# Question Booklet \& Answer Key 

## for the Recruitment Test of

Manager Quality Control held on 10.8.2013

1. 'ढाभैसा' न्रपस फ़्युय वठं :
(A) पि
(B) पे
(C) पी
(D) भr

(A) भंठ-すटी
(B) भर्ठ-या्टी
(C) भீठ-टेटी
(D) भீठ-मपती
2. 'Е्रभाप्वा’ री चै:
(A) ठाम्न
(B) $\mathrm{B} \varphi-\overline{\mathrm{J}} \cdot \mathrm{\square} T$
(C) षेउठ
(D) टिभावठर

(A) मांत्ञ
(B) मांश
(C) मभांत्ञ
(D) म्रांत्त

(A) इएव-fৈठी
(B) इाव-यैमट
(C) उार-ұग्ठ
(D) उाव-हंइप्पी
3. मगी टिंयी नेजे छृट:
(A) हमटा/
(B) गरेठ /ठडउ
(C) е्डठ/भॅगे
(D) म्=
4. विगइए म्रप्ष ‘गाभ’ म्पघट सा मभ
(A) मेव
(B) मिंव
(C) भ.ढममम
(D) मेगा

(A) थீ
(B) भॅठ
(C) मॅड
(D) हे
5. भंரिभां टॅँ
(A) घंल्य गप्मे
(B) हंगाे गत्से
(C) वाट्रा गत्ता
(D) घेप्टीभग्ठ ठत्से
6. 'टाल ठा ठालटी' सा वी भवप चै:
(A) साल्ल यटीभा Јेटी
(B) मेव wॅट गेटा
(C) पेप्टिक्षडी वठठी
(D) भा्यम टिॅछ ठा घट्ती

Directions( Q.No.11-15):-Out of the four given options, choose the correct preposition to be filled in the gaps:11. The alternative __ submission is death.
(A) to
(B) of
(C) with
(D) from
12. It is not likely to derogate his merit.
(A) from
(B) of
(C) with
(D) by
13. He was equal $\qquad$ the occasion.
(A) to
(B) of
(C) with
(D) at
14. Subsequent __ the meeting he wrote a letter to The Hindu.
(A) to
(B) of
(C) by
(D) from
15. Pursuant __ our conversation, I now send you a cheque for Rs. five hundred.
(A) to
(B) of
(C) with
(D) from

Directions (O.No.16-20):- out of the four given options, choose the correct synonym of the words given below:-
16. Rostrum
(A) Register
(B) Dais
(C) Rooster
(D) Wrath
17. Rescind
(A) Descend
(B) Ascend
(C) Revoke
(D) Return
18. Squeamish
(A) Magnanimous
(B) Courageous
(C) Clever
(D) Nervous
19. Tedium
(A) monotony
(B) excitement
(C) agility
(D) monopoly
20. Hauteur
(A) clarity
(B) arrogance
(C) commitment
(D) obstinacy
21. Which one of the following statements about Adi Granth Saheb is not correct?
A) it was compiled in the first decade of the $17^{\text {th }}$ century
B) it contains verses of Kabir
C) it contains verses generally from saints of Saguna Bhakti
D) it contains sayings of Baba Farid
22. The recommendation of which commission led to linguistic reorganization of Punjab in 1966 ?
A) Venkataswami
B) Radcliffe
C) Verma
D) Shah
23. Match the following

## Place

a) Talwandi Saboo
b) Muktsar
c) Anandpur Sahib
d) Amritsar
A) $1,4,3,2$
B) $4,1,3,2$
4. Damdama Sahib
C) $4,1,2,3$
D) $1,4,2,3$

## Other name

1. Khidrana
2. Makhowal
3. Ramdaspur
4. According to 2011 census, which of the following district of Punjab has minimum population density?
A) Mansa
B) Muktsar
C) $\operatorname{Moga}$
D) Mohali
5. How many times presidential rule has been imposed in Punjab?
A) 8
B) 7
C) 6
D) 5
6. 'Babeyan Da Gidhha' (old men's dance) belongs to
A) Malwa region
B) Majha region
C) Doaba region
D) none
7. Who wrote the book 'Philosophy of Bomb'?
A) Raj Guru
B) Sukhdev Singh
C) Bhagat Singh
D) Nanak Singh
8. Who takes away the belongings of the dead after funeral?
A) relatives
B) Charaj Brahmin
C) sons of deceased
D) potter
9. Punjab is the only state in the country where every village and urban slum area have
A) Mahila Surakhya Sang
B) MNREGA
C) Family Planning Centre
D) all of above
10. Punjab produces $\qquad$ of the total milk production in the country
A) $8 \%$
B) $12 \%$
C) $14 \%$
D) $10 \%$
11. Union cabinet declared the year 2013 as
A) Forest conservation year
B) Soil conservation year
C) Water conservation year
D) Wildlife conservation year
12. Which one of the following Indian city became the first city in South Asia to launch a heat wave preparation and warning system?
A) Surat
B) Chandigarh
C) Pune
D) Ahmedabad
13. Which is world's largest river in view of size and volume of water it discharges into sea?
A) Nile of Egypt
B) Amazon of South America
C) Amur-Argun of China
D) Ganges of India
14. What is the full name of IBSA?
A) Iran, Brazil and South Africa
B) India, Bangladesh and South Africa
C) India, Brazil and South Africa
D) India, Brazil and Saudi Arabia
15. On the lines of Amul in Gujarat, which of following states has come forward to bring white revolution?
A) Uttrakhand
B) Punjab
C) Haryana
D) Himachal Pradesh
16. Who is the author of the concept of Antyodaya?
A) Mahatma Gandhi
B) Vinoba Bhave
C) Sri Aurobindo
D) Jayaprakash Naryan
17. Unemployment which occurs when workers move from one job to another job is known as
A) frictional unemployment
B) seasonal unemployment
C) cyclical unemployment
D) technological unemployment
18. 'Hemophillia' is the disease of
A) liver
B) blood
C) brain
D) bones
19. Which one of the following Prime Minister never faced the Parliament during his tenure?
A) Chandra Shekhar
B) VP Singh
C) Chaudhary Charan Singh
D) Atal Behari Vajpayee
20. Who was the first Indian to have achieved 300 runs in an inning in tests?
A) Sachin Tendulkar
B) Sourav Ganguli
C) Bishen Singh Bedi
D) Virender Sehwag
21. Complete the series

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37,43,53,61,71,
$$

A) 81
B) 79
C) 83
D) 73
42. In a certain code language, COMPUTER is written as RFUVQNPC. How is MEDICINE written in the same language?
A) EOJDEJFM
B) EOJDJEFM
C) MFEDJJOE
D) MFEJDJOE

## Read the following information and answer Q.Nos.43-44.

A is the son of B. C, B's sister, has a son D and a daughter E. F is the maternal uncle of D.
43. How is A related to D?
A) cousin
B) nephew
C) uncle
D) brother
44. How many nephews does $F$ have?
A) nil
B) one
C) two
D) three

## Read the following information and answer Q.Nos.45-46.

$\mathrm{A}, \mathrm{B}, \mathrm{C}$ and D are to be seated in a row. But C and D cannot be together. Also, B cannot be at third place.
45. Which of the following must be false?
A) $A$ is at the first place
B) A is at the second place
C) A is at the third place
D) A is at the fourth place
46. If A and B are together, then which of following must be true?
A) C is at the first place
B) $D$ is at the first place
C) C is not at the first place
D) A is at the third place
47. The needle of a compass is turned in such a manner that the pointer which was showing Southeast is now showing West. A person went towards North as per damaged compass. Towards which direction does he actually want to go?
A) North-east
B) North-west
C) South-west
D) South-east
48. How many such 5 s are there in the following sequence each of which is immediately preceded by 3 or 4 but not immediately followed by 8 or 9 ?
35954553584567357554523510
A) 0
B) 3
C) 5
D) 6
49. Bharti is 8 ranks ahead of Divya who ranks $26^{\text {th }}$ in the class of 42 . What is Bharti's rank from the last?
A) $9^{\text {th }}$
B) $24^{\text {th }}$
C) $25^{\text {th }}$
D) $34^{\text {th }}$
50. Replace question mark (?) from the options given below:

| 7 | 4 | 5 |
| :---: | :---: | :---: |
| 8 | 7 | 6 |
| 3 | 3 | $?$ |
| 29 | 19 | 31 |

A) 3
B) 4
C) 5
D) 6
51. What is the greatest possible length of scale that can be used to measure exactly the lengths 3 m , 5 m 10 cm and 12 m 90 cm ?
A) 10 cm
B) 20 cm
C) 25 cm
D) 30 cm
52. Each boy contributed rupees equal to the number of girls and each girl contributed rupees equal to the number of boys in a class of 60 students. If the total collection thus collected is $₹ 1600$, how many boys are there in the class?
A) 25
B) 30
C) 50
D) data inadequate
53. simplify
$\frac{\frac{1}{3} \cdot \frac{1}{3} \cdot \frac{1}{3}+\frac{1}{4} \cdot \frac{1}{4} \cdot \frac{1}{4}-3 \cdot \frac{1}{3} \cdot \frac{1}{4} \cdot \frac{1}{5}+\frac{1}{5} \cdot \frac{1}{5} \cdot \frac{1}{5}}{\frac{1}{3} \cdot \frac{1}{3}+\frac{1}{4} \cdot \frac{1}{4}+\frac{1}{5} \cdot \frac{1}{5}-\left(\frac{1}{3} \cdot \frac{1}{4}+\frac{1}{4} \cdot \frac{1}{5}+\frac{1}{3} \cdot \frac{1}{5}\right)}=$ ?
A) $\frac{2}{3}$
B) $\frac{3}{4}$
C) $\frac{47}{60}$
D) $\frac{49}{60}$
54. In an examination, a pupil's average marks were 63 per paper. If he had obtained 20 more marks for his Geography paper and 2 more marks for his History paper, his average per paper would have been 65 . How many papers were there in the examination?
A) 8
B) 9
C) 10
D) 11
55. If an area enclosed by a circle or a square or an equilateral triangle is the same then the maximum perimeter is possessed by
A) circle
B) equilateral triangle
C) square
D) both circle \& triangle
56. A dry-fruit seller mixes 3 varieties of walnuts costing ₹ 50 , $₹ 20$ and $₹ 30$ per kg in the ratio 2:4:3 in terms of weight and sells the mixture at $₹ 33$ per kg . What percentage of profit does he make?
A) $10 \%$
B) $9 \%$
C) $8 \%$
D) $11 \%$
57. A, B and C start a business each investing ₹ 20000 . After 5 months A withdraws ₹ 5000 , B ₹ 4000 and C invested ₹ 6000 more. At the end of the year, a total profit of ₹ 69900 was recorded. What is the share of B ?
A) ₹ 20500
B) ₹ 21200
C) ₹ 27300
D) ₹ 28200
58. Sunil covers a distance by walking for 6 hours. While returning his speed decreases by $1 \mathrm{~km} / \mathrm{hour}$ and he takes 9 hours to cover the same distance. What was his speed in return journey?
A) $2 \mathrm{~km} / \mathrm{hr}$
B) $3 \mathrm{~km} / \mathrm{hr}$
C) $4 \mathrm{~km} / \mathrm{hr}$
D) $5 \mathrm{~km} / \mathrm{hr}$
59. A man borrows ₹ 4000 from a bank at $7.5 \%$ per annum compound interest. At the end of every year he pays ₹ 1500 as a part payment of loan and interest. How much does he still owe to the bank after 3 such instalments?
A) ₹ 125
B) ₹ 400
C) ₹ 123.25
D) ₹ 469.18
60. Three pipes A, B, C can fill a tank in 6 hours. After working together for 2 hours, C is closed and A and B can fill the remaining part in 7 hours. The number of hours taken by C alone to fill the tank is
A) 10
B) 12
C) 14
D) 16

61 Match the following with respect to MS-Excel 2007:
(i) Maximum Number of open workbooks : (a) 16384
(ii) Maximum number of rows in a Worksheet
: (b) Limited by available memory
(iii) Maximum number of columns in a Worksheet
: (c) 255
(iv) Maximum number of characters in header/footer : (d) 1048576
A) (i)-(a) (ii)-(b) (iii)-(c) (iv)-(d)
B) (i)-(b) (ii)-(d) (iii)-(a) (iv)-(c)
C) (i)-(c) (ii)-(b) (iii)-(d) (iv)-(a)
D) (i)-(d) (ii)-(a) (iii)-(b) (iv)-(c)

Which of the following is concatenation operator?
A) Ampersand (\&)
B) Hash (\#)
C) Dollar (\$)
D) Exclamation (!)

63 What is gutter margin in MS-Word PageLayout?
A) Margin that is added to the left margin when printing
B) Margin that is added to right margin when printing
C) Margin that is added to the binding side of page when printing
D) Margin that is added to the outside of the page when printing

64 Which of the following change is not available in MS-PowerPoint custom animation?
A) Entrance
B) Exit
C) Motion Path
D) Time

65 Using 'Find' command in MS-Word, we can search
A) Characters
B) Whole Word
C) Symbols
D) All of the above
66. IFN stands for
(A) Indian Feed Number
(B) Index Feed Number
(C) International Feed Number
(D) International Formulation Number
67. Which of the following does not come under the Major Category of International Feed Identification System
(A) Roughages
(B) Silages \& hayleges
(C) Protein supplements
(D) Fats
68. Which of the following is a Macromineral
(A) Cu
(B) Mg
(C) Fe
(D) I
69. Which of the following is essential vitamin supplement for ruminants
(A) vitamin A
(B) pantothenic acid,
(C) vitamin K
(D) vitamin B12
70. The amount contained in the feed ingredient/diet as it would be fed to the animal; including water
(A) As-fed basis
(B) Dry matter basis
(C) Air-dry basis
(D) Percent dry matter
71. What is \% of salt in supplement for Diet Formulation of cattles
(A) $20 \%$
(B) $50 \%$
(C) $2 \%$
(D) $10 \%$
72. P 700 is a special form of the following pigment
(A) Chlorophyll-a
(B) Carotene
(C) Xanthophyll
(D) Chlorophyll-b
73. Which of the following metalloproteins does not have iron in the active site?
(A) Hemoglobin
(B) Hemocyanin
(C) hemerythrin
(D) Cytochrome c
74. Non-heme iron sulfur proteins are involved in
(A) proton transfer
(B) oxygen transfer
(C) electron transfer
(D) both electron and proton transfer
75. According to MO theory, for atomic species $\mathrm{C}_{2}$
(A) Bond order is zero and it is paramagnetic
(B) Bond order is two and it is diamagnetic
(C) Bond order is zero and it is diamagnetic
(D) Bond order is two and it is paramagnetic
76. Metalloenzyme involved in the key step of the skin pigment melanin formation is
(A) Myoglobin
(B) Tyrosinase
(C) Nitrogenase
(D) Superoxide dimutase
77. Carboxypeptidase contains
(A) Mg (II) and hydrolyses $\mathrm{CO}_{2}$
(B) Mg (II) and hydrolyses peptide bonds
(C) Zn (II) and hydrolyses $\mathrm{CO}_{2}$
(D) Zn (II) and hydrolyses peptide bonds
78. Which of the following metalloprotein is a redox protein?
(A) Cytochrome c
(B) Carbonic anhydrase
(C) Ferritin
(D) Transferrin
79. Which of the following is the correct sequence for the movement of electrons during the lightdependent reactions of plants?
(A) water , $\mathrm{P}_{700}, \mathrm{NADP}^{+}, \mathrm{P}_{680}$
(B) $\mathrm{P}_{680}$, water , $\mathrm{P}_{700}$, NADP $^{+}$
(C) water , $\mathrm{P}_{680}, \mathrm{P}_{700}, \mathrm{NADP}^{+}$
(D) $\mathrm{P}_{700}, \mathrm{P}_{680}, \mathrm{NADP}^{+}$, water
80. To reduce six molecules of carbon dioxide to glucose via photosynthesis, how many molecules of NADPH and ATP are required?
(A) 12 NADPH and 18 ATP
(B) 12 NADPH and 12 ATP
(C) 18 NADPH and 12 ATP
(D) 24 NADPH and 18 ATP
81. The metals involved in nitrogenase are
(A) Fe and Mg
(B) Mo and Fe
(C) Mo and K
(D) Fe and K
82. The structure of $\mathrm{XeF}_{4}$ is
(A) Square planar
(B) Square pyramidal
(C) Tetrahedral
(D) Octahedral
83. Which of the following is a Primary nutrient?
(A) magnesium
(B) chlorine
(C) Nitrogen
(D) zinc
84. The 3d atomic orbital has
(A) Two radial nodes
(B) No nodes
(C) Two angular nodes
(D) One radial node and angular nodes
85. Which of the following oil contain maximum quantity of saturated fats.
(A) butter
(B) vanaspati oil
(C) ground nut oil
(D) mustard oil
86. Keto enol tautomerism is shown by
(A) $\mathrm{C}_{6} \mathrm{H}_{5} \mathrm{CHO}$
(B) $\mathrm{C}_{6} \mathrm{H}_{5} \mathrm{COCH}_{3}$
(C) $\mathrm{C}_{6} \mathrm{H}_{5} \mathrm{COC}_{6} \mathrm{H}_{5}$
(D) $\mathrm{C}_{2} \mathrm{H}_{5} \mathrm{CHO}$
87. On side of a bag of an $N P K$ fertiliser the chemical composition was listed. What is the name of the element with the chemical symbol $K$ ?
(A) potassium
(B) copper
(C) krypton
(D) carbon
88. Name the substance whose accumulation in pelicans of Lake Michigan led to the formation of thin shells of their eggs.
(A) CFC
(B) PAN
(C) PAC
(D) DDT
89. In $\mathrm{S}_{\mathrm{N}}{ }^{1}$ reactions the order of reactivity of halides is:
(A) Primary allyl $>3^{\circ}>2^{\circ}>1^{\circ}$
(B) $3^{\circ}>$ Primary allyl $>2^{\circ}>1^{\circ}$
(C) $1^{\circ}>2^{\circ}>3^{\circ}>$ Primary allyl
(D) $1^{\circ}>2^{\circ}>$ Primary allyl $>3^{\circ}$
90. The function of $\mathrm{AlCl}_{3}$ in the Friedel-Crafts reactions is to:
(A) Absorb water
(B) Produce nucleophile
(C) Produce electrophile
(D) Absorb HCl
91. A reaction which gives $100 \%$ ee of a product is called:
(A) Enantiospecific
(B) Enantioselective
(C) Chemoselective
(D) Regioselective
92. Reimer-Tiemer reaction involves a:
(A) Carbocation intermediate
(B) Carboanion intermediate
(C) Carbene intermediate
(D) Mono free radical intermediate
93. Polymerisation using Ziegler-Natta catalysis is advantageous over free radical polymerisation because:
(A) It can lead to living polymers via anionic polymerisation (B) It permits stepreaction polymerisation resulting in a highly cross-linked polymer
(C) It gives highly branched polymer with a high degree of crystallinity
(D) It gives linear polymer permitting stereochemical control
94. If we operate a Carnot's engine between the freezing point and boiling point of water, what will be the efficiency of that engine?
(A) $0 \%$
(B) $27 \%$
(C) $73 \%$
(D) $100 \%$
95. Variation of chemical potential with pressure results
(A) Partial molar entropy
(B) Partial molar internal energy
(C) Partial molar volume
(D) Partial molar enthalpy
96. The pure rotational spectrum of CO consists of a series of equally spaced lines separated by $3.84235 \mathrm{~cm}^{-1}$. The atomic masses are: ${ }^{12} \mathrm{C}=19.92168 \times 10^{-27} \mathrm{~kg}$ and ${ }^{16} \mathrm{O}=26.56136 \times 10^{-27} \mathrm{~kg}$. The internuclear distance of the molecule is
(A) $2.312 \AA$
(B) $1.456 \underset{\AA}{\AA}$
(C) $1.131 \underline{\AA}$
(D) $1.921 \underline{\AA}$
97. The molecule which is IR-inactive but Raman-active is
(A) HCl
(B) $\mathrm{N}_{2}$
(C) $\mathrm{SO}_{2}$
(D) proteins
98. Relatively new insecticides that have both low persistence and low toxicity to mammals are what?
(A) organophosphates
(B) pyrethroids
(C) triazines
(D) chlorinated hydrocarbons
99. Oxygen enters into water by:
(A) Respiration
(B) Decomposition of organic matter
(C) Photosynthesis
(D) None of these
100. For one component system, at triple point the number of degrees of freedom is
(A) three
(B) one
(C) two
(D) zero

Answer- Key
Code: 13
(Manager QC)

| Q. | Ans. | Q. | Ans. | Q. | Ans. | Q. | Ans. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | A | 26 | A | 51 | D | 76 | B |
| 2 | B | 27 | C | 52 | D | 77 | D |
| 3 | C | 28 | B | 53 | C | 78 | A |
| 4 | B | 29 | A | 54 | D | 79 | C |
| 5 | C | 30 | D | 55 | B | 80 | A |
| 6 | A | 31 | C | 56 | A | 81 | B |
| 7 | B | 32 | D | 57 | B | 82 | A |
| 8 | B | 33 | B | 58 | A | 83 | C |
| 9 | C | 34 | C | 59 | C | ) 84 | C |
| 10 | D | 35 | A | 60 | C | 85 | A |
| 11 | A | 36 | B | 61 | B | 86 | B |
| 12 | A | 37 | A | 62 | A | 87 | A |
| 13 | A | 38 | B | 63 | D | 88 | D |
| 14 | A | 39 | C | 64 | D | 89 | A |
| 15 | A | $40$ | D | 65 | D | 90 | C |
| 16 | B | 41 | B | 66 | C | 91 | A |
| 17 | C | 42 | B | 67 | D | 92 | C |
| 18 | D | 43 | A | 68 | B | 93 | D |
| 19 | A | 44 | C | 69 | A | 94 | B |
| 20 | B | 45 | A | 70 | A | 95 | C |
| 21 | C | 46 | D | 71 | C | 96 | C |
| 22 | D | 47 | D | 72 | A | 97 | B |
| 23 | C | 48 | C | 73 | D | 98 | B |
| 24 | B | 49 | C | 74 | C | 99 | C |
| 25 | A | 50 | C | 75 | B | 100 | D |

