JNTU ONLINE EXAMINATIONS [Mid 1 - dip]
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1. The set of points seen by the camera , after it was arrived from normal position is , , , , , , , , , , , , , , , , , different [01D01]

a. n 0
b. quite
c. normal
d. high

2. **In c = PCRGw equation w is _ _ _ _ _ _ _ _ _ _ [01D02]** h h h
a. Heterogeneous world point
b. world point at h
c. Homogeneous world point
d. co-ordinate point

3. Translation of the origin of the world co-ordinate system to the location of the gimbals center is accomplished by using the _ _ _ _ _ _ _ _ _ _ matrix [01M01]
a. Identity
b. transformation
c. null
d. transition

4. **A counter clockwise rotation of the camera implies position angles, and 0 0 m ark is z and _ _ _ _ _ _ _ _ _ _ axes are aligned [01M02]**
a. X
b. Y
c. Z
d. R

5. Digitization of the spatial co-ordinates (x, y) called [01M03]
a. Gray level quantization
b. finite sampling
c. Image sampling
d. image quantization

6. The basic objective of obtaining the _ _ _ _ _ _ _ _ _ _ co-ordinates of any particular world point remains the same. [01S01]
a. X-axis
b. Y-axis
c. image plane
d. plane

7. A world co-ordinate system (x,y,z) used to locate both Camera and _ _ _ _ _ _ _ _ _ _ [01S02]
a. 3-D points
b. imaginary points
c. 2-D points
d. plane points

8. The offset of the center of the gimbals from the origin of the world co-ordinate system is denoted by _ _ _ _ _ _ _ _ _ _ [01S03]
a.
b. O
c. W
d. **W** 0

9. The camera was in normal position , in the sense that the gimbals center and origin of the image plane were at the _ _ _ _ _ _ _ _ _ _ of the world co-ordinate system and axes were aligned [01S04]
a. middle
b. centric
c. origin
d. end

10. **Transformation angles are _ _ _ _ _ _ _ _ _ _ when the camera rotates counter**
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clock wise [01S05]
a. negative
b. positive
c. no change
d. fixed to origin

11. A 128 X 128 image with 64 gray levels requires _ _ _ _ _ _ _ _ _ _ bits of storage [02D01]
a. 4096
b. 8192
c. 12288
d. 98304

12. 4- neighbors of pixel p is [02D02]
a. (x+1, y) (x, y+1) (x-1, y) (x, y-1)
b. (x, y) (x, y+1) (x+1, y+1) (x, y-1)
c. (x,y) (x-1, y+1) (x+1, y+1) (x, y-1)
d. (x, y) (x-1, y-1) (x+1, y+1) (x-1,y+1)

13. A 64 X 64 image with _ _ _ _ _ _ _ _ _ _ gray levels requires 16,384 bits of storage [02M01]

a. **2** 4
b. 2 8
c. 32
d. 64

14. A good image is difficult to define because image quality is _ _ _ _ _ _ _ _ _ _ [02M02]
a. high subjective, weakly dependent
b. lowly subjective, weakly dependent
c. high subjective, strongly dependent
d. lowly subjective, strongly dependent

15. Fine sampling is required in the neighborhood of sharp _ _ _ _ _ _ _ _ _ _ transition [02M03]
a. High level
b. low level
c. medium level
d. gray-level

16. f(x,y) is a digital im age , if (x, y) are integers from ZXZ and f is a function that assigns _ _ _ _ _ _ _ _ _ _ value to each distinct pair of co-ordinates (x,y)

[02S01]
a. identical
b. imaginary
c. gray- level
d. complex
17. For a fixed value of spatial resolution, the appearance of an image can be improved in many cases by using an adaptive scheme where the sampling process depends on the _ _ _ _ _ _ _ _ _ _ of the image [02S02]
a. Value
b. immerge
c. characteristics
d. origin
18. The 4- diagonal neighbors of p have coordinate [02S03]
a. (x+1, y), (x+1, y+1), (x-1, y+1),(x-1, y-1)
b. (x, y),(x+1, y-1),(x-1, y+1),(x-1, y-11)
c. (x+1, y+1),(x+1, y-1),(x-1, y+1),(x-1, y-1)
d. (x+1, y+1),(x, y),(x-1, y+1),(x-1, y-1)
19. Connectivity is used to _ _ _ _ _ _ _ _ _ _ of objects and components of regions in an image [02S04]
a. Establishing boundaries
b. destroy boundaries

c. Find boundaries
d. change boundaries
20. For coordinate p(3,4) the 4- diagonal neighbors of p are _ _ _ _ _ _ _ _ _ _ [02S05]
a. (3, 4) (4, 8) (3, 1) (2, 2)
b. (4, 3) (4, 2) (2,5) (2, 3)
c. (4 , 5) (4, 3) (2, 5) (2, 3)
d. (3, 5) (3, 3) (2, 5) (2, 3)

21. **D (p,q)=[(x-s) +(y-t)] is the Euclidean _ _ _ _ _ _ _ _ _ _ _ between _ _ _ _ _ _ _ _ _ _ [03D01]**
a. distance and p
b. speed ,p and q
c. speed, q and p
d. distance, p and q
22. The Euclidean distance between p and q is defined as _ _ _ _ _ _ _ _ _ _ [03D02]

a. D (p,q)=[(x-s)+(y-t)]
b. D (p,q)=[(x-s) +(y-t)]
c. D (p,q)=[(x-s) +(y-t)]
d. D (p,q)=[(x-s) +(y-t)]
23. The city-block distance between p and q is defined as [03D03]

a. D (p,q)=[|x-s|+|y-t|]
b. D (p,q)=[|x-s|+|y-t|]
c. D (p,q)=[|x-s|+|y-t|]
d. D (p,q)=|x-s|+|y-t|
24. A binary relation R over set A for all a, b in A, said to be reflexive if [03M01]
a. a R b
b. b R a
c. b R c
d. a R a
25. A binary relation R over set A is said to be symmetric if for all a, b in A and [03M02]
a. b R b implies b R a
b. a R b implies a R a
c. a R b implies b R a
d. a R a implies a R b
26. For coordinate p(2, 3) the 4 neighbors of pixel p are [03S01]
a. (3, 3) (2, 3) (1, 3) (2, 2)
b. (3, 3) (2, 3) (1, 1) (2, 2)
c. (3, 3) (2, 4) (1, 3) (2, 2)
d. (3, 3) (2, 4) (1, 3) (2, 1)

27. **Two pixels p and q with values from the set of gray level values are four connected , if q is in the set N (p) is known as [03S02]**
a. 8-connectivity
b. 4 - adjacent
c. 4 - connectivity
d. 8- adjacent
28. A binary relation R over set A is said to be transitive if for all a,b,c in A and _ _ _ _ _ _ _ _ _ _ [03S03]
a. a R b and b R c implies a R c
b. a R a and b R b implies a R b
c. a R b and b R a implies a R c
d. a R a and b R c implies a R c

29. **Two pixels p and q with values from the set of gray-level values are 8-connected,**

if q is in the set N (p)is known as [03S04]
a. 8-connectivity
b. 4 - adjacent
c. 4- connectivity
d. 8 -adjacent

30. **D distance is also called as [03S05]**
a. city-block distance
b. chess-board distance
c. Euclidean - distance
d. mean- distance
31. The chess - board distance between p and q is defined as [04D01]

a. D (p,q) = min(|x-s|,|y-t|)
b. D (p,q) = max(|x-s|,|y-t|)
c. D (p,q) = max(|x+s|,|y-t|)
d. D (p,q) = max(|x-s|,|y+t|)
32. The principle logic operations used in an image processing are [04D02]

a. AND,OR, compliment
b. greater, lesser
c. greater, over
d. less than or equal

33. **D distance is also called as [04M01]**
a. city-block distance
b. chess-board distance
c. Euclidean - distance
d. mean- distance

34. The principle uses of image multiplication is to correct [04M02]
a. gray-level shading
b. noise reduction
c. medical-imaging
d. noise level shading

35. Logic operations apply to [04M03]
a. binary image
b. multivolume pixels
c. unary image
d. ternary image

36. **The D distance between two points p and q is equal to the length of the between these two points _ _ _ _ _ _ _ _ _ _ [04S01]**
a. shortest 8-path
b. shortest 2- path
c. shortest 4-path
d. shortest path

37. Arithmetic and logic operation between pixels are used extensively in most branches of _ _ _ _ _ _ _ _ _ [04S02]
a. binary processing
b. digital processing
c. signal processing
d. image processing

38. Arithmetic operations on entire images are caused out [04S03]
a. word by word
b. bit by bit
c. pixel by pixel
d. 2 pixels at a time

39. The principle use of image addition is for image averaging to reduce [04S04]
a. threshold value
b. frequency
c. noise
d. thickness

40. Image subtraction is a basic tool in [04S05]
a. space imaging
b. medical- imaging
c. bionics
d. general tool

41. Basic transformations are developed to overcome the _ _ _ _ _ _ _ _ _ _ problems [05D01]
a. image rotation, image scaling, image translation
b. image acquisition, image translation
c. image transition, image rotation
d. image detection, image translation

42. Arithmetic - logic units in modern image processors are used to perform arithmetic & logic operations in _ _ _ _ _ _ _ _ _ _ [05D02]
a. sequentially
b. parallel
c. randomly
d. Serial

43. Arithmetic operation apply to _ _ _ _ _ _ _ _ _ _ [05M01]
a. binary image
b. multivolume pixels
c. unary image
d. ternary image

44. Logic operation are basic tools in _ _ _ _ _ _ _ _ _ _ processing [05M02]
a. color image
b. digital image
c. signal
d. Binary image

45. Logic operation are basic _ _ _ _ _ _ _ _ _ _ in Binary image processing [05M03]
a. medical operations
b. digital analog
c. signal
d. tools

46. In addition to pixel by pixel processing an entire images, arithmetic and logical operations are used in _ _ _ _ _ _ _ _ _ _ operations [05S01]
a. adjacent-oriented
b. connected oriented
c. Neighborhood oriented
d. control oriented

47. The shape and meaning of the histogram are not affected by the _ _ _ _ _ _ _ _ _ readings [05S02]
a. axis
b. origin
c. horizontal axis
d. vertical axis

48. To rotate a point about another arbitrary point in space requires _ _ _ _ _ _ _ _ _ number of transformations [05S03]
a. 1
b. 2
c. 3
d. 4

49. Neighborhood processing typically is formulated in the Context of so-called _ _ _ _ _ _ _ _ operation [05S04]
a. Logical
b. unmask
c. arithmetic
d. mask

50. **Applying a mask at each pixel location in a image is a computationally _ _ _ _ _ _**

_ _ _ _ task [05S05]

a. Expensive
b. inexpensive
c. difficult
d. rays

51. Player A chooses y e Y and player B chooses z e Z, if player A looses, then he pays player B the amount _ _ _ _ _ _ _ _ _ _ [06D01]

a. L(z,y)
b. L(y,y)
c. L(z,z)

d. **L(y,z)**

52. A game g in the normal form is a triplet (y,z,L) where y and z are _ _ _ _ _ _ _ _ _ _ [06M01]

a. arbitrary spaces
b. arbitrary functions
c. bounded spaces
d. constants

53. Player A _ _ _ _ _ _ _ _ _ _ chooses and player B chooses _ _ _ _ _ _ _ _ _ _ if player A looses, then he pays player B the amount L(y,z) [06M02]

a. y, z e Z
b. yeZ, zeY
c. y, zeY
d. y eY, z eZ

54. The probabilities of _ _ _ _ _ _ _ _ _ _ membership are calculated from Bayes theorem [06S01]

a. object
b. class
c. unique
d. method

55. **Bayesian decision theory is the fundamental statistic approach to the problem of __ _ _ _ _ classification [06S02]**

a. pattern
b. identity
c. general
d. unique

56. The decision making process is analogous to a _ _ _ _ _ _ _ _ _ _ game [06S03]

a. statistical
b. non statistical
c. two - person zero sum
d. non - zero sum

57. **P(w = 1/4 , P(x/w) =1/3 and p(x) =1/2 then p(w / x) = [07D01]**

a. 1/4
b. 1/6
c. 1/8
d. 1

58. The multi variety normal density function is completely determined by [07D02]

a. n + n 2 (n + 1)
b. n + n/2
c. n + (n(n + 1)/2)
d. n + 2

59. _ _ _ _ _ _ _ _ _ _ is the origin of the pattern classification algorithm [07M01]

a. classifier
b. Bionics
c. end entity
d. second entity

60. Player A choose z e Z and player B chooses y eY, if player A wins, he receives the amount [07M02]

a. L(y , z)
b. L(y , y)
c. L(z , z)
d. L (z, y)

61. **Bionics is the _ _ _ _ _ _ _ _ _ _ of the pattern classification algorithm [07S01]**

a. middle
b. origin
c. end
d. second

62. Each of the association units produces an output only if enough of the sensory unit, which are connected to it are [07S02]

a. deactivated
b. activated
c. compensated
d. uncompensated

63. A game G in the normal form is a triplet (Y , Z ,L) where L is a _ _ _ _ _ _ _ _ _ _ [07S03]

a. bounded space
b. arbitrary function
c. bounded numerical function
d. bounded string

64. p(x/c)is the conditional probability of obtaining feature value x given that the sample is from c.then p(x) is probability distribution for future x in the entire population and p(c) is the _ _ _ _ _ _ _ _ _ _ that a random sample is a member of class c. [08D01]

a. prior probability
b. conditional probability
c. profitability
d. least probability

65. A game G in the normal form is a triplet (y,z,l),where y and l are [08D02]

a. orbitaryspace, bonded space
b. arbitaryspace, arbitary function
c. bounded space, arbitary function
d. arbitrary space, bounded numerical function

66. **The M by N matrix L=L with elements L = _ _ _ _ _ _ _ _ _ _ s called pay-off or loss matrix of game G. [08M01]**

a. L Y , Z b. Y, Z c. Y, Z d. **Y , Z** 67. **The nature selects class w and produces a pattern x. the probability that x comes from Wi is written as [08M02]**

a. p(x/w)
b. p(w/x)
c. **p(w /x)** d. p(w)

68. **p(w /x)=1/9;p(w)=1/3 ;p(x)=1/2 now find p(x/w) using Bayes formula [08M03]**

a. 1/3
b. 1/4
c. 1/2
d. 1/6

69. ---------- refers to choosing the most likely class , given the value of the feature [08S01]

a. Bayes classifier
b. Bayes theory

c. Bayes decision making
d. Gradient theorem

70. _ _ _ _ _ _ _ _ _ _ process is analogous to a two - person zero sum game [08S02]

a. Statistical
b. Sensory
c. Equal
d. Decision making

71. The classifier which _ _ _ _ _ _ _ _ _ _ the total expected loss is called the Bayes classifier [08S03]

a. maximizes
b. minimizes
c. equalize
d. remain same

72. Bionics is the application of biological concepts to _ _ _ _ _ _ _ _ _ _ machines which are concerned with problems in animal and machine learning [08S04]

a. statistical
b. electronic
c. computing
d. induction

73. The response of the perception is _ _ _ _ _ _ _ _ _ _ to the weighted sum of the associative array responses [08S05]

a. inversely proportional
b. equal
c. proportional
d. not dependent

74. **In Byes classifier for normal patterns , the decision function for class w may be chosen as d (x)= [09D01]**

a. p(x/w)p(x)
b. p(w /x)p(w) c. **p(x/w)p(w)** d. p(w)

75. In Game G=(Y,Z,L), if both Y and Z contain only a finite number of elements, then G is called _ _ _ _ _ _ _ _ _ _ [09M01]

a. infinite
b. finite
c. unique set
d. loop structure

76. The classifier which minimizes the total expected loss is called _ _ _ _ _ _ _ _ _ _ classifier [09M02]

a. Bayes
b. general
c. unknown
d. expected

77. The training algorithm for the perception machine is a simple scheme for the interactive determination of the _ _ _ _ _ _ _ _ _ _ vector [09S01]

a. weight
b. centroid
c. Mass
d. Linear

78. From a statistical point of view the bayes classifier represents the optimum measure of _ _ _ _ _ _ _ _ _ _ [09S02]

a. performance
b. probability
c. risk
d. loss

79. _ _ _ _ _ _ _ _ _ _ machines is a natural and powerful model of machine learning [09S03]

a. Statistical

b. electronic
c. induction
d. preceptor

80. The perception algorithm converges in a _ _ _ _ _ _ _ _ _ _ number of iterations , if the class under consideration are linearly separable [09S04]

a. equal
b. finite
c. infinite
d. lesser

81. **Player A chooses y e Y and player B chooses z e Z . If Player A looses, he _ _ _ _ _ _ _ _ _ _ player B [09S05]**

a. receive amount from
b. pays amount to
c. Does not do any transaction with
d. Does not received

82. P(x/c) is the conditional probability of obtaining feature value _ _ _ _ _ _ _ _ _ _

given that the sample belongs to class [10D01]
a. x
b. c,c
c. x,x
d. x,c
83. The sensory units are the means by which the machine _ _ _ _ _ _ _ _ _ _ stimuli from its _ _ _ _ _ _ _ _ _ _ environment [10D02]
a. receive, internal
b. send ,external
c. receive, external
d. send, internal

84. **In bayes classification loss function may be expressed as L = 1-d where d = 1 $_{ij}$ when [10M01]**
a. i<j
b. i>j
c. i=j
d. i and j are constants
85. The best bayes classifier for normal patterns places a general _____ decision surface between each pair of paten classes [10M02]

a. first - order
b. third - order
c. second-order
d. next - order
86. One players loss is _ _ _ _ _ _ _ _ _ _ _ in magnitude to the other players gain in a zero-sum game [10S01]
a. less
b. greater
c. equal
d. not decided
87. In the fixed _ _ _ _ _ _ _ _ _ _ _ correction algorithm ,correction increment constant greater than [10S02]
a. 1
b. 2
c. 0
d. 4
88. _ _ _ _ _ _ _ _ _ _ _ the algorithm occurs when a wait vector classifies all patterns correctly [10S03]
a. fixed correction
b. absolute correction
c. bayes

d. convergence
89. _ _ _ _ _ _ _ _ _ _ _ algorithm requires that the starting weight vector be differ from zero [10S04]
a. bayes
b. fixed correction
c. absolute correction
d. fractional correction
90. The _ _ _ _ _ _ _ _ _ _ schemes provide a tool for finding the minimum of a function [10S05]
a. minimizes
b. maximizes
c. gradient
d. does not change

91. **The histogram of digital image with gray levels is a discrete function P(r)=n /n.The no of pixels in the image with that gray level is [11D01]** r_k

a. r_k b. n_k
c. n
d. r_n
92. As all gray levels occur toward the middle of the gray scale, the image would appear as [11D02]
a. light gray with high contrast
b. murky gray
c. murky gray with low contrast
d. light gray with low contrast

93. **Histogram processing P(r) gives an estimate of _ _ _ _ _ _ _ _ _ _ of gray level** r_k **[11M01]**
a. probability of occurrence
b. probability of failure
c. probability of coincidence
d. probability of mutual exclusion

94. **A plot of histogram processing P(r)function all values of K provides a _ _ _ _ _ _** $_k$ **_ _ _ _ description of the appearance image [11M02]**
a. normal
b. global
c. local
d. formal
95. The final histogram with significant speed, corresponding to an image with _ _ _ _ _ _ _ _ _ _ contrast [11M03]
a. high
b. low
c. moderate
d. unequal
96. The image enhancement techniques by considering processing methods that are bagged only on the intensity of _ _ _ _ _ _ _ _ _ _ pixels [11S01]
a. single
b. double
c. half
d. Tribute
97. The idea behind contrast stretching is to _ _ _ _ _ _ _ _ _ _ dynamic range of gray levels in image processing [11S02]
a. increase
b. decrease
c. neither increase nor decrease
d. no change

98. The thresholding fusion creates _ _ _ _ _ _ _ _ _ _ _ image [11S03]

a. unary
b. ternary
c. binary
d. n-nary

99. The dynamic range of processed image _ _ _ _ _ _ _ _ _ _ the capability of display device [11S04]
a. far exceeds
b. not exceeds
c. just exceeds
d. no change

100.The histogram transformation function is used to map the gray level of the pixel in the Neighborhood [12D01]
a. cornered
b. centered
c. in between cornered
d. near to centered

101.Histogram transformation function is also called as [12M01]
a. histogram equalization
b. histogram computation
c. histogram quantization
d. histogram non equalization

102.In the local histogram processing, only one new row or column of neighborhood changes during a _ _ _ _ _ _ _ _ _ _ translation of the region [12M02]
a. column to row
b. pixel to row
c. column to pixel
d. pixel to pixel

103.Updating the histogram obtained in _ _ _ _ _ _ _ _ _ _ introduced at each motion step is possible [12M03]
a. present location with old data
b. previous location with old data
c. previous location with new data
d. present location with new data

104.The advantage of histogram equalization over manual contrast manipulation techniques is that the former is [12M04]
a. Partially automatic
b. partially manual
c. fully automatic
d. fully manual

105.The cumulative distribution at r produces an image whose gray levels have _____ density [12S01]
a. uniform
b. no uniform
c. distributed
d. no distributed

106.The histogram techniques are easily adoptable to _____ enhancement [12S02]
a. global
b. normal
c. local
d. anywhere

107.The local histogram processing is advantage over computing the histogram over all pixels in the neighborhood region each time the region moved _____ pixel location [12S03]
a. 1
b. 2
c. 3
d. 4

108.The undesirable checker board effect is produced when reduce the computation is to utilize _____ Regions [12S04]
a. non overlapping
b. overlapping
c. opposite
d. nearest

109.The measure of average brightness and variance is measure of [12S05]
a. contrast
b. intensity
c. image processing
d. local enhancement

110.The histogram specification, the desired image levels could be equalized by the transformation function is [13D01]
a.
b.
c.
d.

111.If an noisy image g(x,y) is formed by using M different noisy images, the g(x,y) is [13D02]
a.
b.
c.
d.

112.The spatial filtering is opposed to _ _ _ _ _ _ _ _ _ _ filtering using the Fourier transform [13M01]
a. time- domain
b. frequency domain
c. complex-domain
d. minimal-domain

113.The objective of image averaging is to _ _ _ _ _ _ _ _ the noise effects by _ _ _ _ _ _ _ _ _ a set of noisy images [13M02]
a. reduce, adding
b. increase, adding
c. reduce, removing
d. increase, removing

114.Low contrast images can result from [13M03]

a. poor illumination, wrong setting of aperture
b. wrong setting of aperture , lack of dynamic range in the imaging sensor
c. wrong setting of aperture, poor illumination
d. poor illumination, wrong setting of aperture, lack of dynamic range in the imaging sensor

115.The histogram equalization method does not lend itself to _ _ _ _ _ _ _ _ _ _ application [13S01]
a. non Local enhancement
b. reverse image enhancement
c. unique enhancement
d. local enhancement

116.The histogram equalization method is capable of generating only an approximation to _ _ _ _ _ _ _ _ _ _ histogram [13S02]
a. uniform
b. no uniform
c. continues
d. discontinues

117.The method of histogram specification function involves _ _ _ _ _ _ _ _ _ _ transformation functions. [13S03]
a. 1
b. 2
c. 3

d. 4

118.Noise image form ed by the _ _ _ _ _ _ _ _ _ _ of noise to an original image [13S04]
a. Removal
b. addition
c. no change
d. depend on image

119.An effective way to compress the dynamic range of pixel values to perform the following intensity transform ation is useful [14D01]
a.
b.
c.
d.

120.The condition , 0 <=T(r) <=1 for 0 <=r<=1 [14D02]
a. guarantees a mapping that is consistent with the allowed range of pixel values
b. preserves the order from black to white in the gray value
c. guarantees a mapping that is inconsistent with the allow ed range of pixel values
d. the order from white to black in the gray value

121.P(r)=probability density function with r levels={-2r+2 0 <=r <=1 0 else where} probability density function of 's' in the 0<=s<=1 range given by [14D03]
a. 1
b. -1
c. 0
d. -2

122.The condition, T(r) is single valued and monotonically increasing in the internal 0<=r<=1 preserves [14M01]
a. guarantees a mapping that is consistent with the allowed range of pixel values
b. the order from black to white in the gray value
c. guarantees a mapping that is inconsistent with the allow ed range of pixel values
d. the order from white to black in the gray value

123.If all gray levels occurs towards the middle of the gray scale, the image would appear [14S01]
a. turkey gray
b. Murky gray
c. David gray
d. chunky gray

124.Advantage of histogram equalization over manual contrast manipulation techniques in that the former is _ _ _ _ _ _ _ _ _ _ [14S02]
a. fully automatic
b. updating easy
c. analyzing easy
d. easy to use

125.Disadvantage of histogram equalization over histogram on specification is [14S03]
a. fully automatic
b. does not lend itself to interactive image enhancement applications
c. flexible
d. lend itself to interactive image enhancement applications

126.Median filters are _ _ _ _ _ _ _ _ _ _ [14S04]
a. linear
b. nonlinear
c. active
d. passive

127.**The image differentiation magnitude to (mag) given by [15D01]**
a.
b.
c.

d.

128.**Lowpass filter transfer function of n order is given by H(u,v)= cutoff frequency locus at a distance of D from [15D02]**
a. $1/1-[D(u,v)/D_0]^{2n}$
b. $1/1+[D(u,v)/D_0]^{2n}$
c. $1/1+[D(u,v)/D_0]^{n}$

d. 1/1-[D(u,v)/D]

129.If noise pattern consists of strong spike like components which filter is used [15M01]
a. median filter
b. low pass spatial filtering
c. neighborhood averaging method
d. high pass spatial filtering
130.If member of gray levels are 16 and with 256 samples true then number of bits required [15M02]
a. 256* 256* 16
b. 256* 128* 16
c. 256* 8* 128
d. 128* 128* 32
131.Low pass spatial filter have [15S01]
a. +ve coefficients
b. -ve coefficients
c. neutral
d. no coefficients
132.Low pass spatial filters also called [15S02]
a. neighborhood averaging method
b. median filter
c. general method
d. butter worth
133.High pass filters are attenuate or eliminate [15S03]
a. high frequency components
b. low frequency components
c. no frequency
d. any frequency components
134.Low pass filters are attenuate or eliminate [15S04]
a. high frequency components
b. low frequency components
c. no frequency
d. any frequency components
135.A classic application for enhancement is in the area of medical imaging called [15S05]
a. bright mode radiography
b. dark mode radiography
c. mask mode radiography
d. light mode radiography
136.The different noisy images are increases the viability of the pixel values of each location (x,y) [15S06]
a. increases
b. increase and then decreases
c. decreases and the increases
d. decreases

15

137.**The DFT is that function f(x) is discredited into a sequence by taking 'N' sample units apart [16D01]**

a. x - x
b. x
c. x+ x
d. x

138.**The DFT function for x=0,1,2, N then the is [16D02]**
a. 1/ N x
b. x1/ x
c. N x
d. x
139.Edges and other abrupt changes in gray levels are associated with [16M01]
a. low frequency components
b. high frequency components
c. medium frequency components

d. ideal frequency components

140.A classic application for enhancement is in the _ _ _ _ _ _ _ _ _ _ of medical imaging called mask mode radiography . [16M02]
a. volume
b. cube
c. area
d. surface area
141.changes in gray levels are associated with high frequency components [16M03]
a. corner
b. Edges and other abrupt
c. center
d. size
142.The histogram equalization method does not lend itself to _ _ _ _ _ _ _ _ _ application [16S01]
a. Local enhancement
b. image enhancement
c. interactive enhancement
d. reverse local enhancement
143.The Discrete Fourier transfer function is a _ _ _ _ _ _ _ _ _ function [16S02]
a. continuous
b. discrete
c. discontinuous
d. loop

144.**The DFT function for x=0,1,2, N then the , , , , , , , , , , , , , , is 1/N x [16S03]**
a.
b. N
c. x
d. x/N
145.The Separability property is obtained by successive applications of _ _ _ _ _ _ _ _ _ _ [16S04]
a. 1-DFT or its inverse

b. 2-DFT or its inverse
c. 3-DFT or its inverse
d. any DFT

146.In the translation property , the visual examination of transform is usually limited to display of its _ _ _ _ _ _ _ _ _ _ [16S05]
a. angle
b. magnitude
c. volume
d. area
147.The average value of the 2-D discrete function is [17D01]
a.

b.
c.
d.
148.The Laplacion of two variable function f(x,y) defined as [17D02]
a.
b.
c.
d.
149.Consider 2-FT relationships that constitute a basic link between the spatial and frequency domains. These relationships called _ _ _ _ _ _ _ _ _ _ and _ _ _ _ _ _ _ _ _ [17M01]
a. correlation, spatial convolution
b. convolution, correlation
c. spatial convolution, spatial correlation
d. spatial correlation, spatial convolution

150.**f (x, y) = 1?N f(x,y) is the average value of the 1 2 _ _ _ _ _ _ _ _ _ _ discrete function is [17M02]**
a. 2-D
b. 3-D
c. 1-D
d. n-D
151.The DFT and its _ _ _ _ _ _ _ _ _ _ are periodic with period N [17S01]
a. equal
b. Inverse
c. proportional
d. not have any relation
152.In the periodicity properties of the FT , Fourier spectrum shows _ _ _ _ _ _ _ _ _ _ periods in interval [0, n-1] [17S02]
a. back-to-back half
b. back-to-back-full
c. back-to-back double
d. back-to-back triple
153.In the periodicity properties of FT , the shifted spectrum showing a _ _ _ _ _ _ _ _ _ _ period in the same interval [17S03]
a. full
b. half
c. double
d. terrible
154.The individual periods of the convolution will overlap, a phenomenon commonly [17S04]
a. wrap around
b. rounding off
c. convection
d. truncate
155.In the equation if correlation if f(x) and g(x) are the same function is usually called and f(x) and g(x) are different function is called [18D01]
a. cross correlation, auto correlation
b. auto correlation, cross correlation
c. auto correlation, common correlation
d. narrow correlation, auto correlation
156.``Whittaker-Shanoy sour lining theorem'' is a complete recovery of band - limited function from samples where spacing satisfies [18M01]
a.
b.
c.
d.
157.Application correlation in Image processing is [18S01]

a. prototype matching, closest match between unknown image and known image
b. prototype matching, no match between unknown image and known image
c. prototype matching, closest match between unknown image and prototype image
d. match between similar image
158.Sampling can represented by _ _ _ _ _ _ _ _ _ _ _ _ an Impulse train with the function of interest [18S02]
a. multiplying
b. differentiating
c. integrating
d. dividing
159.The array formed by Walsh transformation kernel is a _ _ _ _ _ _ _ _ _ _ _ _ matrix having _ _ _ _ _ _ _ _ _ _ _ _ rows and columns [18S03]
a. symmetric, orthogonal
b. asymmetric, orthogonal
c. symmetric, polygonal
d. asymmetric, polygonal
160.The elements of hadmard matrix are derived from the [18S04]
a. kernel values
b. by normalizing the hadmard matrix
c. sequence of that hadmard columns
d. sequence of that hadmard rows
161.The principal objective of sharpening is _ _ _ _ _ _ _ _ _ _ _ _ live defining in an image [18S05]
a. neglect

b. highlight
c. weakening
d. strengthen
162.The method which is one of the basic tools function image processing applications in printing and publishing industry [19D01]
a. sharp marking
b. unsharp marking
c. spatial marking
d. gradient marking
163.The transfer function of BLPE of order n and with cut off frequency locus at difference do from origin is defined by [19D02]

a. H(mu,v)=1/[1+h(D(u,v)/D_0) ^{n}]
b.
c. H(mu,v)=1/[1+h(D(u,v)/D_0) ^{2}]
d.
164.High pass spatial files eliminates the _ _ _ _ _ _ _ _ _ _ _ _ term [19M01]
a. zero-frequency
b. high-boost-frequency
c. average-frequency
d. low frequency
165.Enhancement frequency domain is compute the furies Henry function of image and multiply the result by fitters transfer function and take _ _ _ _ _ _ _ _ _ _ _ _ the produce enhanced image [19M02]
a. Fourier transfer
b. inverse transfer
c. belies transfer
d. laplace
166.For an ideal low pass filter career section, the point of transition between H(u,v)=1 and H(u,v)=0 often called [19M03]
a. saturated frequency
b. cut in frequency
c. cut off frequency
d. unsaturated f requency

167.Redirecting the average value of an image to zero implies that the image must have some _ _ _ _ _ _ _ _ _ _ _ _ levels [19S01]
a. negative gray
b. positive gray
c. zero gray
d. infinite
168.Unsharp marking is the process of a _ _ _ _ _ _ _ _ _ _ _ _ blurred image from original [19S02]
a. adding
b. multiplying
c. subtracting
d. dividing
169.The blessing is achieved in frequency domain by attenuating or specified range of components function transform of given image [19S03]
a. high frequency
b. low frequency
c. bond frequency
d. in equal frequency
170.The flitter transfer function that affect the real and imaginary parts of Fourier transform of image to be smoothed in exactly the same manner. The flitters referred as [19S04]
a. zero-phase shift filters
b. 30-phase shift filters
c. 60-phase shift filters
d. 90-phase shift filters
171.In ideal filters indicates all frequencies out side the circle are _ _ _ _ _ _ _ _ _ _ _ _ _ [19S05]
a. No attenuation
b. complete attenuated
c. partially attenuated
d. varies attenuation
172.The high pass filtering process attenuates the _____ components with out disturbing information in the Fourier transform [20D01]
a. low frequency, high frequency
b. High frequency, low frequency
c. low frequency, low frequency
d. high frequency, high frequency
173.The image sharpening can be achieved in frequency domain by _ _ _ _ _ _ _ _ _ _ _ _ process [20M01]
a. low pass filtering
b. high pass filtering
c. butter worth filtering
d. low pass and high pass
174.Ideal high pass filter is completely opposite to _ _ _ _ _ _ _ _ _ _ _ _ filters [20M02]
a. ideal low pass
b. ideal butter worth
c. ideal band pass
d. any ideal filters
175.In the enhancement in the frequency domain we compute _ _ _ _ _ _ _ _ _ _ _ _ of the image to be enhanced [20M03]
a. integral
b. Fourier transformation
c. differential
d. lap lace transformation
176.The zero phase shift filters are [20S01]
a. radically asymmetric
b. uniformly asymmetric

c. radically symmetric
d. uniformly symmetric

177.In the enhancement in the frequency domain we perform _ _ _ _ _ _ _ _ _ _ _ _ transform to produce the enhanced image [20S02]
a. inverse
b. Fourier
c. laplace
d. differential

178.**The _ _ _ _ _ _ _ _ _ _ _ _ distance between p and q is defined as [20S03]**
a. hexagon
b. general
c. Euclidean
d. hypothetical
179.The final histogram with significant _ _ _ _ _ _ _ _ _ _ _ _ corresponding to an image with high contrast [20S04]
a. speed
b. volume
c. area
d. value
180.The _ _ _ _ _ _ _ _ _ _ _ _ property is obtained by successive applications of 1-DFT or its inverse. [20S05]
a. Separability
b. Normalization
c. unique
d. non separable