound wave that travels 900m in 3s. If the wavelength of the wave is 10 m, find the frequency of the vibrator.**
a. 30Hz b. 270Hz c. 300Hz d. 3000 Hz.
- The angle of incidence for a ray of light having zero reflection angle is**
a. 0 b. 30° c. 45° d. 90°
- Inter molecular force of attractions is negligible in**
a. Solids b. Liquids c. Gases. d. All the above
- The most important safety method used for protecting home appliances from short circuiting or overloading is by**
a. earthing b. use of fuse c. use of stabilizers d. use of electric meter.
- A cork held under water rises to the surface when released because the upthrust on it is**
a. greater than the weight. b. less than the weight.
c. equal to the weight. d. equal to the weight of water displaced.
- The electron is discovered by**
a. Millikan b. JJ Thomson c. Einstein d. Newton
- Which of the following is isobar?**
a. C and O b. S and Ar c. N and C d. Ar and Ca
- Which method is used to separate the mixture of sand and water?**
a. Sublimation b. Decantation c. Crystallization d. Chromatography
- A greenish coating develops on copper utensils due to formation of**
a. CuCo_3 b. $\text{Cu}(\text{OH})_2$ c. $\text{Cu}(\text{OH})_2 \cdot \text{CuCO}_3$ d. CuO

25. **The bronze medals are made up of**
 a. Cu and Zn b. Zn and Ni c. Cu and Sn d. Cu, Zn, Tn
26. **Which of the following has highest electron affinity?**
 a. F b. Cl c. Br d. I
27. **Formula of compound formed by X^{2+} and Y^{3-}**
 a. X_3Y_2 b. X_2Y_3 c. XY d. XY_3
28. **Molecular formula of lime stone is**
 a. $CaSO_4$ b. $CaCO_3$ c. $CaCl_2$ d. $Ca(NO_3)_2$
29. **Which one of the following salts does not contain water of crystallisation?**
 a. Blue vitriol b. Baking soda c. Washing soda d. Gypsum
30. **Which of the following gases can be used for storage junk food in plastic packets?**
 a. Carbon dioxide or Oxygen b. Nitrogen or Oxygen
 c. Carbon dioxide or Helium d. Helium or Nitrogen
31. **Identify the wrong sequence of the elements in a group**
 a. Ca, Br, Ba b. Cu, Au, Ag c. N, P, As d. Cl, Br, I
32. **What type of chemical reactions take place when electricity is passed through acidified water?**
 a. Displacement b. Combination
 c. Decomposition d. Double displacement
33. **Which one has the smallest size among the following?**
 a. Na^+ b. Mg^{++} c. Al^{3+} d. F^-
34. **The elements X (atomic no. 12) and Y (atomic no. 17) combine to form the molecule**
 a. XY b. XY_2 c. X_2Y d. X_2Y_3
35. **C_2H_6O is**
 a. alcohol b. aldehyde c. ether d. both a and c
36. **A mixture of base and phenolphthalein is**
 a. Yellow colour b. Pink colour c. Orange colour d. Colorless
37. **On passing CO_2 through limewater turns milky due to formation of**
 a. Insoluble $CaSO_4$ b. Insoluble $CaCO_3$
 c. Soluble $Ca(HCO_3)_2$ d. Soluble $Ca(HSO_3)_2$
38. **Oxidation no. of oxygen in F_2O is**
 a. +2 b. -2 c. +1 d. -1
39. **Which of the following is an insecticide?**
 a. Bakelite b. TNP c. BHC d. Aspirin
40. **Which one of the following statements is not correct about the trends in the properties of the elements of a period on going from left to right?**
 a. The oxides become more acidic
 b. The elements become less metallic
 c. There is an increase in the number of valence electrons
 d. The atoms lose their electrons more easily
41. **Crossing over occurs in _____ of meiosis-I**
 a. Leptotene. b. Zygotene. c. Pachytene. d. Diakinesis.
42. **A hereditary condition in which the blood clots extremely slowly is**
 a. Leukemia b. Anemia c. Hemophilia d. HIV/AIDS
43. **The number of meiotic divisions required to produce 200 daughter cells from one parent cell is:**
 a. 100 b. 150. c. 250. d. 50
44. **Osmoregulatory organ in human being is**
 a. Heart b. liver c. kidney d. none
45. **The point where sister chromatids are joined together is called:**
 a. Centriole. b. Centromere. c. Centrosome. d. Chromatin.
46. **How many bones are present in human skull?**
 a. 12. b. 14 c. 18 d. 22
47. **Tendon connects**
 a. Bone to bone. b. Skin to muscles
 c. Muscles to muscles. d. Muscles to bones.
48. **The plant that propagates through leaf is:**
 a. Potato. b. Sweet potato. c. Bryophyllum. d. Sugarcane
49. **The respiratory pigment in human beings is:**
 a. carotene b. chlorophyll c. haemoglobin d. mitochondria
50. **The slow process to form new species from the pre-existing forms by slow genetic variation is called as:**
 a. Mutation b. Hybridization c. Genetic d. Evolution
51. **What is vitamin C ?**
 a. Folic acid b. Nicotinic acid c. ascorbic acid d. Cibic acid
52. **Name the pores in a leaf through which respiratory exchange of gases takes place.**
 a. Lenticels b. Vacuoles c. Xylem d. Stomata

53. **Mosquito moves away from light due to**
 a. Positive chemotaxis. b. Negative phototaxis.
 c. Positive phototropism. d. Positive geotropism
54. **Thyroid stimulating hormone is secreted by**
 a. Thyroid gland b. adrenal gland c. parathyroid gland d. none
55. **The procedure used for cleaning the blood of a person by separating urea from it is called:**
 a. osmosis b. filtration c. dialysis d. double circulation
56. **Which plant hormone promotes cell division?**
 a. Auxin b. Gibberellin c. Cytokinin d. Abscisic acid
57. **Name the tube which connects the kidneys to the urinary bladder.**
 a. Urethra b. Nephron c. Tubule d. Ureter
58. **Diagnostic feature of 'Porifera' is**
 a. Present of water vascular system
 b. Presence of water canal system
 c. diploblastic
 d. tentacles
59. **Which region of the alimentary canal absorbs the digested food?**
 a. Stomach b. Small intestine c. Large intestine d. Liver
60. **High annual productivity**
 a. tropical rain forest b. tropical deciduous
 c. temperate forest d. temperate deciduous
61. **If $x^3 + 11$ is divided by $x^2 - 3$, then the possible degree of remainder is**
 a. 0 b. 1 c. 2 d. less than 2
62. **If the slope of the line joining the points (1, y) and (-2, 3) is -2, then the value of y is**
 a. -2 b. -3 c. 2 d. 3
63. **The formula for determining the area of a triangle having sides of lengths a, b, c is**
 a. $(s-a)(s-b)(s-c)$ b. $\sqrt{s(s-a)(s-b)(s-c)}$
 c. $s(s-a)(s-b)(s-c)$ d. $\sqrt{s(s+a)(s+b)(s+c)}$
64. **The locus of a point whose distance from the x-axis is twice its distance from the y-axis has the equation**
 a. $x + 2y = 0$ b. $x = 2y$ c. $y = 2x$ d. $x - 2 = y$
65. **Which is not a measure of dispersion?**
 a. standard deviation b. range c. mode d. quartile deviation
66. **If angle of sector is 60° , radius is 3.5 cm then length of the arc is**
 a. 3 cm b. 3.5 cm c. 3.66 cm d. 3.8 cm
67. **The circumferences of two concentric circles are 176 m and 132 m respectively. What is the difference between their radii?**
 a. 5m b. 7m c. 8m d. 44m
68. **The period of the function $f(x) = \tan x$ is**
 a. π b. 2π c. 3π d. 4π
69. **The point at which the medians of a triangle meet are called**
 a. in-center b. circum-center c. ortho-center d. centroid
70. **The n^{th} term of an A.P. is given by $a_n = 3 + 4n$. The common difference is**
 a. 7 b. 3 c. 4 d. 1
71. **Obtuse angles between the line pair $x^2 - 4xy + y^2$ is**
 a. 135° b. 120° c. 150° d. 175°
72. **If the volumes of two cubes are in the ratio 8: 1, the ratio of their edges is**
 a. 8: 1 b. 1: 2 c. 4: 1 d. 2 :1
73. **If the circumference of a circle and the perimeter of a square are equal, then**
 a. area of the circle = area of the square
 b. area of the circle > area of the square
 c. area of the circle < area of the square
 d. nothing definite can be said about the relation between the areas of the circle and square.
74. **What is the equation of the line passing through the origin and equally inclined to the axes?**
 a. $y = x$ b. $y = -x$ c. $y = \pm x$ d. none of these
75. **20 teachers of a school either teach mathematics or physics. 12 of them teach mathematics while 4 teach both subjects. Then the number of teachers teaching physics only is:**
 a. 12 b. 8 c. 16 d. None
76. **The value of $\text{Cosec } 35^\circ - \text{Sec } 55^\circ$ will be:**
 a. 0 b. -1 c. 10 d. None
77. **. If one zero of the quadratic polynomial $x^2 + 3x + k$ is 2, then the value of k is**
 a. 10 b. -10 c. 5 d. -5
78. **20 years ago father's age was 5 times that of his son. At present father's age is 10 years more than double the age of his son. What were their ages 20 years ago?**
 a. 25 and 5 b. 30 and 6 c. 55 and 11 d. 50 and 10

