ENTRY LEVEL TEST – SCIENCE

All the questions are compulsory. Each question carries 2 marks. M.M. – 30

1. Sodium and chlorine are reacted and as a result, sodium chloride is formed, also called table salt. What option gives the reactants and products of the reaction?

(a) Reactants – sodium; products – chlorine

(b) Reactants – sodium and table salt; products – chlorine

(c) Reactants – tables salt; products – sodium and chlorine

(d) Reactants – sodium and chlorine; products – sodium chloride

2. Which of the following reactions can also be termed as a thermal decomposition reaction?

(a) Combination reaction

(b) Decomposition reaction

(c) Displacement reaction

(d) Double displacement reaction

3. What does anaerobic respiration in plants obtain the products?

(a) Lactic acid + energy

(b) Carbon dioxide + water + energy

(c) Ethanol + carbon dioxide + energy

(d) Pyruvate

4. Which of the following reactions is used in black and white photography?

(a) Combination Reaction

(b) Decomposition Reaction

(c) Displacement reaction

(d) Oxidation reaction

5. Fruits are formed from the

a) Stamen

b) Stigma

c) Ovary
d) Ovule

6. Reproduction is essential for living organisms in order to ……………………
   a) Keep the individual organism alive
   b) Fulfill their energy requirement
   c) Maintain growth
   d) Continue the species generation after generation

7. The ratio of the number of chromosomes in a human zygote and a human sperm is
   a) 2:1
   b) 3:1
   c) 1:2
   d) 1:3

8. The front face of a circular loop of a wire is the North Pole, the direction of current in this face of the loop will be
   a) Clockwise
   b) Anticlockwise
   c) Towards North
   d) Towards South

9. Which of the following statements is incorrect regarding magnetic field lines?
   (a) The direction of the magnetic field at a point is taken to be the direction in which the north pole of a magnetic compass needle points.
   (b) Magnetic field lines are closed curves.
   (c) If magnetic field lines are parallel and equidistant, they represent zero field strength.
   (d) Relative strength of the magnetic field is shown by the degree of closeness of the field lines.

10. The pH range most conducive for the life of freshwater plants and animals is
    (a) 6.5 to 7.5
    (b) 2.0 to 3.5
    (c) 3.5 to 5.0
11. The most rapidly dwindling natural resource in the world is
(a) Water
(b) Forest
(c) Wind
(d) Sunlight

12. Which of the following statements is incorrect regarding magnetic field lines?
(a) The direction of the magnetic field at a point is taken to be the direction in which the north pole of a magnetic compass needle points.
(b) Magnetic field lines are closed curves.
(c) If magnetic field lines are parallel and equidistant, they represent zero field strength.
(d) Relative strength of the magnetic field is shown by the degree of closeness of the field line

13. Tropical rainforests grow well in areas receiving rainfall
(a) 200 cm
(b) 150 cm
(c) 100 cm
(d) 70 cm

14. Which group of waste materials can be classified as non-biodegradable?
(a) Plant waste, used tea bags
(b) Polyethene bags, plastic toys
(c) Used tea bags, paper straw
(d) Old clothes, broken footwear

15. Which statement shows the interaction of an abiotic component with a biotic component in an ecosystem?
(a) A grasshopper feeding on a leaf
(b) Rainwater running down into the lake
(c) An earthworm making a burrow in the soil
(d) A mouse fighting with another mouse for food
ENTRY-LEVEL TEST: SCIENCE

Maximum Marks- 20

Note- All the questions are compulsory. Each question carries 2 marks.

1 Q: Which plastids are colorless?
   (a) Chromoplast
   (b) Chloroplast
   (c) Leucoplast
   (d) All the above

2 Q: An unripe green fruit changes colour when it ripens. The reason being
   (a) Chromoplast changes to Chlorophyll
   (b) Chromoplast changes to Chromosome
   (c) Chromosome changes to Chromoplast
   (d) Chloroplast changes to Chromoplast

3 Q: _____________ is called the energy currency of the cell
   (a) Endoplasmic reticulum
   (b) Oxygen
   (c) ATP
   (d) Mitochondria

4 Q: _____________ coined the term “Cell”.
   (a) Gorbachev
   (b) Himmler
   (c) Robert Hooke
   (d) Antonie Van Leeuwenhoek

5 Q: The Phenomenon where cytoplasm shrinks in a hypertonic medium is called:
   (a) Frontolysis
   (b) Plasmolysis
   (c) Acidolysis
   (d) Alloysis

6 Q: _____________ is called the Powerhouse of the cell
   (a) Mitochondria
   (b) ATP
   (c) Lysosomes
   (d) Red blood cell

7 Q: The mode of nutrition in fungi
(a) Only Saprotrophic
(b) Saprotrophic and Parasitic
(c) Only Parasitic
(d) None of above

8 Q: What is not poisonous among these?
(a) Scorpion
(b) Centipede
(c) Spider
(d) Crab

9 Q: What is not possessed by bacteria?
(a) Membrane bound Organelles
(b) Nucleus
(c) Nucleolus
(d) All the above

10 Q: What is the Phylum of octopus?
(a) Arthropoda
(b) Mollusca
(c) Annelida
(d) Cnidarian
ENTRY LEVEL TEST - SOCIAL SCIENCE

Time: 20 mins

Name of student: _______________________

1. Which is a way to create new opportunities for women?
   Ans. (a) Household work (b) Education (c) Protest (d) All of these

2. Who becomes the chief Minister?
   Ans (a) Leader of winning party (b) Leader of losing party (c) Prime Minister of the country (d) President of the country

3. What is the full form of MLA?
   Ans a) Member of Law Authority b) Member of Legislative Assembly c) Minister Of Law Abiding Authority d) None of These

4. Who represents our problems in the Parliament House?
   Ans. a) Ourselves b) MLAs c) SHO d) MPs

5. Tax money is used to fund which of the activities?
   Ans. (a) Education (b) Defence (c) Police (d) All of these

6. The Indian constitution recognises
   Ans (a) all people are equal (b) all people are not equal (c) are people are economically sound (d) none of these

7. What is NOT the element of equality?
   Ans. (a) Justice (b) Religion (c) Wealth (d) Health

8. What does democracy mean?
   Ans. (a) Equal right to vote (b) Unequal right to vote (c) Discrimination (d) All of these

9. Who called the Right to Constitutional remedies ‘the heart and soul’ of our constitution?
   Ans (a) Jawaharlal Nehru (b) Dr. B.R. Ambedkar (c) Mahatma Gandhi (d) Sardar Vallabhai Patel

10. Which one of the following is print media?
    Ans. a) Newspaper b) T.V. c) Radio d) Internet

11. Government control over media is knowhow becomes as
    Ans a) Factual b) Censorship c) Independence

12. Who forms the government?
    Ans. a) Opposition Party b) Janta Party c) Rulling Party d) None of these

13. Who becomes the Chief Minister?
    Ans. a) Leader of the winning Party b) Prime Minister of the country c) Leader of losing party d) President of the country

14. Full form of PHC
Ans. a) Private Health centre  b) Public Health Court  c) Primary Health centre  d) All of these

15. Tax Money is used to fund which of the following activities:
Ans. a) Education  b) Defence  c) Police  d) All of these
ENTRY LEVEL TEST - SOCIAL SCIENCE

Time: 45 mint.  M.M: 40

Class: B.Ed. (Sem. I)

Name of student:_______________________

Note: Attempt all the questions. Each question carries four marks. The answer to each question should not exceed 50 words.

Q1. Enlist key features of the Indian constitution.
Q2. What is the structure of courts in India?
Q3. What is the process of election for members of parliament in India?
Q4. What were the social, economic and political conditions of India before Independence?
Q5. Discuss the role of Mahatma Gandhi in the Indian National movement.
Q6. Write a brief note on Maharaja Ranjit Singh as a ruler of Punjab.
Q7. What are the different layers of earth?
Q8. Why do the earthquakes occur?
Q9. What is the Solar System?
Q10. What are the non-farm production activities taking place in your state? Make a short list.
ENTRY LEVEL TEST- ENGLISH

MAX. MARKS- 30

INSTRUCTIONS: All the questions are compulsory.
Select the correct answer. (2 Marks)

1. Could you please tell me where ____________?
(A) the office is located.
(B) Is located the office.
(C) Is the office located.
(D) the office locate.

2. Several ____________ sent an e-mail to the instructor.
(A) student
(B) of students
(C) of the student
(D) of the students

Select the correctly joined sentence among the choices below. (2 Marks)

1. (A) The man was filing a police report who his car had been stolen.
(B) The who was filing a police report, his car had been stolen.
(C) The man whose care had been stolen, he was filing a police report.
(D) The man whose car had been stolen was filing a police report.

2. (A) Sam didn’t really understand the instructions, however he did what he was told.
(B) Not really understanding the instructions, but Sam did what he was told.
(C) Though he didn’t really understand the instructions, Sam did what he was told.
(D) Even though Sam didn’t really under the instructions, but did what he was told.

Rewrite the sentences after the correction. (2 Marks)

1. Joe is one of the friend who graduated from college last year.
2. I still haven’t decide which classes to take next fall.

Change the Direct Speech to Indirect speech. (2 Marks)

1. The old lady said to the girl, “Where do you come from?”
2. Mimi said, “I have been writing this letter.”

Reading Comprehension

Read the following passage and answer the questions: (5 Marks)

Philosophy of Education is a label applied to the study of the purpose, process, nature and ideals of education. It can be considered a branch of both philosophy and education.
Education can be defined as the teaching and learning of specific skills, and the imparting of knowledge, judgment and wisdom, and is something broader than the societal institution of education we often speak of. Many educationalists consider it a weak and woolly field, too far removed from the practical applications of the real world to be useful. But philosophers dating back to Plato and the Ancient Greeks have given the area much thought and emphasis, and there is little doubt that their work has helped shape the practice of education over the millennia. Plato is the earliest important educational thinker, and education is an essential element in &quot;The Republic&quot; (his most important work on philosophy and political theory, written around 360 B.C.). In it, he advocates some rather extreme methods: removing children from their mothers’ care and raising them as wards of the state, and differentiating children suitable to the various castes, the highest receiving the most education, so that they could act as guardians of the city and care for the less able. He believed that education should be holistic, including facts, skills, physical discipline, music and art. Plato believed that talent and intelligence is not distributed genetically and thus is be found in children born to all classes, although his proposed system of selective public education for an educated minority of the population does not really follow a democratic model. Aristotle considered human nature, habit and reason to be equally important forces to be cultivated in education, the ultimate aim of which should be to produce good and virtuous citizens. He proposed that teachers lead their students systematically, and that repetition be used as a key tool to develop good habits, unlike Socrates’ emphasis on questioning his listeners to bring out their own ideas. He emphasized the balancing of the theoretical and practical aspects of subjects taught, among which he explicitly mentions reading, writing, mathematics, music, physical education, literature, history, and a wide range of sciences, as well as play, which he also considered important.

During the Medieval period, the idea of Perennialism was first formulated by St. Thomas Aquinas in his work &quot;De Magistro&quot;. Perennialism holds that one should teach those things deemed to be of everlasting importance to all people everywhere, namely principles and reasoning, not just facts (which are apt to change over time), and that one should teach first about people, not machines or techniques. It was originally religious in nature, and it was only much later that a theory of secular perennialism developed. During the Renaissance, the French skeptic Michel de Montaigne (1533-1592) was one of the first to critically look at education. Unusually for his time, Montaigne was willing to question the conventional wisdom of the period, calling into question the whole edifice of the educational system, and the implicit assumption that university-educated philosophers were necessarily wiser than uneducated farm workers, for example.

**Q1. What is the difference between the approaches of Socrates and Aristotle?**

1) Aristotle felt the need for repetition to develop good habits in students; Socrates felt that students need to be constantly questioned
2) Aristotle felt the need for rote-learning; Socrates emphasized on dialogic learning
3) There was no difference
4) Aristotle emphasized on the importance of paying attention to human nature; Socrates emphasized upon science
Q2. Why do educationists consider philosophy a ‘weak and woolly’ field?
1) It is not practically applicable
2) Its theoretical concepts are easily understood
3) It is irrelevant for education
4) None of the above

Q3. What do you understand by the term ‘Perennialism’, in the context of the given comprehension passage?
1) It refers to something which is of ceaseless importance
2) It refers to something which is quite unnecessary
3) It refers to something which is abstract and theoretical
4) It refers to something which existed in the past and no longer exists now

Q4. Were Plato’s beliefs about education democratic?
1) He believed that only the rich have the right to acquire education
2) Yes
3) He believed that only a select few are meant to attend schools
4) He believed that all pupils are not talented

Q5. Why did Aquinas propose a model of education which did not lay much emphasis on facts?
1) Facts are not important
2) Facts do not lead to holistic education
3) Facts change with the changing times
4) Facts are frozen in time

Use the following words in sentences: (2 Marks)
1. Harmonious
2. Indolent

Writing skills (10 Marks)
Write a persuasive essay on the importance of incorporating poetry into the primary school curriculum. Support your argument with relevant examples.

Situation Analysis (5 Marks)
One student is found to be late to class every day. How would you respond to this problem as a teacher?
ENTRY LEVEL TEST- ENGLISH

Max. Marks: 40

Instructions:
1. Carefully read each question and provide thoughtful responses.
2. Answer all questions.
3. Use complete sentences, proper grammar, and clear expression.
4. Ensure that your responses are relevant to the question asked.

Section 1: Grammar and Syntax

1. Correct the following sentences for grammatical errors:
   a. He don’t want to come with us.
   b. Their car is more older than ours. (2)

2. Rewrite the sentences in reported speech:
   a. She said, “I will finish the project today.”
   b. The teacher exclaimed, “What a fantastic answer!” (2)

3. Identify and correct the errors in subject-verb agreement:
   a. Each of the students (is/are) responsible for their own project.
   b. The collection of rare stamps (was/were) displayed at the exhibition. (2)

Section 2: Vocabulary

4. Define the following terms:
   a. Alacrity
   b. Ubiquitous (4)

5. Use the words in sentences to demonstrate understanding:
   a. Esoteric
b. Ephemeral (4)

Section 3: Reading Comprehension

Read the passage and answer the questions:

Passage:
The discovery of an ancient map led the explorers deep into the heart of the jungle. As they navigated through dense foliage, they encountered exotic wildlife and hidden waterfalls.

6. What motivated the explorers to venture into the jungle?
7. Describe one challenge the explorers faced during their journey. (6)

Section 4: Writing Skills

8. Write a persuasive essay (150-200 words) on the importance of incorporating literature into the primary school curriculum. Support your argument with relevant examples. (10)

Section 5: Pedagogical Understanding

9. Develop a lesson plan for teaching a poetry unit to middle school students. Include objectives, activities, and assessment methods. (10)

----End of Test----

Thank you for completing the English Entry Behavior Test. Ensure your answers are well-organized and demonstrate your understanding of the topics. Review your responses before submission. Good luck!
ENTRY LEVEL TEST- MATHEMATICS

1. The product of the place values of two 2’s in 428721 is
   A. 4       B. 40000    C. 400000    D. 40000000

2. \(3 \times 10000 + 7 \times 1000 + 9 \times 100 + 0 \times 10 + 4\) is the same as
   A. 3794     B. 37940    C. 37904     D. 379409

3. If 1 is added to the greatest 7-digit number, it will be equal to
   A. 10 thousand B. 1 Lakh    C. 10 Lakh     D. 1 Crore

4. The expanded form of the number 9578 is
   A. \(9 \times 1000 + 5 \times 100 + 7 \times 10 + 8 \times 1\)
   B. \(9 \times 1000 + 5 \times 100 + 7 \times 10 + 8 \times 1\)
   C. \(9 \times 1000 + 57 \times 10 + 8 \times 1\)
   D. \(9 \times 100 + 5 \times 100 + 7 \times 10 + 8 \times 1\)

5. When rounded off to the nearest thousands, the number 85642 is
   A. 85600     B. 85700    C. 85000     D. 86000

6. The largest 4-digit number, using any one digit twice, from digits 5, 9, 2 and 6 is
   A. 9652     B. 9562     C. 9659     D. 9965

7. In the Indian System of Numeration, the number 58695376 is written as
   A. 58, 69, 53, 76     B. 58, 695, 376    C. 5,86, 95, 376     D. 586,95,376

8. One million is equal to
   A. 1 Lakh     B. 10 Lakh    C. 1 Crore    D. 10 Crore

9. The greatest number which on rounding off to the nearest thousands gives 5000, is
   A. 5001     B. 5559     C. 5999      D. 5499

10. Keeping the place of 6 in the number 6350947 the same, the smallest number obtained by rearranging other digits is
    A. 6975430     B. 6043579    C. 6034579    D. 6034759

11. Which of the following numbers in Roman numerals is incorrect?
    A. LXXX     B. LXX     C. LX     D. LLX

12. The Largest 5-digit number having three different digits is
    A. 98978     B. 99897    C. 99987     D. 98799

13. The smallest 4-digit number having three different digits is
    A. 1102     B. 1012     C. 1020      D. 1002

14. Number of whole numbers between 38 and 68 is
    A. 31     B. 30     C. 29      D. 28

15. The product of successor and predecessor of 999 is
    A. 999000     B. 998000    C. 989000    D. 1998

16. The product of a non-zero whole number and its successor is always
    A. An even number     B. an odd number    C. a prime number    D. divisible by three

17. A whole number is added to 25 and the same number is subtracted from 25. The sum of the resulting numbers is
    A. 0     B. 25     C. 50      D. 75
18. Which of the following is not true?
   A. \((7 + 8) + 9 = 7 + (8 + 9)\)
   B. \((7 \times 8) \times 9 = 7 \times (8 \times 9)\)
   C. \(7 + 8 \times 9 = (7 + 8) \times (7 + 9)\)
   D. \(7 \times (8 + 9) = (7 \times 8) + (7 \times 9)\)

19. By using dot (.) patterns, which of the following numbers can be arranged in all the three ways namely a line, a triangle and a rectangle?
   A. 9            B. 10             C. 11            D. 12

20. Which of the following statements is not true?
   A. Both addition and multiplication are associative for whole numbers.
   B. Zero is the identity for multiplication of whole numbers.
   C. Addition and multiplication both are commutative for whole numbers
   D. Multiplication is distributive over addition for whole numbers.

21. Which of the following statements is not true?
   A. \(0 + 0 = 0\)
   B. \(0 - 0 = 0\)
   C. \(0 \times 0 = 0\)
   D. \(0 / 0 = 0\)

22. The Predecessor of 1 lakh is
   A. 99000            B. 99999           C. 999999            D. 100001

23. The successor of 1 million is
   A. 2 million        B. 1000001        C. 100001           D. 1000001

24. Number of even numbers between 58 and 80 is
   A. 10              B. 11              C.12                D. 13

25. Sum of the number of primes between 16 to 80 and 90 to 100 is
   A. 20              B. 18              C. 17                D. 16

26. Which of the following statements is not true?
   A. The HCF of two distinct prime numbers is 1.
   B. The HCF of two co prime numbers is 1.
   C. The HCF of two consecutive even numbers is 2.
   D. The HCF of an even and an odd number is even.

27. The number of distinct prime factors of the largest 4-digit number is
   A. 2              B. 3               C. 5                D. 11
ENTRY LEVEL TEST - MATHEMATICS

Total Marks: 50

1. If the sum of five consecutive numbers is 60, then the first number is:
   A. 8       B. 10       C. 12       D. 15

2. The sum of integers from 1 to 100 that are divisible by 2 or 5 is:
   A. 2550     B. 3050     C. 3550     D. 3600

3. \( \frac{7}{13} - \frac{5}{9} \) of \( \frac{4}{15} = ? \)
   A. 5       B. 3       C. 3550     D. 3600

4. The least number which, when divided by 20, 25, 35, 40 leaves the remainder 14, 19, 29, & 34 respectively.
   A. 1390     B. 1384     C. 1394     D. 1396

5. Difference of the largest and smallest of \( \frac{13}{100}, \frac{5}{4}, \frac{9}{20}, \frac{21}{25} \) is:
   A. 0.112    B. 1.12     C. 11.2     D. 0.0112

6. If \( a = b^2 \), \( b = c^2 \) and \( c = a^2 \) then the value of \( 8xyz \) is:
   A. \( abc \)   B. \( 8 \)    C. \( xyz \)   D. 1

7. A person sold two steel almirahs for Rs 1980 each. On one he gained 10% while on the other he lost 10%. In the bargain he:
   A. Neither gained nor lost    B. gained 1%
   C. Lost 1%    D. gained 2%

8. The reflection of the origin point through \( y = 3 \) followed by a reflection in origin is
   A. \( (0, 6) \)    B. \( (0, -6) \)   C. \( (6, 0) \)   D. \( (-6, 0) \)

9. The value of \( \sqrt{3\sqrt{13824} + \sqrt{5776}} \) is
   A. 10     B. 8     C. 1000     D. 50

10. A solid metallic right cone is melted and some solid right circular cylinders are made. If the radius of the base of each cylinder is half the radius of the cone and the height of each cylinder is one-third the height of the cone, then the number of cylinders formed are:
    A. 3     B. 4     C. 5     D. 6

11. The difference between compound interest and simple interest on a sum of money for two years is given below:
    A. \( \frac{Pr^2}{100} \)    B. \( \frac{Pr^2}{50} \)    C. \( \frac{2Pr^2}{10000} \)    D. \( \frac{Pr^2}{10000} \)

12. HCF of \( (x+1) \) and \( (x^2-x+1) \) is
    A. \( (x+1)^2 \)    B. \( (x^2-x+1) \)    C. \( (x^3+1) \)    D. 1

13. The area of a semi-circular region is 308cm², then its perimeter will be:
    A. 44cm     B. 72 cm     C. 28 cm     D. 36 cm

14. A shopkeeper sells his goods at 10% discount. If he gains 12.5% on his goods which cost him Rs 1200, then the marked price of goods is:
    A. 1350     B. 1000     C. 1250     D. 1500

15. Find the value of \( \sqrt{48} - \sqrt{192} + \sqrt{75} \)
    A. 37.32    B. 3.739    C. 1.732    D. 3.737

16. If \( x^2 + y^3 + z^3 = 3xyz \) and \( x + y + z = 0 \), then the value of \( \frac{(x+y)^2}{xy} + \frac{(y+z)^2}{yz} + \frac{(z+x)^2}{zx} \) is
A. xyz  B. 3  C. 3xyz  D. 1

17. \( a = \frac{(4\sqrt{6})}{(\sqrt{2}+\sqrt{3})} \) then the value of \((a + 2\sqrt{2})/ (a-2\sqrt{2}) + (a+2\sqrt{3}) / (a-2\sqrt{3})\) is
   A. \(\sqrt{2}\)  B. \(\sqrt{3}\)  C. 2  D. 3

18. The sum of the interior angles of the polygon is
   A. \((n-4)90^\circ\)  B. \((2n-4) 180^\circ\)  C. \((2n-4) 90^\circ\)  D. \((n-4) 180^\circ\)

19. If the smallest angle of a parallelogram is \(30^\circ\), then the measure of the bigger angle is
   A. 60°  B. 150°  C. 180°  D. 360°

20. If \(10^3 = 64\), then the value of \(10^{(x+1)}\) is
   A. 18  B. 42  C. 80  D. 81

21. Find the value of:
   \[5 + \frac{5}{10} + \frac{5}{100} + \frac{5}{1000} + \frac{5}{10000} + \frac{5}{100000}\]
   A. 5.55555  B. 5.0005  C. 0.55555  D. None of these

22. Find HCF of 42 and 70
   A. 7  B. 14  C. 21  D. 28

23. Three numbers are in the ratio 3:4:5 and their LCM is 2400. Their HCF is
   A. 40  B. 80  C. 120  D. 200

24. \(\sqrt{9.24 + x} = 32\) then \(x = ?\)
   A. 1  B. 68  C. 25  D. 24

25. The smallest number by which 72 be multiplied so that the product is a perfect cube:
   A. 2  B. 1  C. 3  D. None of these

26. If \(\sqrt{49} + \sqrt{x} = \sqrt{784} + \sqrt{841}\), then the value of \(x\)
   A. 50  B. 57  C. 2500  D. 250

27. If 120 is 20% of the number then 120% of that number will be
   A. 20  B. 120  C. 480  D. 720

28. At what rate Rs 600 amounts to Rs 726 in 2 years
   A. 5%  B. 10%  C. 15%  D. 20%

29. Simple interest on a sum for 3 years at the rate of 5% is Rs1200. What will be the compound interest on the same sum at the same time and at the same rate?
   A. Rs 1260  B. Rs 1261  C. Rs 1264  D. Rs 1265

30. The area of the sector of a circle is
   A. \((\theta/360) \times \pi r^2\)  B. \((\theta/360) \times \pi r^2\)  C. \((\theta/180) \times \pi r^2\)  D. \((\theta/360) \times \pi r^2\)

31. Area of a square plot is 200 m². Find the length of its diagonal.
   A. 10 m  B. 15 m  C. 20 m  D. 25 m

32. The area of a rectangular plot is 1200 m². Find the perimeter of the plot if length and breath are in the ratio of 4:3
   A. 120 m  B. 140 m  C. 160 m  D. 180 m
33. If 0 is the centre of the circle and angle BOC = 100° then angle BAC =?

A. 50°  B. 100°  C. 4°  D. 70°

34. For the given data, find the median

9, 4, 3, 12, 6, 7, 4, 5, 7, 8, 9

A. 4  B. 7  C. 9  D. 12

35. If the mean of x, 3, 4 and 5 is 3 then the value of X will be:

A. 4  B. 6  C. 11  D. 0

36. The following pie chart shows the expenditure (in degrees) of a family on different items. What is the percentage expenditure on food?

A. 60%  B. 61%  C. 63%  D. 64%

37. Two numbers are in the ratio 2:3. If 3 be added to both of them, then their ratio becomes 3:

4. Find the sum of numbers.

A. 10  B. 15  C. 20  D. 25

38. Find Cos (90-θ)/Sin θ +Sin θ – Cos (90 – θ), θ ≠ 0

A. 1  B. 2  C. ½  D. 0

39. (1- tan²θ)/ (cot²θ – 1) =?

A. Sin²θ  B. 1  C. ½  D. 0

40. Find the value of 4/3 tan²30 + Sin²60 – 3Cos²60 + ¾ tan²60 – 2 tan²45

A. 20/7  B. 1  C. 13/5  D. 25/36

41. Factors of equation x²-5x+6=0 are

A. -2, 3  B. -2, -3  C. 2, -3  D. 2, 3

42. If roots of equation x²- kx+36 =0 are equal, then what will be the value of K.

A. 14  B. 11  C. 12  D. 15

43. The curved surface area of a cylinder is 48cm. If the radius of its base is 3cm, What is its height?

A. 24 cm  B. 8cm  C. 12cm  D. 5cm

44. Find the total surface area of hemisphere of radius 7cm

A. 442 cm²  B. 452 cm²  C. 462 cm²  D. 472 cm²

45. If perimeter and area of square are equal then side of square is

A. 3cm  B. 4cm  C. 5cm  D. 6cm
Complete the following

46. \((a+b)^3 = \) ________________
47. \(a^3 + b^3 + c^3 - 3abc = \) ________________
48. \((a+b+c)^2 = \) ________________
49. \(a^3 - b^3 = \) ________________
50. Loss % = ______________

ENTRY LEVEL TEST- COMPUTER SCIENCE

1. Which of the following is not an input device
   A. Keyboard       B. Mouse       C. Monitor       D. Joystick

2. One M. B. is comprised to
   A. 1024 bytes   B. 1024*1024 bytes   C. 1024*1024*1024 bytes   D. 1024 kilobytes

3. The Internet may be termed as an example of
   A. LAN           B. WAN           C. MAN           D. All of the Above

4. Email stands for
   A. Easy mail   B. Electronic mail   C. Electronical mail   D. Exchange mail

5. Word text can be underlined by
   A. Ctrl+B       B. Ctrl+U       C. Electronical mail       D. Exchange mail

6. Word text can be underlined by
   A. Ctrl+B       B. Ctrl+U       C. Ctrl+I       D. Ctrl+C

7. The intersection of row and Column makes
   A. Spreadsheet   B. Cell       C. Worksheet   D. Cell pointer

8. PowerPoint creates new slides as
   A. Design Template   B. Auto Content   C. Wizard Blank template   D. All of the Above

9. An electronic page in a presentation is
   A. Page       B. E page       C. Slide       D. E slide

10. Powerpoint presentation is given extension
    A. XLS       B. PPT       C. DOC       D. BMP

11. Movies and sounds menu option is present on
    A. Format       B. Tools       C. Slide Show       D. Insert

12. Graphics are inserted into word through
    A. Chart       B. Files       C. Clip Art       D. None of these

13. Full form of WWW
    D. Wide Web World

14. Which of the following view is not of powerpoint views?
    A. Slide sorter view       B. Slide View       C. Slide Show View       D. Sorter View

15. Which of the following is not output device
    A. Monitor       B. Trackball       C. Printer       D. Plotter

16. One byte is comprised of
    A. Six bits       B. Eight bits       C. Seven bits       D. Five bits

17. Full form of URL is
    A. Uniform Research Locator       B. Uniform Resource Locator
    C. Unique Research Location       D. Unique Research Locator

18. A central computer surrounded by one or more nodes/ computers is called
    A. Bus network       B. Ring Network       C. Star Network       D. None of the Above

19. Computer Network which covers a limited geographical area is called
    A. Wide Area Network       B. Metropolitan Area Network
    C. Local Area Network       D. Value added Network
20. A new word document can be created by selecting
   A. File>open    B. Open>new    C. New>file    D. File>new

21. What are full forms of following:
   A. MICK
   B. OMR
   C. SRAM
   D. DRAM
   E. PROM
   F. EEPROM
   G. DBMS
   H. CAN
   I. PAN
   J. HTML

22. What is software? Explain its types.
23. What is a computer network? Explain its types.
24. What is network?
25. What is email?
26. Discuss recycle bin.
27. What are Icons?
28. Write PowerPoint views.
ENTRY LEVEL TEST- COMPUTER SCIENCE

1. Raw material to be processed by a computer is called:
   a) Date
   b) Program
   c) Software
   d) Information

2. The Processor is an example of?
   a) Hardware
   b) Output unit
   c) Software
   d) Program

3. The unit that transforms data into information is:
   a) Disk drive
   b) Bar code reader
   c) Wand reader
   d) CPU

4. Printers and Screens are common form of:
   a) Storage units
   b) Processing units
   c) Output units
   d) Input units

5. Desktop and Personal Computers are other names of:
   a) Mini computers
   b) Mainframe
   c) Microcomputers
   d) Peripherals equipments

6. Step by step instructions that runs the computer are:
   a) Documents
   b) CPUs
   c) Hardware
   d) Programs

7. Additional Data and Programs not being used by the processor are stored in:
   a) Secondary storage
   b) CPU
   c) Input units
   d) Output units

8. Hardware devices that are not part of the main computer system and are often added later to the system:
   a) Peripheral
   b) clip art
   c) highlight
d) execute

9. **The Internet is a system of**
   a) Interconnected Networks
   b) Software bundles
   c) Web page
   d) Web site

10. **A Web site can contain one or more**
    a) Spiders
    b) Web pages
    c) Networks
    d) Systems

11. **The letters, "DOS" stand for**
    a) Data Out System
    b) Disk Out System
    c) Disk Operating System
    d) Data Operating System

12. **CD-ROM stands for**
    a) Compactable Read Only Memory
    b) Compact Data Read only Memory
    c) Compactable Disk Read Only Memory
    d) Compact Disk Read Only Memory

13. **Chief component of 1st generation computer was**
    a) Transistors
    b) Vacuum Tubes and Valves
    c) Integrated Circuits
    d) None of the above

14. **Which of the following devices can be used to directly image printed text:**
    a) OCR
    b) OMR
    c) MICR
    d) All of the above

15. **Who invented the high level language C?**
    a) Dennis M. Ritchie
    b) Niklaus Writh
    c) Seymour Papert
    d) Donald Kunth

16. **A computer program that converts an entire program into machine language is called a/an:**
    a) Interpreter
    b) Simulator
    c) Compiler
    d) Commander
17. Which number system is usually followed in a typical 32-bit computer?
   a) 2
   b) 10
   c) 16
   d) 32

18. When a key is pressed on the keyboard, which standard is used for converting the keystroke into the corresponding bits:
   a) ANSI
   b) ASCII
   c) EBCDIC
   d) ISO

19. Memory unit is one part of:
   a) Input Device
   b) Control Unit
   c) Output Device
   d) CPU

20. The components that process data are located in the:
   a) Input Device
   b) Output Device
   c) System Unit
   d) Storage Component

21. Word processing, Spreadsheet and photo-editing are examples of:
   a) Application Software
   b) System Software
   c) Operating System Software
   d) Platform Software

22. _______ bits equal one byte:
   a) 8
   b) 2
   c) 1000
   d) 1 Million

23. A name for a small picture or image representing a folder or a program:
   a) Graphic
   b) Icon
   c) Software
   d) Desktop

24. This device allows the user to record or send their voice into the computer:
   a) Monitor
   b) Microphone
   c) Output
25. This memory is for short term storage and is lost when the computer is turned off:
   a) Icon
   b) CPU
   c) Hard drive
   d) RAM
ENTRY LEVEL TEST - PUNJABI

1. सिंह पठान का मीमांसक चेतना थी?
   1. बाबू उवचारित थी।
   2. बाबू आधारित थी।
   3. बाबू आवश्यक थी।
   4. बाबू नतून थी।

2. ‘भिट्टी पूज़ नगर साथ जाओ’ रेखा मध्य पाक सबका चलाया जाता?
   1. जापी गहराम सी है।
   2. बाबू आधारित थी।
   3. मेंढ बनी थी।
   4. बाबू नतून थी।

3. ‘बीत’ दो संदेश है?
   1. संगम।
   2. निरंज।
   3. निवेदन।
   4. वाणि दीप।

4. ‘पुत्रीय’ मध्य पाक सवाल भर भर है?
   1. देखा बनाती असत।
   2. बाबू संगम।
   3. वेद।
   4. भस्ममार्ग।

5. ‘वेदाणी’ मध्य पाक में हाथ धुधामा तच्छ महोदित है?
   1. भस्ममार्ग।
   2. वेदेन्द्रिय।
   3. भवानी।
   4. हुआई।

6. जिसे वेदी चीजों अभावाते हैं जिसे नहीं धुधामा तच्छ किसी भुज जिसे पूच्छ बीते संके उत्तर
   दिया है जो दिलिय संस्करण है?
   1. दिली।
   2. भवानी।
   3. लगाधर।
   4. दिलिय दिलिय वेदी संस्करण।
7. भैंसी बिंदु की बिंदुओं में जाना भजनकर्ता ची हबुड़े माँ की?
   1. धृष्ट।
   2. धृष्ट।
   3. धीर।
   4. धृष्ट।

8. ‘दिन्दूँ’ मध्य विम तंत्र की विभाग है?
   1. धम मंडल।
   2. बंदरपुल मंडल।
   3. बंदरपुल मंडल।
   4. दिन्दूँपुल मंडल।

9. विकास दीखने विदेशियां विभाग तूलीयां उठी?
   1. ना।
   2. धे।
   3. धे।
   4. धे।

10. ‘मेठ’ एक दिनुड़े लिंग बी है?
    1. मेठी।
    2. मेठड़ी।
    3. मेठ।
    4. मेठबी।

11. उप मध्य निभुँ नाल करिक नं रावड़े भुं सिंहविनियों तंत्र है?
    1. समस्त।
    2. भरलूव।
    3. धी।
    4. पुली।

12. ‘मूंजीइत’ देखर दाल।
    1. मूंजीइत।
    2. इंदरपुर।
    3. भ्रिंगवर्धी दाल।
    4. मूंजी धाव।

13. मौल, राम, लघुनीयां आदि मुख थी बुम?
    1. बमलह।
    2. बीलय।
    3. बमील।
    4. गामल।
14. ‘मुख्य’ वा प्रमुख अवस्था मध्ये आहे।
   1. कसाळ।
   2. भेटा।
   3. गुणधर्मी।
   4. मध्ये।

15. ‘विवरण में के देखा’।
   1. भवुड चुमुड देखा।
   2. फिर बीम फिर बुजोर देखा।
   3. भवुड चलव देखा।
   4. उद बीम फिर दुमुड देखा।

16. ब्रज मह ब्रज-बुधु-
    1. मेंह फिंच ढौलीवँ।
    2. फंडे ढौलीवँ।
    3. फंडे तरी पेख।
    4. मेंह धाळी वेटी।

17. फिंच बहेख जुला-----------------------------।
    1. बेडां।
    2. फिंच फिंचुंगँ।
    3. बेए बेडा जु।
    4. फिंचुं फिंचे बेटी तरी।

18. धर्मराज! दिनकविन दिविन तंग आहे है--
    1. आधार लटी।
    2. फिंचपत्र लटी।
    3. गाय लटी।
    4. मुंचेंग वजर लटी।

19. ललंड़ गाव:flexी शरमी फिंचवँ वर्जवँ मी।
    1. जुरवँ टीमी।
    2. बेए बेट।
    3. मेंह पेङ्च।
    4. बेमेंह।

20. ‘रामसात’ आधिपत्य वा मंत्राधिपत्य वेळ है।
    1. अंकुड अंकुड।
    2. नसिन्च नसिन्च।
    3. टवाटा।
    4. नजारीन मच्चेंह।
21. क्या मनुष्य चा र ली है?
   1. अपिलाम।
   2. उंड।
   3. अधिशंस।
   4. धीरजस्वल।

22. ‘समुद्र धन्य प्रेम’ विवरण दे है जहाँ ब्रेट है?
   1. पूर्व: पुलव मिल।
   2. बाटो हीर मिल।
   3. तिक बुभाच बिठलकी।
   4. सुखीड पाँड।

23. कैसा विश्व वा देशी ब्रेट है?
   1. गुरुवर मिल सुमाधित।
   2. त्रिवर्ग मिल पीढ़लकी।
   3. पूर्व: पुलव मिल।
   4. बाटो हीर मिल।

24. कैसा हिंदु धन्य धन्य ब्रेट है बिलम चीप ही बहुँक़ों बाँड़ी सीची है?
   1. इंडी।
   2. बांध।
   3. बुंदीची।
   4. बैठचट।

25. कैसा हीम: ‘बेटी पुलीमा’ विवर्ण दृश?
   1. य, द, ज, छ।
   2. उ, घ, ढ, य।
   3. ट, ठ, झ, च।
   4. व, ध, न, य।

26. क्या हिंदी दी स्रोती बिहार है?
   1. गुलामी।
   2. बेहतरी।
   3. वेशभूम।
   4. बृहतभूमी।

27. उठेने प्रमुख प्रतिहि पति जुसे।
   1. चण।
   2. चुंब।
   3. चल।
   4. चेत।
28. राख विचले विचल हैं टक्के वे माती पिंगा की भवन पुंछ था?
   1. विचल
   2. राखा
   3. विचल
   4. लिखा

29. किमे राख बिंच तिम में टुंडे लोह बीजा नांद माँ था?
   1. राखा
   2. बिंचा
   3. राखी
   4. बुधा

30. ‘लखा’ मधुर तरंग ती विमा है?
   1. टिकवठरचत
   2. ढुंढरचत
   3. दमुडरचत
   4. धम तरंग
ENTRY LEVEL TEST - PUNJABI

1. ਗੁਰੂਮੁਖੀ ਸਿਖੀ ਦੀ ਰਚਨਾ ਤੁੱਤ ਬਿੱਚੇ-ਬਿੱਚੇ ਵਿਚਿੱਤਰ ਦੇਖਨ ਕਿਨਾ ਹੈ?
   1. ਮਹਰਾਂ ਅਦਾ ਅੰਧਾਣ
   2. ਸਿੱਖੀ ਅਦਾ ਬਰਤਨ
   3. ਮਹਰਾ ਅਦਾ ਤੀਰਥੀ
   4. ਮਹਰਾ ਅਦਾ ਸਿਰਫ਼ਸਤਲ

2. ਗੁਰੂਮੁਖੀ ਸਿਖ ਅਰਜ ਮਹਰਾ ਬਿੱਚੇ ਰਹਨ?
   1. ਲ, ਕ
   2. ਜ, ਤ
   3. ਜ, ਁ
   4. ਬ, ਰ

3. ‘ਬਰਹ’ ਵਿਚਿੱਤਰ ਬਿੱਚੇ ਰਹਨ?
   1. ਚੇਣਡੀ
   2. ਉਲੂਢੀ
   3. ਬੰਠੀ
   4. ਹੁੰਠ ਨੀੜੀ

4. ਬਰਹ ਮਹਰਾ ਭਰਵਾ ਅਤੇ ਮਹਰਾ ਤੇ?
   1. ਉ
   2. ਹਨ
   3. ਦੀ
   4. ਦਰ

5. ਬਿੱਚੇ ਰਚਨ/ਰੰਗਰੰਗਰ ਵਿਚਿੱਤਰ ਵਿਚਿੱਤਰਦਾ ਬਚਨ
   1. ਟੇਲੀ-ਟੇਲੀ, ਸਭ
   2. ਤੌਂ ਸੀ, ਤੌਂ ਸੀ, ਤੌਂ ਸੀ ਮਹਰਾ ਥਾਨ
   3. ਤੜੀ ਰਤਨ, ਰਤਨ
   4. ਜਹਾ ਜ਼ਿੱਤ, ਜਾ ਜਿ, ਜਾ ਜਿ

6. ਲਕੀਲੇ ਮਹਰਾਂ (ਵਿਚਿੱਤਰ-ਵਿਚਿੱਤਰਦਾ) ਦੀਆਂ ਵਿਚਿੱਤਰਦਾ ਦੇਖੋ:
   (ਦੀ) ਅਮੀ ਦਰਵਾਜਾ ਧਰਾ ਜਾਂ?
   1. ਲਗਾ-ਕਥਾਕਾ
   2. ਸਭਤਨਾ-ਕਥਾਕਾ
3. लघू-रघुव
4. पवित्रगद-रघुव

(अ) कूम्भ चौकी जीती है बिम लटी मस्त की बुझायें।
1. विदड़ी रघुव
2. लघू रघुव
3. पवित्रचे रघुव
4. पवित्रदात रघुव

7. मैं खिले मा खिल घं (झुबर्वल खिंच घंछने)
1. मैं खिले मा खिल घं
2. मैं खिले खारंग।
3. मैं खिले खिल घं।
4. मैं खिले खिल घं।

8. ‘मुखिय ते अपरी दुर्गा एर भुजाँड बीड़ा’। झुबर्वल दी खिलकी खिलिवा है
1. मुखिया
2. भुजाँड-रघुव
3. चार्टर
4. मचीबां

9. मुखिय खिलिवा दसा दस चुड़े।
1. मुखिय दे खिलिवा है।
2. उच्चे चमक तो उठ।
3. थमके टुंड़े बल।
4. दसीबां खिलकी धा दसीबां उठ।

10. ‘मैं खिले बाबां नाड़ा हों’ दसे खिंचे पृथ्वी खिलिवा चुड़े।
1. मैं
2. बाबां
3. खिंच
4. नाड़ा हों

11. ‘बंगे बेड़े यह’ दस किम भुजाँड दी खिलिवा है?
1. भुजाँड
2. मुखिया
3. मचीबां
4. मचीबां
12. हिमच्छ रचन धनरांज छटे।
   1. आपी, इमी
   2. भांज, हिंच
   3. इं, भेंता
   4. चें, व्रित्ते

13. विक्षेपण विस्तीर्ण बुधवार दे उठे चढ़?
   1. ऐंग
   2. अंठ
   3. धेंस
   4. ठेंव

14. ‘चिंता बुध घुड़ मेटउ’ हे रचब बनें बिस्ते विक्षेपण ही दबाएं वेठी हे?
   1. धुरिमह रचन
   2. हिमच्छ रचन
   3. गुट रचन
   4. मंधिम्ह रचन

15. ‘विक्षेपण ही विस्तीर्ण तेंदी’ –
   1. मंधिम्ह-रचन
   2. धुरिमह रचन
   3. भुरलंती
   4. हिमच्छ-रचन

16. सिंह रचन धनरांज छटे
   1. आप, भापम
   2. इमी
   3. ठुंच, ठुंचलं
   4. ठेंट, व्रित्ते

17. रचब बनें बौल बुध दिबसका दूसर विरा संघ हे?
   1. लोटच
   2. ठुंचभुधभ
   3. बुलचा
   4. भुरलं
18. उपर्युक्त चीजों विक्लीमां विभाग युक्तीमां उठ?
   5. ते
   6. तिरंगा
   7. छपा
   8. ते

19. रच बिच वे उपर्युक्त चीज से विभाग की?
   "मान्यता तर बल में"
   5. मेंधप रुपचार
   6. तिरंगे रुपचार
   7. अन्तिम रुपचार
   8. धृतर रुपचार

20. उच्चता बया जेनेम है। अलीसे मध्य से पाँच से विभाग की?
   5. भाषा टाँड़
   6. धारा टाँड़
   7. तिरंगा रुपचार टाँड़
   8. भाषा-रुपचार टाँड़

21. तिरंगा रुपचार टाँड़ गुटे?
   5. लघुमो, अभस, अभन्न
   6. लघुमो, कप, समाचार
   7. लघुमो, कप, फिलाव
   8. घेरे, जमीन, बंगाल

22. ‘डे’ मध्य दुर्ग विवेकजीमां विक्लीमां बजाय लगाम कारणीक उठ?
   5. भूमि, निगली, शेत
   6. भूमि, लूहैदर, तेज
   7. विधिली, दुर्गेश्वर, दिघी
   8. दुर्गेश्वर, लूहैदर, तेज

23. धाराबिच बचाव नूठ कटी घेड बिच ये मध्य दुर्ग दो बौद्ध बीडी लंडी है?
   1. अंधकार सजा वे
   2. भूमि रिंधु तर विभाग दंपर वे
   3. समस्तवे तंब विस्तर वे
   4. अपनी भाषा तथा
24. बंधकों विशेषता चुटें।
1. छ
2. रू
3. दू
4. दू

25. राख सिंचे पलब छुटें (समर्थ पलब)
1. रेव वाढ़ छै, पुंड दिखालख तरी।
2. रेव मंग छै किन मै छिमर्दुः तरी स्थित।
3. नेवर उमीं धाम रेहटा है उई भिखुड़ खड़े।
4. रेव फलाड़ खड़ा है उई से उच्चमुड़ खड़े।

26. मुखिया इं राख नं छुट घर समर्थ पलब दी विश्ववी विश्वभूमि है।
1. मृणुरी
2. विचित्री
3. विचित्री
4. लापत लापत

27. “बीजार! भेदी गोमुं अं मुठ” राख दिच विचे दिमाहित दी दचे दची है?
1. दिनारा दचव
2. भण्डार-मुचव
3. भेदियती
4. मुडता दचव

28. कबीर मेंधपी माह दी विश्वभूमि देने।
माहु महुल मैदे भट दे रेहे दी है।
1. तुरक
2. अहुरक
3. टुरकर्नेके
4. दिनारा दिचे वेदी ही रहीं

29. मुक्तीद मिड मदुखे नंदी भविष्यद राख दिच अध्ययन लापत दिवस है?
1. मुक्तीद मिड
2. मदुखे नंदी
3. नंदी
4. भविष्यद
30. मुख्य चम्बल चित्र दै चित्र मुख्य चित्रण चम्बल दै
   1. चबूंग चम्बल
   2. चम्बल
   3. चम्बल
   4. भंगवस्त

31. रावं हंदें निम भन्ने बेली बीडी नर्ते डुम्भू दी विनारं संघादे दै?
   1. धुंडहं धुपर
   2. छुड़म धुपर
   3. भेमभ धुपर
   4. भहंस धुपर

32. मैंने विषेस ना विहर गं (ब्रह्मद वाज दिंदु घरले)
   1. मैं विषेस ना विहर मी
   2. मैंने विषेस विहर गं
   3. मैंने विषेस विहर घरा
   4. मैंने विषेस विहर मी

33. ब्रह्मद वाज घरले:-
   1. ये, उह, उंग
   2. मी, मह, मांग
   3. जा, जी, जे
   4. टूं, ते, राङ

34. श्वेता धुपर वाज कठी विहरे विश्वभित्र घरले संघेदे घरह।
   1. बापां! में! वे छुएगा
   2. आछु! ती! ती आधिभा ठूं
   3. छगती छुंटे!
   4. ती!

35. विश्वभा विषेस बिंती धुपर वे छुंटे घरह?
   1. 6
   2. 7
   3. 8
   4. 5
36. भयंकर देवता दीपावली विभाग छैले।
   1. 5
   2. 6
   3. 4
   4. 7

37. सिवके मंत्रिपत्र हेतु पृथक्के अर्थ अथवा गद्यके वृद्धि दिये हुए विरोध तंगा है?
   1. पृथक्क
   2. अथवा
   3. उपयुक्ते भिन्नता
   4. अद्वितीय

38. उदयभ खूब अभूतस्य हो। दब दिंश सी विज्ञ विशिष्ट है?
   1. अवर्णकृत
   2. सत्यनिर्वास
   3. मेसनति
   4. मनविशिष्ट

39. व्रज, भ, मु, विश वी उठ?
   1. विशिष्ट
   2. तांत्र
   3. पाणु
   4. धर्मवंश

40. मैं आधर्म विभाग भक्ति सप्ताह छैला? वेंक निस्क विच्छ विष्णुमाठ है?
   1. धर्मवंशी
   2. विशिष्ट-विभाग
   3. मेसनति-विभाग
   4. हिमवंशिक