## **PROVISIONAL ANSWER KEY**

Question Paper Code: Category Code: Exam: 322/2013/C 322/2014 Sergeant Medium of Question: English Date of Test 30-10-201 Alphacode A Question1:-Two lines are intersect in a point. How many angles are formed? 30-10-2015 A:-2 B:-4 C:-8 D:-10 Correct Answer:- Option-B Question2:-How many edges are in a square pyramid? A:-4 B:-12 C:-8 D:-5 Correct Answer:- Option-C Question3:-A solid body with length, breadth and height are equal, what is its name? A:-Rectangle B:-Circle C:-Cube D:-Parallelogram Correct Answer:- Option-C Question4:-6, 10, 12, 15, 16, 18, 21. What is its Arithmetic Mean? A:-12 B:-14 C:-15 D:-18 Correct Answer:- Option-B Question5:-What is the total surface area of a sphere with its radius 2.5 cm? А:-6.25 П cm<sup>2</sup> B:-2.5 П cm<sup>2</sup> С:-25 П cm<sup>2</sup> D:-3.14 cm<sup>2</sup> Correct Answer:- Option-C Question6:-What is sin 45°? A:-√2 B:-1 C:-√3  $D:=\frac{1}{\sqrt{2}}$ Correct Answer:- Option-D Question7:-In a parallelogram one side is 15 cm and distance from this side to its opposite side is 9 cm, what is its area? A:-135 cm<sup>2</sup> B:-67.5 cm<sup>2</sup> C:-80 cm2 D:-24 cm<sup>2</sup> Correct Answer:- Option-A Question8:-Find the value of  $0.05 + 1\frac{1}{2} + 2.45$ A:-4 B:-5 C:-4.05 D:-3.45 Correct Answer:- Option-A Question9:-Find the value of  $2\frac{8}{11} + 3\frac{4}{12}$ A:- 5 12/23  $B:-\frac{200}{33}$  $C:-\frac{100}{33}$  $D:-\frac{90}{43}$ Correct Answer:- Option-B Question10:-The trigonometric term 'Tangent' is originate from A:-French B:-Greek C:-Latin D:-Arabic Correct Answer:- Option-C Question 11:-If  $5^2 \times 5^4 \times 5^6 \times ... \times 5^{2n} = (0.04)^{-28}$ , what is the value of 'n'? A:-8 B:-7 C:-14 D:-12 Correct Answer:- Option-B Question 12:-30°, 60°, 90° are the angles of a triangle; opposite side of 30° is two metre, what is the length of side opposite to 60°? A:-√3  $B:-\frac{2}{\sqrt{3}}$ C:-2√3  $D:-\frac{1}{\sqrt{2}}$ Creect Answer:- Option-C Question13:-A sector with radius 18 cm and centre angle 60°. While folding to make a cone, what will be the radius of that cone? A:-3 cm B:-9 cm C:-30 cm D:-36 cm Correct Answer:- Option-A Question 14:-If  $x_n = (n+1)^2 - (n-1)^2$ , what is its  $x_2$ ? A:-10 B:-12 C:-20 D:-8 Correct Answer:- Option-D Question15:-Find the half of 214 A:-27 B:-17 C:-7<sup>2</sup> D:-2<sup>13</sup>

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Correct Answer:- Option-D
Question16:-The sides of a triangle are 10 cm, 13 cm, 13 cm. What is its area?
      A:-60cm<sup>2</sup>
       B:-36cm<sup>2</sup>
       C:-130cm2
      D:-13cm<sup>2</sup>
Correct Answer:- Option-A
Question
17:-Sum of first ' \ n' terms of an arithmetic sequence is
 \ 2n^2+3n , what is its second term?
       A:-9
       B:-8
       C:-10
      D:-4
Correct Answer:- Option-A
Question 18.: x^2 - x - 6 = 0, what are the two factors of this equation?

A: (x + 2)(x + 3)

B: (x - 3)(x + 2)

C: (x - 2)(x - 3)

D: (x + 3)(x - 2)
       Correct Answer:- Option-B
Question19:-An equilateral triangle with one side 8 cm. What is the radius of its incircle?
      A:-4
B:-6
      C:-\frac{4}{\sqrt{3}}
       D:-2
       Correct Answer:- Option-C
Question20:-In a right angled triangle, small sides are 3.5 cm; 2.5 cm; what is its hypotenuse?
      A:-6
B:-4.3
       C:-3.5
       D:-5.5
Correct Answer:- Option-B
Question21:-Which major port in India is known as "Offspring of Partition"?
       A:-Haldia
       B<sub>*</sub>Kandla
      C:-Nawashewa
D:-Mumbai
       Correct Answer:- Option-B
Question22:-On which river in India does the Dhuan Dhar waterfall situate?
A.-Yamuna
B:-Mahanadi
       C:-Kosi
D:-Narmada
Correct Answer:- Option-D
Question23:-Which soil in India is known as 'Self-Ploughing Soil'?
      A:-Red soil
B:-Laterate soil
C:-Black soil
       D:-Alluvial soil
Correct Answer- Option-C
Question24-Which among the following personality called Bharathappuzha "Sokanasini"?
A:-Kunchan Nambiar
       B:-Ezhuthachan
        C:-Vallathol
D:-M.T. Vasudevan Nair
DFWLL Vasuevent Near
Correct Answer: - Option-B
Question25:-The only Malayalee who was one among the eight personalities who prepared the "Bombay Plan"?
       A:-E. Sreedharan
B:-V.K. Krishna Menon
        C:-John Mathai
D:-M.S. Swaminathan
Correct Answer:- Option-C
Question26:-At which of the following central jail, Bhagat Singh was hanged to death?
      A:-Alipur
B:-Lahore
C:-Amritsar
D:-Thihar
       Correct Answer:- Option-B
Question27.-Who among the following organized the Ganapathi and Shivaji festivals to awaken mass consciousness?
A.-Bankim Chandra Chatterjee
B.-Swami Vivekananda
       C:-Bal Gangadhar Tilak
D:-Surendranath Banerjee
Correct Answer:- Option-C
Question28:-Who is known as "India's Unofficial Ambassador to England"?
      A:-Dadabhai Naoroji
B:-Surendranath Banerjee
C:-W.C. Banerjee
D:-Gopalakrishna Gokhale
Correct Answer:- Option-A
Question29:-The Women Unit of Indian National Army (INA) was
A:-Rani of Lakshmi
       B:-Rash Bihari Bose
       C:-Aruna Asaf Ali
D:-Rani of Jhansi
Correct Answer:- Option-D
Question30:-The partition of Bengal was in the year
      A:-1905
B:-1911
       C:-1885
       D-1909
Correct Answer:- Option-A
Question31:-Who was the author of "Jaathikkummi"?
       A:-Dr. Pulpu
      B:-Pandit Karuppan
C:-Kumara Guru
D:-Thycaud Ayya
Correct Answer:- Option-B
Question32:-Who was the founder of "God's Church of Visible Salvation"?
A:-Kuriakose Elias Chavara
B:-Pope John Paul II
D-Fole John Fund
C-St. Alphonsa
D-Poikayil Yohannan
Correct Answer: Option-D
Question33:-The first president of Nair Service Society was
      A:-K. Kelappan
B:-Mannath Padmanabhan
C:-Chattampi Swamikal
D:-Pattom Thanu Pillai
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Correct Answer:- Option-A

Question34:-Aruvippuram consecration was in the year A:-1928 B:-1903 C:-1856 C-1856 D-1888 Correct Answer:- Option-D Question35:-What was the original name of Thycaud Ayya Guru? A:-VK. Gurukkal B:-Muthukuty C:-Subbarayan D: Chemicke data D:-Shanmukhadasa Correct Answer:- Option-C Question36:-The 35th National Games was held at A:-Assam B:-Kerala C:-Karnataka D:-Manipur Correct Answer:- Option-B Question37-Swach Bhara Project was launched on A:-1st March 2014 B:-1st January 2015 C:-1st February 2015 D:-2nd October 2014 Correct Answer:- Option-D Question38:-Who is the Chief Minister of Bihar? A:-Tarun Gogoi B:-Nitish Kumar C:-Dr. Raman Singh D:-Manohar Lal Correct Answer:- Option-B Question39:-The Scheme "Project Arrow" is related to A:-Rural Department B:-Telephone Department 2: Notputs of equations C:-Postal Department D:-Forest Department Correct Answer:- Option-C Question40-Kallash Satyarthi, the Nobel laureate belongs to which State? A:-Andhra Pradesh B:-Bihar C:-Madhya Pradesh D:-Assam Correct Answer:- Option-C Question41:-When a resistance wire is stretched twice its lenght,its area of cross-section reduced by half.Then its resistance A:-increases twice B:-increases 4 times C:-reduces to half D:-no change Correct Answer:- Option-B Question42:-In a p-type semiconductor,the majority carriers are A:-electrons B:-holes C:-neutrons O-ineutons D-protons Correct Answer- Option-B Question43-When a white light undergo dispersion through a triangular glass prism, the colour that deviates the most A:-violet B:-red C:-indigo D:-yellow Correct Answer:- Option-A Ouestion44-When an explosion occurs 6800m away from a man, then how long after its sound reaches the man(speed of sound in air is 340 m/s) A:- 2 s B:-6.8 s C:-3.4 s D:-20 s Correct Answer:- Option-D Question45:-Time taken by sunlight to reach the earth is approaximately A:-81/2 minutes B:-8½ seconds C:-8½ hours D:-81/2 light years Correct Answer:- Option-A Question46:-A transformer works on A:-Self induction B:-Ioule's heating effect C:-Maxwell's law D:-Mutual induction Correct Answer:- Option-D Question47:-Unit of electric power A:-Volt B:-Watt C:-Ampere D:-Newton Correct Answer:- Option-B Question48:-Einstein's mass-energy relation is A:-E=M/c2 B:-E=Mc2 C:-E=M2c D:-E=Mc/2 Correct Answer:- Option-B Question49-When a body is lifted from the surface of the earth,acceleration due to gravity(g) on it A-increases B-remains the same C:-first increases and then decreases D:-decreases Correct Answer:- Option-D Question50:-During free fall of a body,its weight A:-decreases B:-increases C:-no weight D:-none of the above Correct Answer:- Option-C Question51:-A gas can be liquified by, A:-High temperature and high pressure B:-Low temperature and low pressure C:-Low temperature and high pressure D:-High temperature and low pressure Correct Answer:- Option-C Question52:-At constant pressure, the volume of a fixed mass of gas is directly proportional to its temperature in Kelvin scale. This is known as,

A:-Boyle's law B:-Charles' law C:-Avogadro's law D:-Hentry's law Correct Answer:- Option-B Question53:-36g of water contains A:-2x6:023x10<sup>23</sup> molecules B:-6.023x10<sup>23</sup> molecules C:-6.023x10<sup>23</sup> molecules D:-2x6:023x10<sup>23</sup> molecules Correct Answer:- Option-A Question54:-Maximum number that can be accommodated in p subshell is, A:-2 A:-2 B:-6 C:-14 D:-10 Correct Answer:- Option-B Question55:-The metal with maximum electropositivity is, A:-K B:-Na C:-Fe D:-Cs Correct Answer:- Option-D Question56:-An important ore of aluminium is, A:-Dolomite B:-Haematite C:-Bauxite D:-Carnalite Correct Answer:- Option-C Question57:-Maximum close packing can be seen in, A:-Graphite B:-Diamond C:-Glass D:-Liquids Correct Answer:- Option-B Question58:-Value of absolute zero is, A:--273°C B:-273°C C:-0°C C:VC D:-273K Correct Answer:- Option-A Question59:-The minimum energy required to remove the most loosely bound electron from an isolated gaseous atom is called its, A:-Electronegativity B:-Electropositivity C:-Ionisation energy D.-Electron gain enthalpy Correct Answer:- Option-C Question60:-Maximum number of electrons that can be accommodated in a shell is, A:-2n<sup>2</sup> B:-n<sup>2</sup> C:-2n D:-n Correct Answer:- Option-A Question61-Which of the following is a unicellular green algae that is motile and with a light sensitive "eyespot" A:-Chlamydomonas B:-Hydra C:-Spirogyra D:-Chlorella Correct Answer:- Option-A Question62:-Plant hormone used in the ripening of fruits is A:-Auxin B:-Gibbrellin C:-Ethylene D:-Abscissic Acid Correct Answer:- Option-C Question63:-A viral disease of A:-Coconut budrot B:-Bunchytop of banana se of plant that spreads through aphides in the following is C:-Wilt of brinial D:-Quick will in pepper Correct Answer: Option-B Question64:-Light sensitive proteinacious pigment in plant involved in photomorphogenesis is A:-Cytochrome B:-Chlorophyll C:-Phytohormone D:-Phytochrome Correct Answer- Option-D Question65:-Flowering plants are included under the group A:-Phanerogams B:-Cryptogams C:-Bryophytes D:-Lichens Correct Answer:- Option-A Question66:-Water and minerals are principally transported in angiosperms through A:-Xylem parenchyma B:-Xylem tracheids C:-Xylem vessels D-Xylem Roses D-Xylem Rhres Correct Answer:- Option-C Question67:-Growth movement of plants in response to gravity is called A:-Phototropism B:-Hydrotropism C:-Chemotropism D:-Geotropism Correct Answer:- Option-D Question63:-Male reproductive organs of a flower are called A:-Androecium B:-Gynoecium C:-Calvx D:-Corolla Correct Answer:- Option-A Question69:-The structure meant for the nourishment of developing embryo in a seed is A:-Phloem B:-Pollentube C:-Leaves D:-Endosperm Correct Answer:- Option-D Oue sistion70:-The plant selected by G J Mendel for his genetic experiment is A:-4' O Clock plant B:-Garden pea

C:-Sweet pea D:-Snap dragon Correct Answer:- Option-B Question71:-Deficiency of Tocopherol in human body leads to, A:-Beriberi B:-Pellagra C:-Infertility D:-Scurry Correct Answer:- Option-B Question72:-Example for a uricotelic animal A:-kangaroos B:-bony fish C:-cockroach D:-frog Correct Answer:- Option-C Question73:-The part of brain which controls respiration A:-cerebrum B:-cerebellum C:-medulla oblongata C:-medulla oblongata D:-pons Correct Answer:- Option-C Question74:-Acromegaly is due to A:-hypersecretion of growth hormone B:-hyposecretion of ACTH D:-hyposecretion of ACTH Correct Answer:- Option-A Question75:-A child's blood group is O.The parents blood group can not be A:-A and B B:-A and A C:-AB and O D:-B and O Correct Answer:- Option-C Question76:-The nitrogen base which pair with adenine in DNA A:-uracil B:-thymine C:-cytosine D:-guanine Correct Answers- Option-B Correct Answers- Option-B Question 77:-Which one of the following is the most primitive ancestor of man ? A:-Homo habilis B:-Australopithecus C:-Neanderthal man C:-Neanderthai man D:-Ramapithecus Correct Answer:- Option-D Question78:-Kala azar is a disease caused by A:-fungus B:-bacteria C:-virus D-protozoa Correct Answer.- Option-D Question79:-Majority of Carbon dioxide in human body is transported to lungs A:-as bicarbonates A:-as bicarbonates B:-as carbonic acid C:-attached to haemoglobin D:-attached to leucocytes Correct Answer:- Option-A Question80:-Which of the following is a true fish ? A:-cutle fish B:-silver fish C:-iolity fish C:-jelly fish D:-flying fish Correct Answer:- Option-D Question81:-One of the girls ..... .. a badminton player. A:-are B:-is C:-were D:-have been Correct Answer:- Option-B Question82:-I am clever,....? A:-aren't I? B:-amn't I? C:-shall I? D:-do I? Correct Answer:- Option-A Question83:-Raju told me that he .....to go home that day. A:-wants B:-will want C:-has wanted D:-wanted D:-wanted Correct Answer:- Option-D Question84:-Shakespeare ........ A:-is regarded B:-is regarding C:-regards D:-has regarded Correct Apswer: Option A .....as the greatest playwright. Correct Answer:- Option-A Question85:-Gita is writing an essay ......the new economic policy. A:-at B:-on C:-with D:to Correct Answer:- Option-B Question86:-If I got a lot of money, I .....buy an aeroplane. A:-would B:-will C:-shall D:-would have Correct Answer:- Option-A Question87:-Mr. Smith, the only foreigner in our group, is ......European. A:-an B:-a C:-the D:-any Correct Answer:- Option-B Question88:-My parents ......Paris last month. A:-have visited B:-will have visited C:-visited D:-has visited

Correct Answer:- Option-C Question89:-Nina is ......than Anil. A:-clever B:-cleverest D-curves and C-most clever D-cleverer Correct Answer: Option-D Question90-We tried our best, but .....not win the match. A:-could B:-should C:-may D:-can Correct Answer:- Option-A Question91:-The teacher wanted the students to ......the important points. A:-take after B:-take off Correct Answer:- Option-B Question94:-Which prefix can be used to form the opposite of the word 'gratitude'? A:-un B:-mis C-dis D-in Correct Answer:- Option-D Question95:-Prima facie means ....... A:-beautiful face B:-prim and proper C-at first view D:-prime time Correct Answer:- Option-C Question96:-The story is about a .......between two brothers. A:-duel B:-duel C-dual C:-dis B-duet C-dual D-dude Correct Answer:- Option-A Question97:-Which of the following is the correct spelling? A-asassimation B-asasimation D-assascination D:-assassination Correct Answer:- Option-D Question98:-A group of lions is known as..... Question99:-A group of lions is known as...... Ac-swarm B:-flock C:-team D:-pride Correct Answer:- Option-D Question99:-The plural form of the word 'criterion' is ...... A:-criterions B:-criteria C:-criteria C:-criterias O:-Criterian D:-Criterion Correct Answer:- Option-B Question100:-Which of the following is the synonym of 'attentive'? A:-attractive B:-servant C:-watchful D:-tentative Correct Answer:- Option-C