Academic Excellence Through Quality Education

KATHMANDU MODEL HIGHER SECONDARY SCHOOL

Higher Secondary School of Science, Management & Humanities (Affiliated to HSEB)

NATIONAL HSS
MODEL QUESTIONS
MANAGEMENT/HUMANITIES

F.M.: 100

Time : 2 hrs.

Shade the appropriate circle (●) using black ink in the answer sheet.

SUBJECT: ENGLISH **F.M.: 50** **P.M.: 20**

Choose the best answers:

1. 'After several mistakes, the company *gave him the sack.'* What is the meaning of the phrase in Italics?
   a. to promote employee to a higher post b. to dismiss an employee from employment
   c. to transfer an employee d. to kill an employee
2. Select the correct spelling from amongst the given alternatives.
   a. Sycology b. sychology c. psychology d. psychology
3. Let me……pair my nails.
   a. pair my nails.
   b. pour my nails.
   c. pare my nails.
   d. pear my nails.
4. Sir. E. S. Jonson was an……scientist.
   a. eminent b. imminent c. immense d. iment
5. I've not understood the matter **at all**. The meaning of phrase in bold type is……
   a. a little b. completely c. very much d. not so much
6. Choose the correct alternative for " a herd of ……"
   a. bees b. people c. insects d. deer
7. I listened the news ……radio.
   a. in the b. on the c. on d. in
8. Find an error in one of the parts of the sentence. The letter of that part is your answer.
   Are you (**A**) / listening (**B**) / what he is (**C**) / saying? (**D**).
   a. A b. B c. C d. D
9. The odd word/man out among "a. milk b. cheese c. cream d. brinjal" is……
   a. ……. b…… c…… d……
10. I shall call you……Saturday night.
    a. on b. at c. in d. at the
11. Five kilograms of sugar …….. required for the recipe.
    a. are b. is c. were d. have been
12. The fan ……. repairing.
    a. needs b. need c. were needing d. are needing
13. Neither Sita nor Ram …… responsible for the accident
    a. is b. am c. are d. were
14. Ram as well as his sister, ……. at the party.
    a. were b. was c. is d. has been
15. Everyone was at the meeting, ……..?
    a. weren't they b. were they c. didn't they d. don't they
16. I am as intelligent as …… is.
    a. us b. they c. she d. her
17. ……. country is famous for its beauty.
    a. our b. hers c. mine d. yours
18. She washed the clothes ……
    a. himself b. themselves c. herself d. herselves
19. He is the manager ……. was promoted
    a. that b. whom c. who d. which
20. This is the man ……
    a. which I know b. that I know c. who I know d. whom I know
21. We like …… computer games.
    a. play b. to playing c. played d. playing
22. The plane …… for Pokhara tomorrow.
    a. is leaving b. was leaving c. left d. leaves
23. She was driving when she …… with an accident.
    a. was meeting b. returned
    c. is meeting d. met
24. She ……. home after she had finished the work at the office.
    a. had returned b. returned c. has returned d. will be returning
25. He has been working in this office …… last Monday.
    a. for b. by c. since d. at
26. She is …… a doctor and social worker.
    a. as well as b. not only c. both d. nor
27. He is …….. member in the family.
    a. the older b. the eldest c. elder d. oldest
28. He could go for a long drive today if it ……. sunny.
    a. is b. was c. had been d. were
29. If you heat water, it …….. into steam.
    a. would turn b. should turn c. will turn d. could turn
30. He is different ……. his other friends.
    a. of b. from c. to d. at

31. There was a misunderstanding ……. him and me.
    a. between b. for c. from d. among
32. I guess the cat is ……. the bed.
    a. below b. at c. under d. by
33. …… answer she gave me was right.
    a. a b. an c. the d. none
34. There is somebody walking behind us. I think …….
    a. we are following b. we are being followed
    c. we are followed d. we are being following
35. The passive of 'Many people speak English' is
    a. English is spoken by many people
    b. English has been spoken by many people
    c. English was spoken by many people
    d. English had been spoken by many people
36. The passive form of 'Girls had eaten bread' is
    a. Bread had been eaten by girls b. Bread has been eaten by girls
    c. Bread is eaten by girls d. Bread will be eaten by girls
37. I asked the doctor if I ……. the antibiotics.
    a. take b. can take c. could take d. took
38. Sushma said that …… all those things long time before.
    a. she reads b. she is reading c. she had read d. she was reading
39. Binit asked me …….
    a. what was my problem b. what my problem was
    c. what is your problem d. what was your problem
40. ……. I heard the noise, I became aware that somebody was in the room.
    a. No sooner b. When c. While d. As soon as
41. He arrived late in the class ……. a traffic jam.
    a. because b. therefore c. as d. because of
42. Strict rules were brought by the police ……. the crime would decrease.
    a. such that b. so c. therefore d. so that
43. The world 'really' is an ……..
    a. adverb b. adjective c. verb d. noun
44. The word 'that' is a ……
    a. determine b. preposition c. interjection d. noun
45. The subject of a sentence usually comes ……. the object.
    a. after b. before c. between d. in
46. Sara bought a pen and gave ……. to Claire.
    a. it b. them c. that d. it
47. She was tired because she'd ……. all day.
    a. been working b. was working c. work d. nothing
48. I think …….. stay in tonight.
    a. I'll b. I'll going to c. I'd d. I'm
49. By the time you get home I'll ……. my work.
    a. be finished b. have finished c. had finished d. be finishing
50. I …… complete silence now while I try this experiment.
    a. am working b. did what c. have wanted d. want

SUBJECT: MATHS F.M.: 50 P.M.: 20

51. If A and B are subsets of U in which n (U) = 43, n(A) = 25, n(B)=18 and n(A∩B) = 7then the value of n$\left(\overline{A \cup B}\right)$ is
    a. 36 b. 25 c. 14 d. 7
52. If A and B be two sets containing 3 and 6 district elements respectively then the minimum number of elements in A∪B is
    a. 0 b. 3 c. 6 d. 9
53. The price of an article with 15% VAT is Rs.690. The price of the article excluding VAT is
    a. Rs.630 b. Rs.600 c. Rs.590 d. Rs.580
54. If Nischal sold a Palpali Dhaka topi for Rs.80 at 60% profit. The cost price of that topi is
    a. Rs.40 b. Rs.45 c. Rs.50 d. Rs.60
55. At what rate percent compound interest will Rs.625 amount to Rs.729 in 2 years?
    a. 8% b. 6% c. 5.5% d. 5%
56. In how many years will the population of a town be 209475 from 190000 at the growth rate of 5% p.a.?
    a. 3 yrs. b. 2 yrs. c. 4 yrs. d.2.5yrs
57. If the area of an equilateral triangle is 16$\sqrt{3}$ cm^2. The perimeter of triangle is ……
    a. 16cm b. 18cm c. 20cm d. 24cm
58. The lateral surface area of a right equilateral triangular prism of height 20cm and base 6cm is ……..
    a. 360cm^2 b. 340cm^2 c. 300cm^2 d. 240cm^2
59. The total surface area and the diameter of the base of a cone are 594cm^2 and 18cm respectively slant height of the cone is ……..
    a. 13cm b. 14cm c. 12cm d. 15cm
60. If the surface area of a lemon is 616cm^2. The volume of lemon is ……
    a. 450cm^3 b. 457.33cm^3 c. 460cm^3 d. 470cm^3
61. The volume of a right circular cylinder of height 7cm is 567πcm^3. The curved surface area is …..
    a. 905.14cm^2 b. 805.14cm^2 c. 550cm^2 d. 396cm^2

62. A pyramid with square base of side 10cm has slant height 13cm. The volume of the pyramid is
a. 200cm^3 b. 300cm^3 c. 400 cm^3 d. 450cm^3

63. The HCF of two expressions is x+1 and their LCM is x^6-1. If one of them is x^3+1 then the another is
a. x^3-1 b. x^4+x^3-x-1 c. x^4-x^3+x-1 d. x^4-x^3-x-1

64. The value of $\frac{x^2}{y(x-y)}+\frac{y^2}{x(y-x)}$ is
a. 0 b. 1 c. $\frac{x^2+xy+y^2}{xy}$ d. $\frac{x-y}{xy}$

65. The value of $\left(\frac{8}{27}\right)^{\frac{-2}{3}}$ is .....
a. 4/9 b. 9/4 c. 1 d. 1/4

66. The value of $\frac{5.2^k-5.2^{k-2}}{2^{k+2}}$ is
a. 15/16 b. 16/15 c. 1 d. 0

67. If n(U) = 70, n(A)=40, n(B) = 20 and $n\left(\overline{A\cup B}\right)$ =15, then the value of n(A$\cap$B) is ...
a. 6 b.5 c. 4 d. 3

68. The value of $\frac{P^2}{(P-y)^y}-\frac{2P}{(P-y)^{y-1}}+\frac{1}{(P-y)^{y-2}}$ is .....
a. $\frac{y}{P-y}$ b. $\frac{P-y}{y}$ c. $\frac{(P-y)^y}{y^2}$ d. $\frac{y^2}{(P-y)^y}$

69. If $3\times81^x=9^{x+4}$ then the value of x is ……
a. 2/7 b. 7/2 c. 1 d. 2

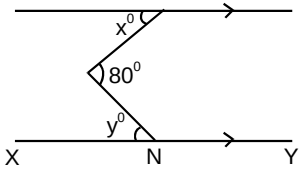
70. If 2^y+2^{y-2} = 5 then the value of y is .....
a. 0 b. 2 c. 1 d. -2

71. If $\sqrt{x-7}=\sqrt{x}-1$, then the value of x is .....
a. 4 b. 8 c. 16 d. 32

72. The marked price of an article was fixed to Rs.1380 by increasing 15% on its actual price. Its actual price is ……..
a. Rs.1240 b. Rs.1250 c. Rs.1260 d. Rs.1200

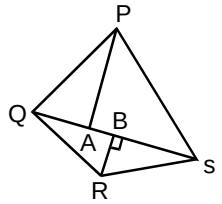
73. If $7x^2=28x$, then the value of x is ……
a. 4 b. 0, 4 c. 3 d. none of the above

74. In the given figure , $AB\,\mathrm{P}\,CD$. What is the value of x+y?

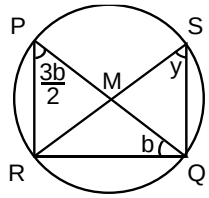


a. 30^0 b. 45^0 c. 120^0 d. 80^0

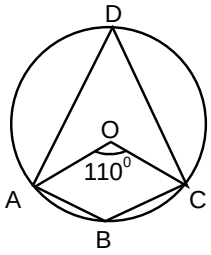
75. The area of the given quadrilateral PQRS where PA and RB are perpendicular to QS and 3RB = 2PA = QS = 6cm is ……
a. $10cm^2$
b. $12cm^2$
c. $15cm^2$
d. $18cm^2$



76. In the given figure, M is the centre of the circle. If $\angle PQR=b^0$, $\angle RPQ=\frac{3b^0}{2}$ and $\angle RSQ=y^0$, then the value of y is ……
a. 45^0
b. 54^0
c. 60^0
d. 65^0



77. In the given figure, $\angle BOC=110^0$, then the value of $\angle ABC$ is



a. 55^0 b. 125^0 c. 85^0 d. none of the above

78. The smallest prime number greater than 53 is….
a. 59 b. 55 c. 57 d. 67

79. If a = 12cm, C= 15 $\sqrt{2}$ cm and $\angle ABC = 45^0$. The area of ∇ABC is ……
a. $45cm^2$ b. $60cm^2$ c. $75cm^2$ d. $90cm^2$

80. If $\sum$f=15 and $\sum$fx=750 then the mean is
a. 50 b. 45 c. 40 d. 30

81. 1, 5, 7, 2x-4, x+7, 2x+1 and 3x+2 are in ascending order. If the upper quartile is 15 then the value of x is ……
a. 5 b. 6 c. 7 d. 8

82. The mean of all factors of 10 is ……..
a. 3.5 b. 4.5 c. 5.5 d. 5

83. A card is drawn at random from a well shuffled pack of 52 cards. The probability that it is an ace or a queen is …….
a. 2/13 b. 1/13 c. 3/13 d. 4/13

84. The probability that a number chosen at random from the integers between 5 and 16 inclusive is a multiple of 3 or multiple of 2 is ……
a. 4/5 b. 2/5 c. 2/3 d. 1/3

85. If x+2 is a factor of $3x^2p+x^2-2x-8$, then the value of p is
a. 6 b. 5 c. 4 d. 7

86. If two lines 3x-2y-5=0 and 2x+py-3=0 are parallel to each other, then the value of p is
a. -4/3 b. 4/3 c. 3/4 d. -3/4

87. The sum of 2-6+18-……. upto 6 terms is ……
a. 264 b. 364 c. -364 d. -464

88. If $\begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} 3 & 5 \\ 4 & 6 \end{pmatrix} \begin{pmatrix} 1 \\ 2 \end{pmatrix}$, then the value of x and y are
a. (13, 16) b. (16, 13) c. (1, 3) d. (2, 4)

89. If $\cos\alpha = \frac{\sqrt{3}}{2}$, then the value of $\sin 3\alpha$ is
a. 0 b. 1 c. -1 d. 2

90. If cosx+secx = 5/2, ($0^0 \le x \le 180^0$), then the value of x is …….
a. 30^0 b. 45^0 c. 60^0 d. 90^0

91. The value of $\frac{3^{x+2}+3^x}{5.3^x}$ is….
a. 0 b. 1 c. 2 d. none of the above

92. If set A = {x, y z}, then the number of subsets of A is…….
a. 2 b. 3 c. 6 d. 8

93. The length of a chord which is at a distance of 6cm from the centre of the circle of radius 10cm is
a. 4cm b.8cm c.16cm d. 32cm

94. The measures of the two acute angles in a right angled triangle are in the ratio of 4 :5 the measure of the larger angle is …….
a. 30^0 b. 35^0 c.40^0 d. 50^0

95. If a+b=8, b+c=9 and c+a=11, what is the average value of a, b and c?
a. 4 b. 14/3 c. 16/3 d. 6

96. The interior angle of a regular pentagon is
a. 108^0 b. 60^0 c. 90^0 d. 110^0

97. If x-2y=3 and 4^{x+y}=1, then the value of x and y are
a. (1, 0) b. (-1, 1) c. (1, -1) d. (2, 1)

98. If diagonal of a square is $3\sqrt{2}$ cm. The area of square is
a. $18cm^2$ b. $4cm^2$ c. $9cm^2$ d. none of the above

99. A card is drawn from a well shuffled pack of 52 cards. The probability of that card being a king or a black is
a. 5/13 b. 4/13 c. 6/13 d. 7/13

100. The transformation represented by the matrix $\begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}$ is …….
a. (-x, y) b. (x, -y) c. (x, y) d. (-x, -y)

The End