

ASSISTANT, UNIVERSITIES IN KERALA

Exam held on 24.05.2016

- If 4 taps can fill a tank in 10 hours. Then how many hours can 6 taps fill the same tank?
(a) $6\frac{2}{3}$ hours (b) $2\frac{2}{5}$ hours
(c) $6\frac{3}{2}$ hours (d) 15 hours
- A and B together can do a piece of work in 12 days and A alone can complete the work in 18 days. How long will B alone take to complete the job?
(a) 6 days (b) 30 days
(c) 36 days (d) 21 days
- A garden is 90 m long and 75 m broad. A path 5 m wide is to be built outside around it. Find the area of the path :
(a) 850 m^2 (b) 6750 m^2
(c) 1750 m^2 (d) 7600 m^2
- Which of the following numbers is divisible by 33?
(a) 1333 (b) 1375
(c) 2133 (d) 2145
- H.C.F of 36 and 264 is:
(a) 6 (b) 36
(c) 792 (d) 12
- In how many years will a sum of money triple itself, the rate of interest being 10%?
(a) 15 years (b) 20 years
(c) 10 years (d) 18 years
- Manu's age is 6 times Binu's age. 15 years hence Manu will be 3 times as old as Binu. Find Binu's age:
(a) 60 years (b) 10 years
(c) 45 years (d) 50 years
- Find the time taken by a 180 m long train running at 54 km/hr to cross a man standing on a platform:
(a) 4 seconds
(b) 12 seconds
(c) 30 seconds
(d) 15 seconds
- What number should be subtracted from each of the numbers 23, 30, 57 and 78 so that the remainders are in proportion?
(a) 4 (b) 3
(c) 6 (d) 7
- If $\frac{y-x}{x} = \frac{3}{8}$ Find $y : x$:
(a) 11:8 (b) 8:11
(c) 8:5 (d) 5:8
- 'Flower' is related to Petal in the same way as 'Book' is related to:
(a) Author (b) Content
(c) Page (d) Library
- Find the missing numbers in this series: 2, 6, 18, 54, ____, 486, 1458.
(a) 152 (b) 182
(c) 162 (d) 108
- Find out the missing letter: B, E, H, K, N, ____
(a) P (b) O
(c) R (d) Q
- If 'A' is in the north of B and C is in the west of B. In What direction is A with respect to C?
(a) South (b) East
(c) South-West (d) North-East
- Statement: All the students passed the examination. Some students are girls.
Conclusion:
(I) Some boys passed the Examination.
(II) All the girls failed the Examination.
(III) None of the boys passed the Examination.
(IV) None of the girls failed the Examination.
(a) I and II follow
(b) II and III follow
(c) I, II and III follow
(d) None of the above
- If EDUCATION is coded as NOITACUDE, then REDFORT will be coded as :
(a) TROFDER (b) FORTRED
(c) TROFRED (d) FORTDER
- Find out the pair which is different from the other given pairs:
(a) Cow and Buffalo
(b) Cock and Hen
(c) Horse and Mare
(d) Dog and Bitch
- Find the odd one among these :
(a) Lake (b) River
(c) Pool (d) Sea
- If HOBBY is coded as IOBY and LOBBY is coded as MOBY then, BOBBY is Coded as :
(a) BOBY (b) COBY
(c) NOBY (d) OOBY
- If I = 9 YOU = 61 then WE = ---
(a) 28 (b) 32

- (c) 65 (d) 50
21. The transformer works on which principle :
 (a) Electrostatic force
 (b) Magnetostatic force
 (c) Snell's law
 (d) Electromagnetic induction
 22. Which is the most effective test to determine AIDS?
 (a) Lipid profile test
 (b) Angiograph
 (c) Western blot test
 (d) MRI scan
 23. Minamata disease is due to :
 (a) Arsenic (b) Lead
 (c) Copper (d) Mercury
 24. An alloy used in making heating elements for electric heating device is :
 (a) German silver
 (b) Alloy steel
 (c) Nichrome
 (d) Solder
 25. Phenomenon behind the formation of rainbow :
 (a) Diffraction of light
 (b) Scattering of light
 (c) Interference of light
 (d) Dispersion of light
 26. What is the name of the pigment which helps animal to see in dim light?
 (a) Rhodopsin (b) Haemoglobin
 (c) Photopsin (d) Chromatin
 27. What is oil of vitriol?
 (a) Sodium Chloride (b) Nitric Acid
 (c) Sulphuric Acid (d) Hydrochloric Acid
 28. What is manufactured using Bessemer process?
 (a) Steel (b) Gold
 (c) Zinc (d) Silver
 29. A person suffering from bleeding gum need in his food:
 (a) Carotene (b) Citrus
 (c) Vitamin K (d) Cod-liver oil
 30. Which fossil organism is usually regarded as the connecting link between birds and reptiles?
 (a) Dryopithecus
 (b) Archaeopteryx
 (c) Australopithecus
 (d) Ardipithecus
 31. Which of the following work won the 'Odakkuzhal Award' to S. Joseph?
 (a) Manushyanu Oru Aamukham
 (b) Chandranodoppam
 (c) Chakkarappandhal
 (d) Unnikkuttante Lokam
 32. Who got the 'Dr. Sukumar Azhikode Thatwasi Endowment' for this year?
 (a) Dr. T.M. Thomas Issac
 (b) V.S. Achuthanandan
 (c) Ramesh Chennithala
 (d) V.M. Sudheeran
 33. Present Jnanpeed winner Raghuveer Chaudhari is a popular writer in ----- language.
 (a) Marathi (b) Gujarati
 (c) Bengali (d) Telugu
 34. Which country was defeated by India to win her Seventh Crown in SAF Games?
 (a) Pakistan (b) Afghanistan
 (c) Kasakistan (d) Kirgistan
 35. Who is the present Governor of Reserve Bank of India?
 (a) P. Sadasivam
 (b) C. Sankara Narayanan
 (c) Raghuram Rajan
 (d) Ajith Dowal
 36. Recently dead Mufti Muhammed Sayyid was the Chief Minister of-----State.
 (a) Delhi
 (b) Assam
 (c) Jammu-Kashmir
 (d) Mizoram
 37. Who scored 1009 runs in one innings, in the Bhandari Trophy under-16 Inter School Cricket?
 (a) Praveen Dhanvade
 (b) Prakash Dhanvade
 (c) Pratheesh Dhanvade
 (d) Pranav Dhanvade
 38. 'Miss World', Miriya Lalguna Roso belongs to which of the following country?
 (a) Spain (b) France
 (c) Indonesia (d) Japan
 39. Who among the following was appointed as CEO of NITI AYOGE?
 (a) Amithabh Bachan
 (b) Saniya Mirza
 (c) Amithabh Kanth
 (d) Arun Jaitley
 40. World's largest Bird statue is built in Jatayu Nature Park. In which place of Kerala, it is built?
 (a) Chennamangalam
 (b) Kothamangalam
 (c) Kaipamangalam
 (d) Chatayamangalam
 41. The literacy rate of India is : ,
 (a) 61% (b) 75%
 (c) 80% (d) 50%
 42. Which is the tree generally grown for forestation?

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- (a) Mango Tree
(b) Coconut Tree
(c) Banyan
(d) Teak
43. Who was the first martyr in First Indian Independence War 1857?
(a) Jhansi Rani
(b) Mangal Pande
(c) Savarkar
(d) None
44. Who was the Chairman of Nehru Committee Report?
(a) Jawaharlal Nehru
(b) Motilal Nehru
(c) Arun Nehru
(d) None
45. What is a Republic?
(a) In a democracy the head of the state is a nominated one
(b) The government is directly elected by the people
(c) The head of the state is hereditary and legislative is constituted by the representatives of people
(d) In a democracy, the head of the state is either directly or indirectly elected by the people
46. What is the official name of India?
(a) Democratic State of India
(b) Republic of India
(c) Socialist State of India
(d) Socialist Secular India
47. Which was the first linguistic state in Independent India?
(a) Karnataka
(b) Tamil Nadu
(c) Andhra Pradesh
(d) None of the above
48. In which river Bhakra-Nangal Dam is situated?
(a) Sutlej (b) Godavari
(c) Narmada (d) Krishna
49. Swami Vivekananda delivered his famous Chicago Speech in :
(a) 1872 January 12
(b) 1892 September 11
(c) 1882 October 2
(d) 1867 November 1
50. What is the total length of NH49 (Kochi to Dhanushkodi)?
(a) 500 km (b) 550 km
(c) 600 km (d) 440 km
51. Kochi Rajya Praja Mandalam was formed in the year :
(a) 1940 (b) 1941
- (c) 1942 (d) 1943
52. The original name of Vagbhatanandan, the famous social reformer in Kerala?
(a) Kelu Kuruppu
(b) Kunji Kannan
(c) Krishnan-Ayyan
(d) Kutti Krishnan
53. Gayathripuzha is the tributary of which river?
(a) Periyar
(b) Bharatha Puzha
(c) Chaliyar
(d) Pampa
54. K.S.E.B. was formed in the year :
(a) 1957 (b) 1956
(c) 1958 (d) 1959
55. What is the name of rain water harvest programme organised by Kerala Government?
(a) Jalanidhi
(b) Harita
(c) Varsha
(d) Anugraha
56. Who founded 'Ananda Mahasabha' in 1918?
(a) Sahodaran Ayyappan
(b) Vagbhatanandan
(c) Brahmananda Sivayogi
(d) Agamananda Swami
57. Who wrote the famous book 'A Short History of the Peasant Movement' in Kerala?
(a) E.M.S. Namboothirippad
(b) C. Achutha Menon
(c) P.K. Vasudevan Nair
(d) Pattom Tanupillai
58. Who founded Jatinasini Sabha?
(a) Anandatheerthan
(b) Chattampi Swamikal
(c) Pandit Karuppan
(d) Thycaud Ayya
59. In which district Mangalavanam, the smallest wild life sanctuary in Kerala situated?
(a) Ernakulam (b) Trissur
(c) Wayanad (d) Idukki
60. Where is Kerala coconut research station situated?
(a) Kayamkulam
(b) Sadanandapuram
(c) Mannuthi
(d) Vellayani
61. The authority to issue 'writs' for the enforcement of Fundamental Rights rests with :
(a) The Parliament
(b) The President
(c) The Supreme Court and High Courts
(d) The CBI
62. Who is the Chairman of the Rajya Sabha?

»Solved Paper

- (a) The President
(b) The Vice-President
(c) Lok-Sabha Speaker
(d) The Governor
63. The Public Service Commission in India, as the Union Public Service Commission was first called, was established in the year :
(a) 1919 (b) 1926
(c) 1947 (d) 1950
64. Which Constitutional Amendment made right to free and compulsory education as a fundamental right?
(a) 73rd (b) 86th
(c) 52nd (d) 74th
65. Who is the present CAG?
(a) Shashi Kant Sharma
(b) Vinod Rai
(c) Agarwal
(d) H.K. Khanna
66. The Fundamental Rights of the Indian Citizens are enshrined in :
(a) The Preamble
(b) Part III of the constitution.
(c) Part IV of the constitution
(d) Part V-A of the constitution
67. Which of the following Article of the constitution deals with the Fundamental Duties of the Indian Citizens?
(a) Article 51-A (b) Article 29-B
(c) Article 21-A (d) Article 39-C
68. In which year the National Development Council (NDC) was established?
(a) 1948 (b) 1950
(c) 1952 (d) 1957
69. The National Human Rights Commission was established in the year:
(a) 1993 (b) 1975
(c) 2001 (d) 1996
70. Who is the Chairperson of Kerala State Vanitha Commission?
(a) K. Ajitha (b) Sugathakumari
(c) C.K. Janu (d) K.C. Rosakutty
71. The passive form of 'This shop sells all the vegetables' is :
(a) All the vegetables are sold by this shop
(b) All the vegetables are sold in this shop
(c) All the vegetables have been sold by this shop
(d) All the vegetables are being sold by this shop
72. I was going the documents last evening.
(a) on (b) in
(c) through (d) about
73. The problem was difficult that I could

not solve it.

- (a) very (b) so
(c) too (d) much
- In which part of the questions 74 and 75 is the mistake?
74. (a) it was Shakespeare
(b) and not no one else
(c) who wrote this play -
(d) at the beginning of the sixteenth century
75. (a) the film
(b) that I saw yesterday
(c) was about an old man
(d) who was living a long time ago
76. The indirect form of 'Do you like comics?' she asked me is :
(a) She asked me whether I like comics
(b) She asked me whether I have liked comics
(c) She asked me whether I liked comics
(d) She asked me did I like comics
77. Let us go for a walk, :
(a) do we? (b) shall we?
(c) don't we? (d) didn't we?
78. It was raining when I home yesterday.
(a) had reached
(b) has reached
(c) had been reaching
(d) reached
79. Germany is European country.
(a) a (b) an
(c) the (d) no article required
80. Milk is in proteins and minerals.
(a) good (b) large
(c) big (d) rich
81. Anganwadi centres are functioning under the programme :
(a) IRDP
(b) NRDP
(c) KUDUMBASHREE
(d) ICDS
82. The was launched in December 2001 to ameliorate the conditions of the urban slum dwellers living below the poverty line without adequate shelter
(a) Valmiki Ambedkar Awas Yojana
(b) Bharat Nirman
(c) Samagra Awas Yojana
(d) PMRY
83. This is a comprehensive housing scheme launched with a view to ensure the integrated provision of shelter, sanitation and drinking water. The basic objective of the programme is to improve the quality of life of the people as well as the overall habitat in rural areas:
(a) Samagra Awas Yojna
(b) Antyodaya Anna Yojana

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- (c) Sampoorana Grameen Rozgar Yojana
(d) Adarsh Gram Yojana
84. Which programme is launched on the lookout for the 'poorest of the poor' by providing them 35 kilograms of rice and wheat at Rs.3 and Rs. 2 per kg. respectively?
(a) National Food for Work Programme
(b) Adarsh Gram Yojana
(c) Antyodaya Anna Yojana
(d) Sampoorana Grameen Rozgar Yojana
85. Which plan was called as Mehnatnabis plan named after the well-known economist?
(a) First plan 1951 to 56
(b) Second plan 1956 to 61
(c) Third plan 1961 to 66
(d) Fourth plan 1969 to 74
86. Who is the implementing officer at district level responsible for the monitoring and supervision of national food for work programme?
(a) District industrial officer
(b) District Collector
(c) District civil supplies officer
(d) District information officer
87. Jawhar Rozgar Yojana was launched in April 1st 1989, by combining the two programmes:
(a) RLEGP, NRDP
(b) IRDP, NREP
(c) NREP, RLEGP
(d) NRDP, IRDP
88. Kudumbashree mission was launched on May 17th 1998 by our former Prime Minister ,
(a) Sri. Narasimha Rao
(b) Sri: Manmohan Singh
(c) Sri A.B. Vajpai
(d) Sri. S.R. Devagouda
89. Mahila Samridhi Yojana was started in 1998 on the day of:
(a) Women's day
(b) Gandhi Jayanthi
(c) Independence day
(d) Republic day
90. To change negative family and community attitudes towards the girl child at birth and towards her mother is the prime objective of:
(a) Integrated Child Development Scheme
(b) Mahila Samridhi Yojana
(c) Indira Awas Yojana
(d) Balika Samridhi Yojana
91. Name the Act that governs the internet usage in India:
(a) The IT Gazette of India Act, 2004
(b) The Information Technology Act, 2000
(c) The Internet Usage Act, 2002
(d) The Right to Information Act, 2005
92. An attempt to criminally and fraudulently acquire sensitive information, such as usernames, passwords and credit card details, by masquerading as a trust worthy entity in an electronic communication is termed as :
(a) Spooling
(b) Tracking
(c) Bugging
(d) Phishing
93. A device that modulates signals to encode digital information and demodulates signals to decode the transmitted information :
(a) modem (b) decoder
(c) encoder (d) modulator
94. '.mpg' extension refers usually to what kind of file?
(a) Text/Document file
(b) Image file
(c) Animation/movie file
(d) All the above
95. The brain of any computer system is :
(a) Memory
(b) Peripheral Unit
(c) CPU
(d) Control unit
96. An attempt to make a computer resource unavailable to its intended users is called :
(a) Malware attack
(b) Worms attack
(c) Denial -of-service attack
(d) Adware attack
97. Who is considered to be the first programmer?
(a) Ada Lovelace
(b) Alan Turing
(c) Charles Babbage
(d) Von Neumann
98. A computer program that is used to convert an assembly language to machine language is:
(a) Compiler
(c) Assembler
(b) Interpreter
(d) Comparator
99. Codes consisting of light and dark marks of various thickness which may be optically read is known as:
(a) Operand
(b) Bar code
(c) Decoder
(d) Op code
100. The inventor of world wide web :
(a) Tim Berner's Lee
(b) MarcAndreessen
(c) James H. Clark
(d) Robert Cailliau

Mathematics: Explanations

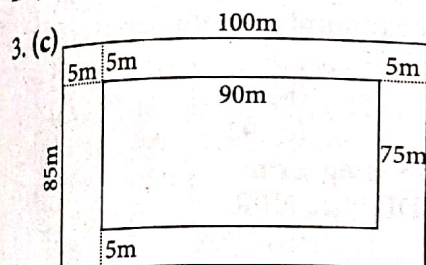
1. (a) $M_1 T_1 = M_2 T_2$

$4 \times 10 = 6 \times T_2$

$T_2 = \frac{4 \times 10}{6}$

$= 6 \frac{2}{3}$ hours

2. (c) $\frac{xy}{y-x} = \frac{12 \times 18}{18-12} = \frac{12 \times 18}{6} = 36$



Area of path = Area of big rectangle - Area of small rectangle

$= 100 \times 85 - 90 \times 75$

$= 8500 - 6750 = 1750 \text{ m}^2$

4. (d) $33 = 3 \times 11$

If a number is divisible by 33, it should be divisible by 3 and 11.

Here 2145 is the only number which can be divided by 3 and 11.

5. (d)

$$\begin{array}{r} 2 \overline{) 36, 264} \\ 2 \overline{) 18, 132} \\ 3 \overline{) 9, 66} \\ 3, 22 \end{array}$$

H.C.F = $2 \times 2 \times 3 = 12$

6. (b)

The amount will be double in

$\rightarrow \frac{100}{R} \text{ Years} = \frac{100}{10} \text{ Years}$

$= 10 \text{ years}$

It will be tripled in $\rightarrow 20 \text{ years}$

7. (b) Binu's age $\rightarrow x$

Manu's age $\rightarrow 6x$

15 years hence Binu's age $\rightarrow x+15$

15 years hence Manu's age $\rightarrow 6x+15$

now $6x+15 = 3(x+15)$

$6x+15 = 3x+45$

$6x-3x = 45-15$

$3x = 30 \quad x = \frac{30}{3} = 10$

Binu's present age $\rightarrow 10 \text{ years}$

8. (b) Time = $\frac{\text{Distance}}{\text{speed}}$

$= \frac{180}{54 \times \frac{5}{18}} = \frac{180}{3 \times 5} = \frac{180}{15} = 12 \text{ seconds}$

9. (c) From the option

When 6 is subtracted we get

$17:24 = 51:72$

10. (c)

$\frac{y-x}{x} = \frac{3}{8}$

$\frac{y}{x} - 1 = \frac{3}{8}$

$= \frac{3+8}{8} = \frac{11}{8}$

$\frac{y}{x} = \frac{3}{8} + 1$

$y:x = 11:8$

11. (c)

12. (c) $2 + 4 \rightarrow 6$
 $\times 3$

$6 + 12 \rightarrow 18$
 $\times 3$

$18 + 36 \rightarrow 54$

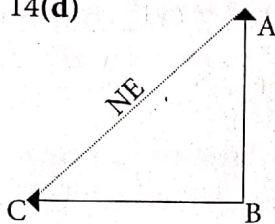
next term is $54 + 36 \times 3 = 54 + 108 = 162$

13. (d)

$B \xrightarrow{+3} E \xrightarrow{+3} H \xrightarrow{+3} K \xrightarrow{+3} N$

Next term is $N \xrightarrow{+3} Q$

14. (d)



North east

15. (d)

16. (a) Here the code is done by writing letters of the word in reverse order

\therefore REDFORT is coded as TROFDER

17. (a) Male female relation does not follow in cow and buffalo

18. (b)

19. (b) bobby \rightarrow coby

20. (a) $1 \rightarrow 9$

$YOU \rightarrow 25 + 15 + 21 = 61$ similarly

$WE \rightarrow 23 + 5 = 28$

Answers

- | | | | | | |
|--------------------|-----------------|----------|-------------------|----------------|-----------|
| 1. (a) | 2. (c) | 3. (c) | 4. (d) | 5. (d) | 6. (b) |
| 7. (b) | 8. (b) | 9. (c) | 10. (a) | 11. (c) | |
| 12. (c) | 13. (d) | 14. (d) | 15. (d) | 16. (a) | 17. (a) |
| 18. (b) | 19. (b) | 20. (a) | 21. (d) | 22. (c) | 23. (d) |
| 24. (c) | 25. (d) | 26. (a) | 27. (c) | 28. (a) | 29. (b) |
| 30. (b) | 31. (b) | 32. (a) | 33. (b) | 34. Mistake in | |
| Question | 35. Urjit Patel | 36. (c) | 37. (d) | | |
| 38. (a) | 39. (c) | 40. (d) | 41. Right Answer- | | |
| 74.04 % | 42. (d) | 43. (b) | 44. (b) | 45. (d) | |
| 46. (b) | 47. (d) | 48. (a) | 49. Right Answer- | 1893 | |
| September-11 | 50. (d) | 51. (b) | 52. (b) | 53. (b) | |
| 54. (a) | 55. (c) | 56. (c) | 57. (a) | 58. (a) | 59. (a) |
| 60. (a) | 61. (c) | 62. (b) | 63. (b) | 64. (b) | 65. Rajiv |
| Mehrishi | 66. (b) | 67. (a) | 68. (c) | 69. (a) | |
| 70. M.C. Josephine | 71. (a) | 72. (c) | 73. (b) | | |
| 74. (b) | 75. (d) | 76. (c) | 77. (b) | 78. (d) | 79. (a) |
| 80. (d) | 81. (d) | 82. (a) | 83. (a) | 84. (c) | 85. (b) |
| 86. (b) | 87. (c) | 88. (c) | 89. (b) | 90. (d) | 91. (b) |
| 92. (d) | 93. (a) | 94. (c) | 95. (c) | 96. (c) | 97. (a) |
| 98. (c) | 99. (b) | 100. (a) | | | |