

Sl. No. :

KET SCHOLARSHIP TEST

(ಕೆಎಸ್ ಉನ್ನತಶಿಕ್ಷಣ ಸಂಸ್ಥೆ)



TEST SET:

A

Exam Duration: 2 hours 30 minutes

Date: 20th December 2015

Please read the following instructions carefully.

1. No candidate is allowed to appear KET TEST examination without KET TEST card.
2. All the candidates should maintain silence during examination.
3. No electronic devices (mobile, scientific calculator etc.) are allowed to use during examination.
4. All the candidates should use pen for answering questions.
5. All the questions are objective type. And for each question, there are four alternative answers given. Choose the correct one. You should write your serial no. on the question paper.
6. The answer sheet will be supplied separately. The respective correct answer should be ticked in the square box.
7. The total number of questions is 100. Each question carries 4 marks, and 1 (one) mark will be deducted for each wrong answer.

There are 11 pages in the question set.

In case of any discrepancies the decision of KET will be final.

Q1. OVAL is related to CIRCLE. In the same way RECTANGLE is related to:

- A. Pentagon
- B. Triangle
- C. Square
- D. Trapezoid

Q2. What should be the next number in the series

3, 7, 15, 31, 63,

- A. 127
- B. 131
- C. 115
- D. 92

Q3. Tomba sells a TV to Chaoba at a profit of 10% and again Chaoba sells it to Mani at a loss of 10%. If Mani pays Rs. 9900 to Chaoba for the TV, then the cost price of the TV for Tomba is :

- A. Rs 10000
- B. Rs 9900
- C. Rs 11000
- D. None of these

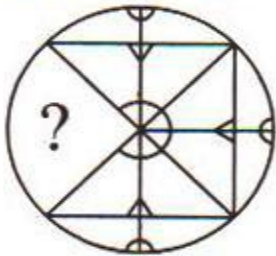
Q4. Arrange the following words as per order in the dictionary.

1. Noble 2. Nobiliary 3. Noblesse 4. Nobility 5. Nobble

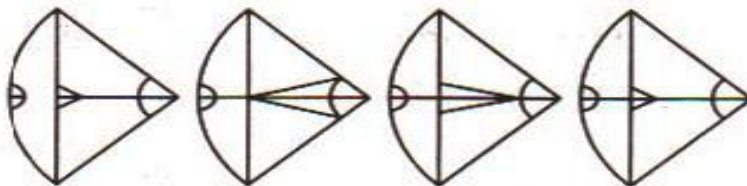
- A. 1,4,3,2,5
- B. 3,4,1,2,5
- C. 5,2,4,1,3
- D. 2,4,3,5,1

Q5. Which option in the Answer figures will complete the missing part in Question figure?

Question figure



Answer figures



i. ii. iii. iv.

- A. iv
- B. iii
- C. ii
- D. i

Q6. Find the odd one out

- A. Assam
- B. Mizoram
- C. West Bengal
- D. Nagaland

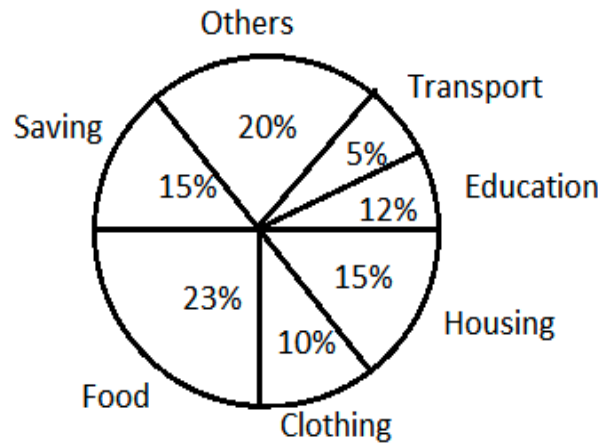
Q7. Introducing Reena, Monu said, "She is the only daughter of my mother's husband then how Reena related to Monu."

- A. Aunt
- B. Sister
- C. Niece
- D. Cousin

Q8. Town D is towards East of town F. Town B is towards North of town D. Town H is towards South of town D. Towards which direction is town H from town F ?

- A. East
- B. North-East
- C. South-West
- D. South-East

Directions (Q9-Q10): Read the following pie-chart corresponding to spendings by a family and answer the questions given below it.



Q9. If the total amount spent during the year 1998 was Rs. 46000/- the amount spent on food was :

- A. Rs 10580.
- B. Rs 2300.
- C. Rs 23000.
- D. Rs 2000

Q10. The ratio of the total amount of money spent on housing to that spent on education was:

- A. 5:2
- B. 4:5
- C. 2:5
- D. 5:4

Q11. Fill in the blank

The agenda for the meeting is _____ the notice.

- A. forwarded in
- B. subscribed to
- C. delivered as
- D. Enclosed with

Q12. Choose the correctly spelled word

- A. Tomorrow
- B. Tommorrow
- C. Tommorow
- D. Tomorow

Q13. Choose the word which can replace the given phrase

- "Something no longer in use"
- A. Absolute
 - B. Obsolete
 - C. Primitive
 - D. Desolate

Q14. Choose the meaning represented by the given phrase

- "Fall flat"
- A. fail to win appreciation
 - B. to fall in love
 - C. lose confidence
 - D. lose consciousness

Q15. Choose the word which has **same meaning** as "ATROCITY"

- A. envy
- B. violence
- C. jealousy
- D. absurdity

Q16. Choose the word which has **opposite meaning** to "HEREDITARY"

- A. carried
- B. regained
- C. acquired
- D. possessed

Q17. Change to passive voice

"The doctor operated on me at home"

- A. I was operated by the doctor at home
- B. I was operated on at home by the doctor
- C. I had to be operated at home by the doctor
- D. I was operated at home

- Q29. Ranthambore National Park is majorly famous for
A. Elephants
B. Leopards
C. Tigers
D. Lion
- Q30. Who is the Chief Justice of Imphal High Court.
A. Luxmi Kanta Mohapatra
B. N. Kotiswar Singh
C. KH. Nobin Singh
D. Abhay Manohar Sapre
- Q31. Nomadic herding is practised in India mostly in the
A. Western region
B. Central region
C. South-eastern region
D. North-eastern region
- Q32. Extracting metals from the ores through heating beyond melting point is called
A. Smelting
B. Refining
C. Crystallisation
D. Quenching
- Q33. In India Uranium is found in
A. Jharkhand and Kerala
B. Jharkhand and Rajasthan
C. Rajasthan and Kerala
D. Karnataka and Rajasthan
- Q34. The shortest day in the northern hemisphere is
A. June 21
B. January 22
C. December 22
D. November 30
- Q35. Which area is densely populated due to cultural factors
A. Mumbai
B. Pune
C. Kanpur
D. Varanasi
- Q36. Which of the following Industry is not a Sunrise industry in India
A. Information technology
B. Hospitality
C. Textile industry
D. Food processing
- Q37. Which are the man made factors are responsible for extinction of species.
A. Tsunami
B. Deforestation
C. Earthquakes
D. Soil erosion
- Q38. Which is not among the means of mass media communication
A. Television
B. Radio
C. Newspaper
D. Telephone
- Q39. The temperate grasslands of South Africa is called
A. Veld
B. Prairies
C. Tundra
D. Pampas
- Q40. The oceanic crust of earth mainly consists of
A. Silica and Aluminum
B. Silica and Iron
C. Silica and Magnesium
D. Silica and Nickel
- Q41. Who introduced Doctrine of Lapse
A. Lord Dalhousie
B. Lord Wellesly
C. Lord Cornwallis
D. Lord Hastings
- Q42. Battle of Buxar was introduction of East India Company rule in India. It was fought in
A. 1786
B. 1764
C. 1774
D. 1768
- Q43. Where is the 1857 Mutiny originated.
A. Delhi
B. Barrackpore
C. Meerut
D. Gorakhpur
- Q44. Permanent settlement was introduced in order to
A. Increase revenue
B. Have fixed income
C. Give responsibility to Zamindars
D. All of the above

- Q45. Mughal rulers issued farman. What is the meaning of farman.
 A. An obstruction B. A military rising
 C. A nawab revenge D. A royal order
- Q46. Rajaraja and Rajendra built many achritecture in India, they were rulers of
 A. Chauhan dynasty B. Chola dynasty
 C. Pallava dynasty D. None of the above
- Q47. Who was crowned as King of Manipur after British defeated Manipur in 1891
 A. Kulachnadra Maharaja B. Surachandra Maharaja
 C. Budhachandra Maharaja D. Churachand Maharaja
- Q48. Before Italy unification, which of the following is true.
 A. Ruled mostly by foreigners
 B. Native rulers but small kingdoms
 C. Piedmont-Sardinia was ruled by foreigners
 D.Count Cavour was one of the King
- Q49. Which of the following is not related to Mrs Annie Besant
 A. Quit India Movement B. Theosophical Society
 C. Home rule movement D. None of the above
- Q50. Who raised the slogan" Freedom is my birthright and I shall have it".
 A. Bipin Chandra pal B. Lala Lajapat Rai
 C. Bal Gangadhar Tilak D. Chandrasekhar Azd
- Q51. Numbers 1 to 100 are written on hundred separate slips kept in a box and well shuffled. One slip is chosen at random. What is the probability of getting a number containing 7
 A. 1/100 B. 10/100
 C. 19/100 D. 20/100
- Q52. Sum of all interior angles of a polygon with (n) sides is given by
 A. $(n - 2) \times 180^\circ$ B. $n - 2 \times 180^\circ$
 C. $(n + 2) \times 180^\circ$ D. $n + 2 \times 180^\circ$

Direction Q53 – Q54: Read the table given below about Frequency distribution of daily income of 550 workers of a factory and answer the following questions

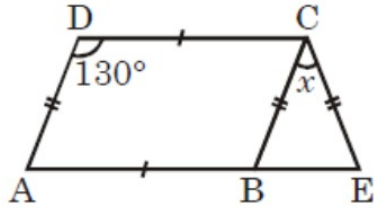
Class	Class intervals (daily income in Rs)	Frequency (number of workers)
I	100-125	45
II	125-150	25
III	150-175	55
IV	175-200	125
V	200-225	140
VI	225-250	55
VII	250-275	35
VIII	275-300	50
IX	300-325	20
	TOTAL	550

- Q53. Which classes has the highest and lowest frequency?
 A. IV & IX B. V & IX C. V & II D. IX & IV
- Q54. What is the size of class intervals?
 A. 100 B. 20 C. 25 D. 30
- Q55. What will be the value of 'x' in Pythagorean triplet (20,21, x)?
 A. 27 B. 29 C. 28 D. 26

Q56. A shopkeeper bought a TV and a VCR at the cost of Rs 8000 each. He sold the TV at a profit of 8% and the VCR at the loss of 4%. What is the profit or loss % of the whole transaction.

- A. 2% loss B. 2% profit C. 4% loss D. 4% profit

Q57. In Fig. what is the value of x if ABCD is a parallelogram and CBE is an isosceles triangle.



- A. 50 B. 80 C. 60 D. 70

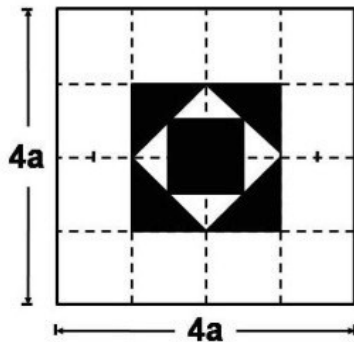
Q58. Which of the following is correct

- A. $(a-b)^2 = a^2 - b^2 + 2ab$ B. $(a+b)^2 = a^2 + b^2 - 2ab$
 C. $(a-b)^2 = a^2 - b^2$ D. $(a-b)^2 = a^2 + b^2 - 2ab$

Q59. Which of the following is a factor of $6xy - 4y + 6 - 9x$?

- A. $2x + y$ B. $3x + 2$ C. $3x - 2$ D. $2 - 3x$

Q60. Find the area of the shaded region



- A. $2a^2$ B. $(3/4)a^2$ C. $4a^2$ D. $3a^2$

Q61. When the matchsticks struck against rubbing surface, red phosphorous

- A. Converts into white phosphorous
 B. Reacts with potassium chlorate
 C. Ignite antimony disulphide
 D. None of the above

Q62. When magnesium ribbon burnt it produce:

- A. Magnesium oxide B. Magnesium hydroxide
 C. Magnesium chloride D. Magnesium sulphate

Q63. Moist air is the combination of-

- A. $H_2O + CO + O_2$ B. $H_2O + CO_2 + O_2$
 C. $H_2O + CO_2 + H_2$ D. $H_2O + O_2 + H_2$

Q64. What happens when dilute sulphuric acid is poured on a copper plate?

- A. Copper sulphate is formed
 B. Zinc sulphate formed
 C. Copper chloride formed
 D. Zinc sulphate formed

Q65. Which gas is obtained during the processing of coal?

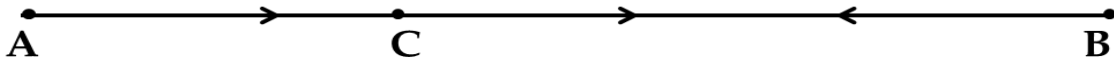
- A. Carbon dioxide B. Coal gas
 C. Carbon monoxide D. Sulphur dioxide

Q66. The fibres which resemble wool are known as

- A. Terylene B. Polyester
 C. Acrylone D. Nylon

- Q67. The process by which artificial fibres are made from simple molecules is called
- A. Monomer
B. Polymer
C. Thermosetting
D. Polymerization
- Q68. Iron can displace _____ from its salt solution.
- A. Zinc
B. Sodium
C. Copper
D. Potassium
- Q69. Materials having properties of both metal and non-metal are called _____.
- A. Noble Metals
B. Metalloids
C. Alloys
D. Mixtures
- Q70. What is used for surfacing of roads?
- A. Paraffin wax
B. Bitumen
C. Coke
D. Lubricants
- Q71. The algae commonly used as fertilizers are called
- A. Staphylococcus
B. Diatoms
C. Blue green algae
D. None of the above
- Q72. The yeast multiply by a process called
- A. Binary fission
B. Spore formation
C. Budding
D. None of the above
- Q73. Plastids are found in the cell of the following organisms:
- A. Fungi
B. Plants
C. Protozoa
D. Animals
- Q74. In plant cells membrane surrounding vacuoles is known as
- A. Cell membrane
B. Tonoplast
C. Cell wall
D. Nucleolus
- Q75. Which organelle is considered as a suicide bag?
- A. Centrosome
B. Mesosomes
C. Lysosomes
D. Chromosome
- Q76. Which organelle is the power house of the cells ?
- A. Plastids
B. Mitochondria
C. Golgi
D. Nucleus
- Q77. Largest cell in human body is
- A. liver cell
B. muscle cell
C. nerve cell
D. kidney cell
- Q78. Yeast is used in the production of
- A. Sugar
B. Hydrochloric acid
C. Alcohol
D. Oxygen
- Q79. Plasmodium is a human parasite which causes
- A. Dysentery
B. Sleeping sickness
C. Malaria
D. All of the above
- Q80. Which of the following is **not** a fungi
- A. Paramecium
B. Bread mould
C. Penicillium
D. Aspergillus

Q81. A bus is moving in a straight road from A to B and come back to C as shown in figure. $AB=50$ km; $BC=30$ km; time taken by the bus from A to B is 1hr 30 min, time taken by the bus from B to C is 30 min. Then the velocity of the bus is-



- A. 10 Km/hr
 B. 20 Km/hr
 C. 40 Km/hr
 D. 80 Km/hr

Q82. A sound source can produced 1000 number of vibrations in 10 s. What is the time period of the wave?

- A. 100 s
 B. 0.01 s
 C. 1000 s
 D. 0.1 s

Q83. A and B are two bamboo tubes of same diameter and density. Length of A is 15 cm and b is 20 cm. (Choose the correct answer from the followings)

- A. Tube A has higher frequency than tube B
 B. Tube B has higher frequency than tube A
 C. Speed of sound in the two tubes will be same
 D. Both the tubes have same frequency

Q84. A man and a car are start moving from Kakching to Imphal with same velocity of 20 km/hr. Mass of the man is 60 kg and car is 2000 kg. (select the correct answer)

- A. Car will reach Imphal earlier than man
 B. Both car and man will reach Imphal at same time
 C. Man will reach Imphal earlier than car
 D. None of the above

Q85. A bulb is connected to battery. Accidentally the two ends of the bulb is connected by an electric wire. Select the correct answer

- A. The bulb will be brighter than earlier
 B. There will be no light on the bulb
 C. The bulb will not change its brightness
 D. None of the above

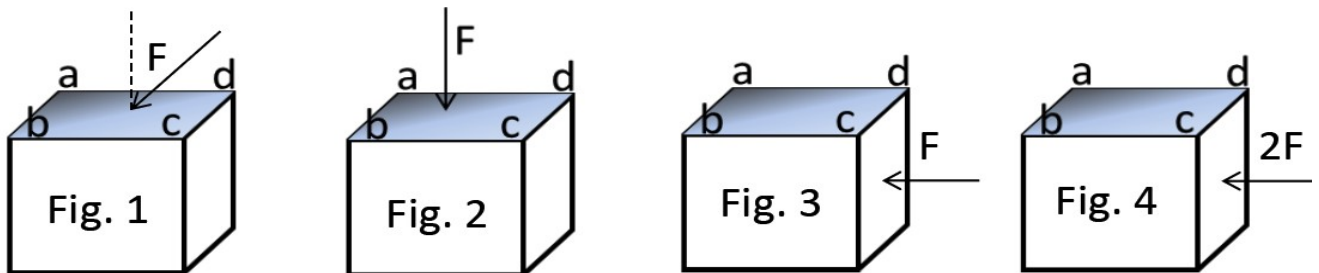
Q86. A ball is rolling without slipping. Then select the wrong one.

- A. rolling friction is zero
 B. kinetic friction is zero
 C. static friction is zero
 D. all the above statements are correct

Q87. The time difference between synodic month and sidereal month is

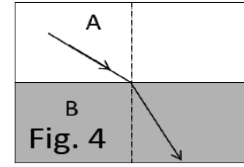
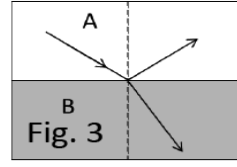
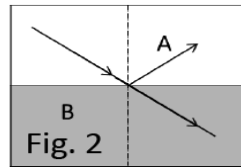
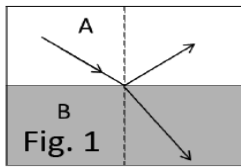
- A. 2.2 days
 B. 2.2 hrs
 C. 2.5 days
 D. 2.5 hrs

Q88. Figure below shows that the direction of applied force ($= F = 4N$) on a cube. The pressure on the top surface **abcd** will be highest in the case of



- A. Fig. 1
 B. Fig. 2
 C. Fig. 3
 D. Fig. 4

Q89. Two transparent mediums A and B have same refractive index, then which of the following ray diagram is correct?



- A. Fig. 1
 B. Fig. 2
 C. Fig. 3
 D. Fig. 4

Q90. 20×10^{19} electrons are moving in a conductor in 10 s from P to Q. Then, the current in the conductor is- (charge of an electron = -1.6×10^{-19} C)

- A. 3.2 A from Q to P
 B. 3.2 A from P to Q
 C. 320 A from P to Q
 D. 320 A from Q to P

DIRECTIONS Q91 – Q100: Answer the questions based on the passage given

Passage 1:
Thang-Ta

Thang Ta--"The Art of the Sword and Spear"-- is the traditional martial art of Manipur in Northeast India. It integrates various external weapons - the sword, spear, dagger, etc. - with the internal practice of physical control through soft movements coordinated with the rhythms of breathing. The proper name for Thang-Ta is Huyen Lallong. As the name implies, Huyen Lallong is more than just the training of fighting skills. It involves breathing methods, meditations, and rituals. Some of the sword and spear forms are entirely ritualistic, although they are composed of material techniques. They are to be performed only at special occasions or under special circumstances. Perhaps the most famous form is the ritual spear dance done by King Bhagyachandra (ruled 1759-1798) on a mountain top during his exile due to the Burmese invasion in 1762. The Manipuris believe that the ritual was instrumental in driving the Burmese out of Manipur.

The unarmed aspect of Thang-Ta is named Sarit Sarat. Traditionally, it is taught after competence in weapons was gained. It uses footwork and handwork form and the weapons form with a liberal dose of the native wrestling style-Mukna. The heart of Thang-Ta is the "sword". There are literally hundreds of different sword drills for training the basic patterns. Many are two persons set but others may be practiced solo, at least initially. Three warriors - Paona Naol Singh, Ningthoukhongja Poila, Loukrakpam Sana Mityeng each founded a distinct style within the art of Thang-Ta.

Thang-Ta is almost completely unknown today outside Manipur. In India itself, the art is not well known, although a documentary was broadcast on Indian television in 1994. Unfortunately, opportunities for Westerners to study Thang-Ta are very limited. Travel to and from the region is restricted.

Source: <http://www.libertynet.org/solaris/Aikido/Events.html>

Q91. Thang-Ta integrates various external weapons like

- A. Sword, Hammer and Arms
 B. Spear, Knife and Mukna
 C. Sword, Spear and Dagger
 D. Dagger, Spear and Footwork

Q92. The proper name of Thang-Ta, as per the passage, is

- A. Sarit Sarat
 B. Huyen Lallong
 C. Mukna
 D. Art of Sword and Spear

- Q93. The ritual performed by King Bhagyachandra was instrumental in driving out
of Manipur
- | | |
|-------------|------------|
| A. British | B. Ahoms |
| C. Japanese | D. Burmese |
- Q94. Sarit Sarat is
- | | |
|-------------------------------|----------------------------------|
| A. Wrestling form | B. Footwork and Muscle work form |
| C. Footwork and handwork form | D. Ritualistic form. |
- Q95. Which of the following is incorrect?
- | |
|---|
| A. None of Westerner knows about Thang-Ta |
| B. Travel to and from region is restricted |
| C. In India itself, the art of Thang-Ta is not well known |
| D. Opportunities for Westerners to learn the art of Thang-Ta is limited |

Passage 2:

String it together

Understand string theory? Take a bow. The orchestra is one of the first things that come to mind when you think of Classical music, right? That's because, classical music has a distinctive sound. And it comes from the smart organization of the instruments that produce the soundscape. Remember how we saw that the musical air is a continuum of auditory frequencies, textures, timbres and amplitudes? Don't be confused! Auditory frequencies are the same thing as pitch. Amplitude is nothing but volume or loudness. And the timbre (rhymes with amber) of an instrument depends on something called harmonics or overtones. Which we'll talk about later.

So, you know why you get a feeling of completeness after listening to orchestral music? It's because it covers every timbre range, amplitude, auditory frequency, tempo and texture. It leaves nothing out. The credit should go to the choice of instruments, composition methods and the skill of the conductor.

This is a great insight in itself about how we get a sense of completion with music. A well-balanced approach is what sets compositions apart. Let's see how it all works.

[source: <http://www.thehindu.com/features/kids/> (dated 28 october 2015)]

- Q96. When we think of the Classical music, what comes first in our mind is
- | | |
|-----------|--------------|
| A. Rhythm | B. Frequency |
| C. Bow | D. Orchestra |
- Q97. Musical air is a continuum of
- | |
|-------------------------------|
| A. Timbre range and amplitude |
| B. Amplitude and frequency |
| C. Tempo and texture |
| D. All of the above |
- Q98. Amplitude, according to the passage, is
- | | |
|-----------------------|-----------------------|
| A. Volume or loudness | B. Frequency of sound |
| C. Pitch of sound | D. Harmonics |
- Q99. After listening to orchestral music we feel
- | | |
|-----------------|------------|
| A. Depressed | B. Excited |
| C. Completeness | D. Empty |
- Q100. A well balanced approach is what sets.....apart
- | | |
|----------------|-----------------|
| A. Lyrics | B. Music |
| C. Instruments | D. Compositions |