

लोक सेवा आयोग
नेपाल टेलिकम, प्राविधिक, टेलिकम, सार्ती, टेलिकम इन्जिनियर (इलेक्ट्रोनिक्स एण्ड कम्युनिकेशन)
पदको आन्तरिक तथा खुला प्रतियोगितात्मक लिखित परीक्षा
२०८२।०३।२९

KEY [A]

पत्र : प्रथम
समय : २ घण्टा १५ मिनेट

पूर्णाङ्क : १००

विषय : **General Awareness, Management and Institutional Awareness Test**

उत्तरपुस्तिकामा प्रश्नपत्रको KEY अनिवार्य रूपले उल्लेख गर्नुपर्नेछ । उल्लेख नगरेमा उत्तरपुस्तिका रद्द हुनेछ । परीक्षामा calculator, mobile प्रयोग गर्न पाइनेछैन ।

Objective

Time : 45 Minutes

50×1=50 Marks

Multiple Choice

- Who is ranked as the world's richest person in Forbes' 2025 list?
A) Jeff Bezos B) Elon Musk C) Bernard Arnault D) Mark Zuckerberg
- When is National ICT Day celebrated in Nepal?
A) April 25 B) May 2 C) June 5 Y D) August 15
- What is the 'Green Muffler Campaign' related with?
A) Water pollution B) Air pollution C) Sound pollution D) Climate change
- Where will United Nations Framework Convention on Climate Change (UNFCCC), COP30 be held?
A) Baku, Azerbaijan B) Dubai, UAE
C) Belem, Brazil D) Sharm El-Sheikh, Egypt
- What is the main purpose of a Public Service Charter?
A) To promote public investment
B) To outline the duties of general public
C) To regulate government or public spending
D) To inform citizens about services, standards and timelines ✓
- How many areas of cooperation are there in BIMSTEC?
A) 13 B) 16 C) 19 D) 22 ✓
- Where is the SAARC Secretariat located?
A) Thimpu B) Dhaka C) New Delhi D) Kathmandu ✓
- Doreen Boodan-Martin was elected as the Secretary General of the International Telecommunications Union on 29th September, 2022.
A) 15th B) 18th C) 20th D) 22nd
- When did the First Five-Year Plan (2013-2018) begin?
A) 1st Baisakh 2013 BS B) 1st Ashar 2013 BS
C) 1st Ashoj 2013 BS D) 1st Magh 2013 BS ✓
- Which body is responsible for interpreting the constitution?
A) Parliament B) Supreme Court C) Prime Minister D) President
- What is the targeted unemployment rate to be achieved by the end of 16th Five-Year Plan?
A) 5.0% B) 6.0% C) 6.5% D) 7.0%
- By which country's assistance was the Civil Service Hospital (in Nepal) built?
A) England B) Japan C) India D) China ✓
- Who is the inventor of Telephone?
A) Alexander Graham Bell B) Samuel Morse
C) Claude Chappe D) Robertson

Contd...

A - 2, प्राविधिक, टेलिकम, सार्तौ, टेलिकम इन्जिनियर (इलेक्ट्रोनिक्स एण्ड कम्प्युनिकेशन)

14. As per the Economic Survey 2081/82, what is the estimated per capita income (in US Dollar) in the current fiscal year?
 A) 1452 B) 1456 C) 1507 D) 1517
15. Which country provided assistance for the establishment of Balaju Industrial District?
 A) India B) China C) USA D) Japan
16. What is the topic related to beekeeping business?
 A) Viticulture B) Pisciculture C) Sericulture D) Apiculture
17. On which Tithi is "Buddha Jayanti" celebrated in Nepal?
 A) Baishakh Shukla Purnima B) Jestha Shukla Purnima
 C) Asar Shukla Purnima D) Mangsir Shukla Purnima
18. Which of the following is correct in order of the five major languages spoken in Nepal?
 A) Nepali, Maithili, Bhojpuri, Tamang, Tharu
 B) Nepali, Bhojpuri, Maithili, Tharu, Tamang
 C) Nepali, Maithili, Bhojpuri, Tharu, Tamang
 D) Nepali, Maithili, Bhojpuri, Tamang, Tharu
19. Who won the Madan Puraskar thrice in his life?
 A) Bhairav Risal B) Mohan Mainali
 C) Madhav Prasad Ghimire D) Satya Mohan Joshi
20. The Treaty of Sugauli led to which of the following outcomes?
 A) Start of Rana regime
 B) Loss of one third of Nepal's territory to British
 C) Unification of Nepal
 D) Introduction of Federalism
21. What was Jayasthiti Malla famous for?
 A) Expanding territory B) Building Pashupatinath temple
 C) Reforming caste and legal system D) Starting formal education
22. What was the name of Atom Bomb dropped in Hiroshima in 1945 AD?
 A) Little Man B) Little Boy C) Fat Man D) Fat Boy
23. On 20 May, 2020, Nepal released a new map of its own territory that expanded its claim of an additional square kilometers.
 A) 181 B) 335 C) 353 D) 370
24. Which is the most common gas in nature?
 A) Nitrogen B) Hydrogen C) Radon D) Methane
25. Hima River is located in which district?
 A) Dolpa B) Humla C) Mustang D) Jumla
26. Which of the following soil types is considered most fertile and ideal for agriculture in Nepal?
 A) Himali soil B) Sandy Pebbly soil C) Red Gray soil D) Talaiya soil
27. According to Population Census Report, 2021, the population growth rate of Nepal is%.
 A) 0.29 B) 0.92 C) 1.15 D) 1.25
28. How many national parks of Nepal are listed in World Heritage Sites?
 A) 1 B) 2 C) 3 D) 4
29. Which mountain range does Bhrikuti Peak belong to?
 A) Annapurna B) Mahalangur C) Damodar D) Dhaulagiri
30. The highest mountain in Europe is
 A) Mount Elbrus B) Dylch-Tau C) Koshtan-Tau D) Tetnaldi

$(1+2+3+2+2019)$
 $= 1+2+3+2$

$2 \overline{) 8110}$
 405

A 8 hrs
 B 10 hrs
 A - $\frac{1}{8}$ - 1 hrs
 B - $\frac{1}{10}$ - 1 hrs

$(\frac{1}{8} - \frac{1}{10})$ - 1 hr
 $\frac{5-4}{40}$
 $\frac{1}{40}$

$\frac{20}{3} = 7 \frac{2}{3}$
 $\frac{12}{12} = 1$
 $20 \div 3 = 6 \frac{2}{3}$



Contd...

31. Tap A can fill a cistern in 8 hours. Tap B can empty the same cistern in 10 hours. If the cistern is empty and both the taps are opened simultaneously, in how many hours will they take to fill the tank?

- A) 40/9 B) 1/40 C) 40 D) 9

32. The ratio of water and milk in a 30 liters 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 liters B) 33 liters C) 36 liters D) 39 liters

33. The equation of a sphere passing through the circle $x^2+y^2+z^2-9=0$, $x+y+z+18=0$ is

- A) $2(x^2+y^2+z^2-9)+9(x+y+z+18)=0$ B) $x^2+y^2+z^2-9+x+y+z+9=0$
 C) $2(x^2+y^2+z^2-9)+x+y+z+18=0$ D) $x^2+y^2+z^2-9+2(x+y+z+18)=0$

34. If the MP = Rs. 540 and discount = 5%, then which one is the SP in that case?

- A) Rs. 500 B) Rs. 513 C) Rs. 515 D) Rs. 600

35. $\lim_{x \rightarrow 1} \frac{x+x^2+x^3+\dots+x^{20}-20}{x-1}$ is

- A) 200 B) 210 C) 220 D) 230

36. The length of the latus rectum of the parabola $y^2 + 8x - 2y + 17 = 0$ is

- A) 2 B) 4 C) 8 D) 16

37. The eccentricity of an ellipse $\frac{x^2}{25} + \frac{y^2}{9} = 1$ is

- A) 25 B) 9 C) 1 D) 4/5

38. Integrate:

$\int \left(\frac{1}{x} + \frac{1}{x^2} \right) dx$

- A) $x + 2x + c$ B) $\log x + 2x + c$ C) $\log x - \frac{1}{x} + c$ D) $\log x - \frac{1}{2x^2} + c$

39. The Fourier series of even function contains

- A) $\cos x, \sec x$ B) $\cos x, \sin x$ C) $\sin x, \operatorname{cosec} x$ D) $\sin x, \tan x$

40. The Laplace transform of the hyperbolic function $f(t) = \cosh at$ for $s > a$, where $a \geq 0$ is

- A) $\frac{1}{2} \left(\frac{s}{s^2-a^2} \right)$ B) $\frac{1}{2} \left(\frac{1}{s^2-a^2} \right)$ C) $\frac{1}{2} \left(\frac{s}{a^2-s^2} \right)$ D) $\left(\frac{s}{s^2-a^2} \right)$

41. The Taylor series generated by $f(x) = \cos x$ at $x = 0$ is

- A) $\sum_{n=0}^{\infty} \frac{(-1)^n x^{2n}}{(2n)!}$ B) $\sum_{n=0}^{\infty} \frac{(-1)^n x^{2n}}{2(n)!}$ C) $\sum_{n=0}^{\infty} \frac{x^{2n}}{(2n)!}$ D) $\sum_{n=0}^{\infty} \frac{(-1)^n x^n}{(2n)!}$

42. $f(x) = \sin x + \cos x$ is

- A) Odd function B) Even function
 C) Constant function D) Neither odd nor even function

43. Which measure of central tendency is most affected by extreme values in a data set?

- A) Mean B) Median C) Mode D) All equally

44. The formula to calculate mode for ill-defined case is

- A) $3\text{median} - 2\text{mean}$ B) $3\text{mean} - 2\text{median}$ C) $2\text{median} - 3\text{mean}$ D) $2\text{mean} - 3\text{median}$

45. If the equations of two lines of regression be $3x-2y=12$ and $6x-y=5$, then the correlation coefficient between x and y is

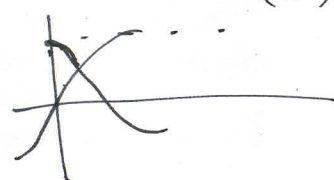
- A) 0.25 B) ± 0.5 C) 0.5 D) -0.5

$\frac{540 \times 540}{2 \times 27} = 513$

$\frac{(2-1) + (2^2-1) + \dots + (2^{19}-1)}{(2-1)} = 2^{19} - 1$

$\frac{21 - \text{water}}{9} = \text{milk}$

$(x-1) + x(x-1) + x^2(x-1) + \dots + x^{19}(x-1) = \frac{x(1-x^{20})}{(x-1)}$



$\frac{1}{2} + \frac{1}{3} = \frac{5}{6}$

$\frac{2 \times 27}{2} = 27$

$5 \text{ mean} = 6 \text{ mean}$

$\frac{1}{2} + \frac{1}{3} = \frac{5}{6}$

$\int \frac{1}{x^2} dx = \frac{x^{-2+1}}{-2+1} = -x^{-1} = -\frac{1}{x}$

A - 4. प्राविधिक, टेलिकम, सार्ता, टेलिकम इन्जिनियर (इलेक्ट्रॉनिक्स एण्ड कम्युनिकेशन)

46. Correlation coefficient between two variables x and y is 0.6, then correlation coefficient between $3x$ and $-y$ is
- A) 0.4 B) -0.5 C) 0.6 D) -0.6
47. If four coins are tossed, what is the probability of getting at least three heads?
- A) $3/16$ B) $1/4$ C) $3/8$ D) $5/16$
48. Which of the following statements is valid for discrete probability distribution?
- A) Sum of probability is equal to one B) Area under the curve is equal to one
- C) Infinite set of outcomes D) Represented by smooth curve
49. The continuous probability distribution is
- A) Binomial B) Poisson C) Normal D) t-distribution
50. If the sample size was 50, then standard error was 8 units. How much would be the standard error if sample size was increased to 200?
- A) 2 B) 4 C) 8 D) 10

- The End -

उत्तरपुस्तिकामा KEY अनिवार्य रूपमा लेख्नुहोला ।

HHHH
HHHT
HHTH
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$5/16$

$nxy = 0.6$

$3nxy = -$

