

CLASS -XII
SEMESTER -III
SUBJECT: AGRICULTURE (AGRI)
FULL MARKS: 35

Select the correct alternative.

9. Statement 1: The decomposition of organic matter is quicker in cold climate.

Statement 2: The decomposition rate is faster in well aerated soil.

- a) Only statement 1 is correct,
- b) Only statement 2 is correct.
- c) Both the statements are independently correct.

d) Both the statements are correct, and they are interrelated to each other,

10. which one of the following cations has the highest Cation Exchange Capacity (C.E.C)?

- a) Sodium ion
- b) Hydrogen ion
- c) Calcium ion
- d) Magnesium ion.

11. match column A with column B

A	B
1. ESP of saline soil.	a. > 4 ds/m
2. pH of acid soil	b. >15
3. ESP of alkali soil	C <15
4. EC of saline soil	d. < 5.5

- a) 1-b, 2-a, 6-d, 4- c
- b) 1- b, 2- d, 3- b, 4-a
- c) 1-d, 2-b, 3-a, 4- c
- d) 1-a, 2- d, 3- c, 4- b

12. _____ is an example of non-symbiotic N- fixing bacteria,

- a) *Rhizobium* sp.
- b) *Azotobacter* sp.
- c) *Chlostridium* sp.
- d) b and c are true.

13. Answer the question based on the statement TRUE (T) or FALSE (F)-

1. The Calcium Carbonate Equivalent of Calcium carbonate is 100.

2. Sheet is the first step of soil erosion.

3. Ammonium sulphate fertilizer induces acidity to the soil.

4. Cotton is an alkaline soil tolerant crop.

- a) 1-T, 2-F,3-F,4-F
- b) 1-F,2-F,3-F,4-F
- c) 1-T, 2-T,3-F,4-F
- d) 1-T,2-T,3-T,4-T

14. Identify the correct sequence of soil erosion.

- a) Sheet → Rill → Ravine → Gully.
- b) Ravine → Gully → Rill → Sheet
- c) Rill → Gully → Ravine → Sheet
- d) Sheet → Rill → Gully → Ravine

15. Which plant nutrient is called 'Enzyme Activator'?

- a) N
- b) P
- c) K
- d) Ca

16. The number of essential secondary nutrient is _____

a) 6 b) 4 c) 9 d) 3

17. Night Soil is used in making of _____ type of compost.

a) town compost b) rural compost c) FYM d) bone meal

18. Which one of the following is not a concentrated organic manure?

a) Mustard oil cake b) Neem cake c) Groundnut cake d) FYM

19. The calcium content in CAN is _____ %

a) 12.5% b) 25% c) 8% d) 16%

20. Calculate the amount of urea required to supply 92 kg of Nitrogen?

a) 46kg b) 92 kg c) 100 kg d) 200 kg

21. Assertion (A): Indian farmer don't like green manuring.

Reasoning (R) : Green manuring needs assured irrigation facility.

a) Only A true. B) Only B true
c) Both are independently true. d) Both of them are true and R explains A.

22. Match column A and column B

A	B
1. Ammonium sulphate	a) 18% N
2. Ammonium nitrate	b) 20% N
3. CAN	c) 33% N
4. DAP	d) 25% N

a) 1-b, 2-a, 3-d, 4-c b) 1-a, 2-b, 3-c, 4-d

c) 1-d, 2-c, 3-a, 4-d d) 1-b, 2-c, 3-d, 4-a

23. which one of the following is not a correct technique?

a) Lime and ammonium sulphate should not be applied at the same time.
b) Gypsum should be used for the reclamation of acid soil.
c) Epigeic earthworm is ideal for vermicompost cultivation.
d) In a vermicompost pit at least three layers should be maintained.

24. Select the odd one.

a) SSP b) DSP c) DAP d) Rock phosphate.

25. _____ is an example of nitrifying bacteria.

a) *Nitrosomonas* sp. b) *Nitrococcus* sp. c) *Nitrobacter* sp. d) all of them are true.

26. Statement 1 : Denitrification is an essential but harmful process.

Statement 2: Denitrification takes place in aerobic condition.

- a) Only statement 1 is true b) only statement 2 is correct.
- c) both the statements are independently correct.
- d) both of them are correct and statement 1 explains statement 2.

27. The family cow is _____

- a) Suidae b) Equidae c) Bovidae d) Commelidae.

28. India ranks _____ in live stock population.

- a) First b) Second c) Third d) Fourth

29. The word "White Revolution" is related to-

- a) Sheep production. b) Cow production c) Milk production. d) wool production.

30. which one of the followings is not a bacterial disease.

- a) Rinder pest b) Haemorrhagic septicaemia c) Anthrax d) Black Quarter.

31. The ideal pH for seamen preservation is –

- a) 6.4 b) 7.4 c) 5.0 d) 6.8

32. In which months age the chicken start to lay eggs?

- a) 3.5 b) 4.5 c) 5.5 d) 6.5

33. FMD (Food and Mouth) is a _____ type of disease.

- a) physiological b) bacterial c) fungal d) viral

34 The conception rat-e in A.I for cattle is

- a) 35-40 b) 52-55, c) 60-78 d) 90-100

35. The National Dairy Research Institute (NDRI) is located at-

- a) Varanasi, b) Kanpur c) Kolkata d) Karnal.

SAMPLE QUESTIONS-ANTHROPOLOGY

CLASS-XII .SEM- III

Multiple Choice Question [1 mark each]

Select the correct alternative and answer the following questions:-

1x35=35

UNIT-I

1. The stone tools from the Soan valley was discovered first by-

- a) Dr. D.N. Wadia
- b) Dr. Helmut de Terra
- c) T.T. Patterson
- d) None of them

2. The age of Nevasa industry belongs to-

- a) Lower Pleistocene
- b) Upper Pleistocene
- c) Late Pleistocene
- d) Holocene

3. Which of the following sites is located in W.B.?

- a) Bagor
- b) Birbhanpur
- c) Tinevalley
- d) Vimbhetka

4. Choose the correct sequence of tools as they occurred in Prehistoric period

- a) Hand axe—Scraper—Leaf point—Lunate
- b) Scraper—Leaf point—Hand axe—Lunate
- c) Lunate—Hand axe—Leaf point—Scraper
- d) Leaf point—Scraper—Lunate—Hand axe

5. Which of the following site is famous for rock paintings?

- a) Birbhanpur
- b) Bhimbhetka
- c) Burzahom
- d) Sohan

UNIT-II.

6. Migration of groups of people helps in

- a) Isolation
- b) Hybridization
- c) Both a) & b)
- d) None of these

7. Racism advocates-

- a) Absolute Purity of blood
- b) Inequality of race
- c) A race is inherently superior or inferior to others
- d) All of these

8. An ethnic group shares a common-

- a) Nationality
- b) Language
- c) Religion
- d) All of these

9) How many primary races were recognized by E.A. Hooton?

- a) 5
- b) 7
- c) 3
- d) 6

10. According to Prof. Garn, The Hindu is a -

- a) Geographical Race
- b) Local Race
- c) Micro Race
- d) None of them

11. Blumenbach divided the people of the world on the basis of

- a) Human skull
- b) Blood Group
- c) Head hair
- d) Stature

12. A

B

1. The Proto Australoid a) The Kadar, The Irula

2. The Nordics	b) The Oraons, The Chechu
3. The Negrito	c) The Red Kaffirs, The Khattas
4. The Mediterraneanians	d) The Nambudri Brahmins, Bengali Brahmins

- a) 1—a, 2—b, 3—c, 4—d
- b) 1—d, 2—c, 3—a, 4—d
- c) 1—b, 2—c, 3—a, 4---d
- d) 1---c, 2—d, 3---b, 4---a

13. The skin colour of the Mongoloid is-

- a) Melanoderm
- b) Leucoderm
- c) Xanthoderm
- d) None of them

UNIT-III

14. -----is the earliest Anthropological theory about primitive religion.

Select the correct option for the blank

- a) Animatism
- b) Animism
- c) Manaism
- d) Naturalism

15. The theory of Naturalism was postulated by--

- a) Max-Muller
- b) Tylor
- c) Marret
- d) Durkheim

16. Burning of an effigy is--

- a) Homoeopathic magic
- b) Contagious magic
- c) Black magic
- d) None of these

17. A totem may be associated with a/an--

- a) material object
- b) plant

- c) animal
- d) None of them

18. 'Ancestor worship' is done by the tribals because they believe--

- a) They acquire powers of a far-reaching kind
- b) Spirits of the dead ancestors have power to decide their destiny
- c) Unless the spirits are worshipped it continue to exist harass them
- d) None of these

19. 'Marang Buru' of the Santal is a --

- a) Benevolent spirit
- b) Malevolent spirit
- c) Protective spirit
- d) Ancestral spirit

20) The supernatural goddess of the Toda is --

- a) On
- b) Teikirzi
- c) Potsamma
- d) Thakur

21. Which of the following practices is banned now?

- a) Sorcery
- b) Witchcraft
- c) Shamanism
- d) None of these

UNIT-IV.

22. Study of Dermatoglyphics helps in--

- a) Identification of murderers
- b) Identification of criminals
- c) Determination of paternity
- d) Both a) & b)

23. Which of the following are used by the Forensic Anthropologists?

- a) Osteology
- b) Serology
- c) Eugenics
- d) Both a) & b)

24. Which of the following Prehistoric sites has been declared a heritage site by the UNESCO?

- a) Attirampakkam
- b) Birbhanpur
- c) Bhimbhetka

d)None of these

25. Heritage Management is concerned with-

- a) Identification of our heritage
- b) Maintenance of our heritage
- c) Preservation of our heritage
- d)All of these.

26. Which are the threats to our heritage?

- a) Urbanization
- b) Mining activities
- c) Erosion
- d) All of these

27. Development Anthropology focuses on--

- a) Retention of local economy
- b) Protection of the environment
- c) Preservation of cultural diversity
- d) All of these

28. The aim of Development Anthropology?

- a) To record data for future analysis
- b) To improve our economic condition and to increase the equality of basic needs
- c) To provide information for related cultural studies
- d) To ignore the participation of the local community in development

a.A-(F),B(T),C(T),D(F)
b.A(T),B(F),C(F),D(T)
c.A(T),B(T),C(T),D(F)
d.A(F),B(F)C(F),D(T)

29. The main concern of the Nutritional Anthropologist is --

- a) Nutritional value of food
- b) Socio-cultural source of food
- c) To find out the cause of change of food habits of the people
- d) Both a) & c)

30. The normal value of BMI is--

- a) 25.00<30.00
- b) 20.00<25.00
- c)18.00<20.00
- d)16.00<17.00

31. Development Anthropology requires--

- a) A systematic exploration of ethnographic materials
- b) A capacity to work with the different categories of experts
- c) To develop strategies to tackle various socio- economic problems.
- d) All of these.

UNIT-V.

32. Which of the following subjects were dealt by N. K. Bose?

- a) Temple architecture
- b) Human Geography
- c) Urban Sociology
- d) All of them

33. The Bidisa complex at Midnapur was developed by-

- a) Prof. J .K. Bose
- b) Dr, A.K. Danda
- c) Prof. P.K. Bhowmick
- d) Prof. D.P. Mukherjee

34. Dr. A.K. Ghosh is noted for his contribution in--

- a) Palaeoanthropology
- b) Genetics
- c) Nutrition Anthropology
- d) Population Anthropology

35. Outlines of Physical Anthropology was written by-

- a) Dr. R.M. Sarkar
- b) Prof. B.M. Das
- c) L.P. Vidyarthi
- d) Dr. Indrani Basu Roy

Questions : Class : XII : Sem – IV

Short answer type : 2 Marks

Unit –I

Q.1. Why Lodhas are termed as Ex – criminal tribe ?

OR

What is Jhum cultivation ?

Unit –II

Q. 2. What is social organization ?

OR

What is Bow-and-arrow giving ceremony ?

Unit –III

Q.3. Why Chalcolithic is so named ?

OR

What do you mean by Civilization ?

Unit –IV

Q.4. Which period of growth is known as prenatal period ?

OR

What is acclimatization ?

Unit –V

Q.5. Write any two utilities of Anthropological Fieldwork.

OR

What is case study method ?

Broad answer type : 5 Marks

Unit –I

Q.1. Write in brief the mode of subsistence of any Indian tribes known to you who practice domestication for their livelihood.

OR

What do you understand by surplus and reciprocity in mode of subsistence ?

Unit –II

Q. 2. Briefly describe the ways of acquiring mates among the Indian tribal populations.

OR

Write in brief the social organization of any matrilineal tribe known to you.

Unit –III

Q. 3. Discuss in brief the religious belief persisted among the people of Indus Valley Civilization.

OR

Write a brief note on PandurajarDhibi.

Unit- IV

Q.4. Define growth. Mention the factors affecting growth.

2+3

OR

Briefly describe the human adaptation to cold climatic environment.

Unit – V

Q.5. Define ethnographic fieldwork. Mention the development of it in India. 2+3

OR

Briefly describe the participant and non-participant observation methods with merits and demerits.

Applied Artificial Intelligence (APAI)

SEMESTER – III

(Model Question Paper)

1. A YouTube video file is an example of—
 - A. Structured data
 - B. Semi-structured data
 - C. Unstructured data
 - D. Relational data
2. Which type of data is easiest to store, search, and process using traditional database systems?
 - A. Structured data
 - B. Semi-structured data
 - C. Unstructured data
 - D. Multimedia data
3. 1. Natural Language Processing (NLP) mainly deals with _____.
 - A. Teaching machines to understand and process human language
 - B. Designing computer hardware
 - C. Converting videos into text
 - D. Building physical robots
4. Match the following column:

Column A	Column B
i. Siri	a. Autonomous system
ii. Analysis images/videos	b. Speech recognition
iii. Automatic washing machine	c. Weather forecast
iv. Forecast temperature/rainfall	d. Computer vision

- A. i-a, ii-b, iii-c, iv-d
- B. i-b, ii-d, iii-a, iv-c
- C. i-b, ii-a, iii-d, iv-c
- D. i-d, ii-a, iii-c, iv-b

- 5. Robotics mainly focuses on—
- A. Designing mechanical machines capable of performing tasks
- B. Translating human speech
- C. Predicting rainfall
- D. Analyzing medical reports only
- 6. NLP is a branch of _____ that enables computers to understand, interpret, and respond to _____ language.
- A. Robotics, machine
- B. AI, human

- C. Database, programming
- D. ML, binary

7. Match the following column:

Column A (Application)	Column B (Example)
(i) Chatbots	(a) Google Translate
(ii) Autocomplete	(b) Gmail spam detection
(iii) Machine Translation	(c) “How may I help you?” bot
(iv) Email Filtering	(d) Suggests text as you type

- A. i-c, ii-d, iii-a, iv-b
- B. i-c, ii-a, iii-d, iv-b
- C. i-a, ii-d, iii-b, iv-c
- D. i-d, ii-a, iii-c, iv-b

8. Riya types “I am feel” in her smartphone keyboard, and the system suggests “I am feeling good”. Which NLP application is being used here?

- A. Grammar Checker
- B. Autocomplete in Search Engines
- C. Sentiment Analysis
- D. Machine Translation

9. Voice assistants like Siri, Alexa, Google Assistant use a combination of _____ recognition and NLP to process user commands.

- A. Speech
- B. Face
- C. Pattern
- D. Image

10. Match the following column:

Column A (Application)	Column B (Role of AI/ML)
(i) Sentiment Analysis	(a) Detect hate speech, fake news
(ii) Fake news detection	(b) Classify text as positive/negative
(iii) Chatbots	(c) Respond automatically to queries

- A. i-c, ii-b, iii-a
- B. i-c, ii-a, iii-b
- C. i-a, ii-c, iii-b
- D. i-b, ii-a, iii-c

11. A company wants to analyze customer reviews of its product to know whether people are happy or angry. Which NLP application should they use?

- A. Grammar checker
- B. Sentiment analysis
- C. Autocomplete
- D. Machine Translation

12. In NLP, the Bag-of-Words model, TF-IDF, and n-gram features are used for _____ extraction from text before applying ML models.

- A. Data storage
- B. Feature
- C. Video
- D. Audio

13. Gmail automatically sends emails containing “Win a lottery” into the spam folder. Which NLP application is at work?

- A. Autocomplete
- B. Machine Translation
- C. Email Classification and Filtering
- D. Grammar Checker

14. Match the following column:

Column A (ML Model)	Column B (Use in NLP)
(i) K-Nearest Neighbors	(a) Splits text into decision rules
(ii) Decision Tree	(b) Finds nearest words/contexts
(iii) Artificial Neural Net	(c) Learns deep text patterns

- A. i-c, ii-b, iii-a
- B. i-c, ii-a, iii-b
- C. i-a, ii-c, iii-b
- D. i-b, ii-a, iii-c

15. The pipeline of sentiment analysis is: Text → Preprocessing → _____ Extraction → _____ Model → Sentiment Output.

- A. Data, Graphical
- B. Feature, ML
- C. Voice, Database
- D. Symbolic, Hardware

16. The Python class used in Scikit-learn to create an Artificial Neural Network is _____.

- A. MLPClassifier
- B. RandomForestClassifier
- C. KMeans
- D. SVM

**17. Assertion: .mp3 files are larger in size and used in professional audio systems.
Reason: .mp3 files are uncompressed and of high quality.**

- A. Both A and R are true, and R is the correct explanation
- B. Both A and R are true, but R is not the correct explanation
- C. A is false, R is true
- D. Both A and R are false

18. Which of the following is not a basic speech feature?

- A. Frequency
- B. Amplitude
- C. Font Style
- D. Zero Crossing Rate

19. The number of times a speech signal crosses the zero value in a given time is known as _____.

- A. Energy
- B. Frequency
- C. Zero Crossing Rate
- D. Pitch

20. Which Python library is commonly used for speech feature extraction?

- A. Matplotlib
- B. NumPy
- C. Librosa
- D. OpenCV

21. Which of the following correctly describes the process of speech recognition using AI tools like Python?

- A. Recording speech → Converting it directly to text using a keyboard
- B. Recording speech → Extracting features like MFCC → Training ANN model using MLPClassifier → Predicting spoken words
- C. Writing text → Converting it into audio using ANN
- D. Scanning text documents using a camera → Processing with speech recognition

22. A voice assistant like Alexa understands commands such as "Play music" or "Turn off the lights." Which components or technologies are involved in making this work?

- A. Only text processing and camera input
- B. Image recognition and handwriting analysis
- C. Audio input, feature extraction (MFCC, pitch), speech recognition using AI/ML models
- D. Just recording the audio and storing it as .mp3

23. What is the main goal of Computer Vision?

- A. To understand and generate natural language
- B. To recognize and process speech signals
- C. To enable computers to interpret and understand images and videos
- D. To improve internet speed using AI

24. Which of the following is a real-world application of computer vision?

- A. Text-to-speech conversion
- B. Language translation
- C. Face detection in smartphones
- D. Audio noise reduction

25. The RGB color model represents images using combinations of _____.

- A. Red, Green, Yellow
- B. Red, Green, Blue
- C. Red, Grey, Blue
- D. Red, Gold, Black

26. Match the following formats with their correct type:

1. .jpeg, .bmp, .tiff
2. .mp4, .avi

- A. 1 – Video formats, 2 – Image formats
- B. 1 – Image formats, 2 – Video formats
- C. Both are image formats
- D. Both are video formats

27. Case: A model is trained to recognize **dogs, cats, and pandas** from images.

What kind of machine learning problem is being solved here?

- A. Text classification
- B. Image classification with three classes
- C. Audio recognition
- D. Data clustering

28. Assertion: Sobel and Prewitt kernels are used to detect edges in an image.

Reason: They highlight sharp changes in pixel intensity.

- A. Both A and R are true, and R is the correct explanation
- B. Both A and R are true, but R is not the correct explanation
- C. A is true, R is false
- D. Both A and R are false

29. Which of the following is the correct sequence of steps to classify images using ML ?

- A. Data collection → Evaluation → Train the model → Test split
- B. Train the model → Collect data → Evaluate
- C. Data collection → Data representation → Split data → Train classifier → Evaluate
- D. Split the data → Train classifier → Data collection → Evaluation

30. A student is working on a computer vision project to classify images of dogs, cats, and pandas. She collects the images in .jpeg format, converts them to

grayscale, extracts mean pixel values and edge features using Sobel kernels, then trains a k-NN model using Scikit-learn.

Which of the following steps has she correctly followed for this task?

- A. Used text features instead of image features
- B. Skipped training and directly evaluated the model
- C. Used proper image formats, feature extraction, and a classification algorithm
- D. Used .mp4 and .avi files for image classification

31. What is the main characteristic of time series data?

- A. Data collected from images
- B. Data that has no order
- C. Data collected over time in regular intervals
- D. Randomly arranged numerical data

32. Stock prices recorded daily for a company are an example of:

- A. Categorical data
- B. Time series data
- C. Spatial data
- D. Unstructured text data

33. The ARIMA model is mainly used for:

- A. Image classification
- B. Object detection
- C. Time series forecasting
- D. Clustering customer data

34. Which of the following is a common step when using linear regression for time series prediction?

- A. Training the model using image features
- B. Predicting future values using time and past data points
- C. Clustering the output labels
- D. Sorting the features alphabetically

35. In time series analysis, data is usually represented as:

- A. Images arranged in folders
- B. Tables with timestamps and corresponding values
- C. Text documents
- D. Random videos

ARTI

SEM -3
MOCK Test

1. Foundation of statistics in machine learning -5
2. Introduction to machine learning 15
3. Supervised Learning -15

Answer the following MCQ questions

1x35=35

1. Consider two points $A = (-2, 5)$ and $B = (4, -1)$ in 2D space. What is the Euclidean distance between A and B?
A) 6 B) $\sqrt{72}$ C) $\sqrt{52}$ D) 10 [B) $\sqrt{72}$]
2. Two vectors are given: $A = [1, -2, 3]$ and $B = [4, 0, -1]$. What is their dot product?
A) 1 B) -2 C) -1 D) 4 [A) 1]
3. Observed frequency = [25, 35, 40], Expected frequency = [30, 30, 40]. What is the chi-square value?
A) 1.67 B) 2.50 C) 3.33 D) 4.00
4. Given two datasets:
 $X = [1, 2, 3, 4, 5]$
 $Y = [2, 1, 0, -1, -2]$
What is the Pearson correlation coefficient (r)?
A) +1 B) -1 C) 0 D) 0.5 [B -1]
5. A random variable X takes values {1, 2, 3} with probabilities {0.2, 0.5, 0.3}. What is $E[X]$, the expected value?
A) 2.0 B) 2.1 C) 2.2 D) 2.3 [Ans: 2.1]

6. Match the concepts with their formula/result:

Column A	Column B
1. Euclidean Distance	A. $\sum(x_i \times y_i)$
2. Dot Product	B. $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$
3. Chi-Square Test	C. $\sum (O_i - E_i)^2 / E_i$
4. Pearson Correlation	D. $\sum(x_i - \bar{x})(y_i - \bar{y}) / \sqrt{(\sum(x_i - \bar{x})^2 \sum(y_i - \bar{y})^2)}$

Options:

- A) 1-B, 2-A, 3-C, 4-D
- B) 1-A, 2-B, 3-D, 4-C
- C) 1-C, 2-D, 3-B, 4-A
- D) 1-D, 2-C, 3-A, 4-B

Answer: A) 1-B, 2-A, 3-C, 4-D

7. Which of the following is an example of overfitting in machine learning?

- A) The model performs poorly on training and test data.
- B) The model performs well on training data but poorly on test data.
- C) The model performs poorly on both training and unseen data.
- D) The model performs well on test data but poorly on training data.

Answer: B) The model performs well on training data but poorly on test data

8. In linear regression, which assumption is required?

- A) Features must always be categorical
- B) The relationship between input and output is linear
- C) Features are always independent of each other
- D) The dataset must be balanced

Answer: B) The relationship between input and output is linear

9. You train a model using gradient descent with a very large learning rate. What is most likely to happen?

- A) The algorithm converges faster and more accurately
- B) The algorithm oscillates or diverges instead of converging
- C) The algorithm becomes stuck in a local minimum
- D) The algorithm ignores the loss function

Answer: B) The algorithm oscillates or diverges instead of converging

10. Which of the following is an example of a high-bias, low-variance model?

- A) Deep Neural Network with millions of parameters
- B) Decision Tree with very large depth
- C) Linear Regression with few features
- D) Random Forest with 100 trees

Answer: C) Linear Regression with few features

11. If you double every feature value in a dataset, what happens to the cosine similarity between vectors?

- A) It doubles
- B) It becomes half
- C) It remains the same
- D) It becomes zero

Answer: C) It remains the same

12. In logistic regression, what does the output of the hypothesis function represent?

- A) A predicted class label
- B) A probability value between 0 and 1
- C) The distance from the decision boundary
- D) A linear combination of features without transformation

Answer: B) A probability value between 0 and 1

13. Which of the following situations is an example of class imbalance problem?

- A) Predicting if an email is spam when 95% of emails are non-spam
- B) Predicting student marks when data is between 0 and 100
- C) Predicting house prices with values between ₹10 lakh and ₹1 crore
- D) Predicting daily stock prices with 2000 data points

Answer: A) Predicting if an email is spam when 95% of emails are non-spam

14. Which regularization technique adds a penalty proportional to the absolute value of coefficients?

A) Ridge Regression (L2) B) Lasso Regression (L1) C) Elastic Net D) Dropout

Answer: B) Lasso Regression (L1)

15. You have two features: "height (cm)" and "weight (kg)". Which scaling method is most appropriate before applying k-NN?

A) No scaling needed B) Min-Max scaling C) One-Hot Encoding D) Adding a bias column

Answer: B) Min-Max scaling

16. You have a dataset with 2 features and a bias. After applying the Normal Equation, you get: What is the predicted value y for $x_1=3, x_2=4$?

A) 31 B) 32 C) 33 D) 34 Ans: C) 33 15.

17. Given a linear regression model: Hypothesis: $h(x)=\theta_0+\theta_1x$ Initial values: $\theta_0=0, \theta_1=0$ Data: ($x=1, y=2$) Learning rate $\alpha=0.1$ Using one step of gradient descent, what will be the updated value of θ_1 ?

A) 0.2 B) 0.4 C) -0.2 D) 0.1 Answer: A) 0.2

18. Suppose the hypothesis is $h(x) = \theta_0 + \theta_1x$ with $\theta_0=1, \theta_1=2$. For input $x=3, y=10$, what is the squared error?

A) 1 B) 4 C) 9 D) 16

Answer: B) 4

19. You apply z-score normalization to feature value $x=70$, with mean $\mu=50$ and standard deviation $\sigma=10$. What is the normalized value?

A) 1.5 B) 2.0 C) -2.0 D) 2.5

Answer: B) 2.0

20. Given dataset $X = [1, 2, 3]$, $Y = [2, 4, 8]$. Compute the correlation coefficient (r).

A) 0.866 B) 0.9 C) 0.95 D) 1.0

Answer: A) 0.866

21. In gradient descent, you have $\theta_0=0, \theta_1=0, \alpha=0.1$, and a single training point ($x=2, y=4$). After one update step, what is the new θ_1 ?

A) 0.2 B) 0.4 C) 0.8 D) 1.6

Answer: D) 1.6

Confusion Matrix

	Predicted Positive	Predicted Negative
Actual Positive	50 (TP)	10 (FN)
Actual Negative	5 (FP)	35 (TN)

22. What is the recall for the model?

- A) $50 / (50 + 10) = 83.3\%$
- B) $35 / (35 + 5) = 87.5\%$
- C) $50 / (50 + 5) = 90.9\%$
- D) $10 / (10 + 35) = 22.2\%$

Answer: A)

23. What is the precision?

- A) $50 / (50 + 10) = 83.3\%$
- B) $50 / (50 + 5) = 90.9\%$
- C) $50 / (50 + 35) = 58.8\%$
- D) $35 / (35 + 10) = 77.8\%$

Answer: B)

24. Calculate the F1-score using precision = 0.91 and recall = 0.83

- A) 0.865
- B) 0.84
- C) 0.78
- D) 0.89

Answer: A)

25. What is the accuracy of the model?

- A) 85%
- B) 88%
- C) 90%
- D) 80%

Answer: A)

26. Why is K-Fold Cross Validation used?

- A) To reduce overfitting
- B) To reduce dimensionality
- C) To estimate model performance reliably
- D) To improve runtime

Answer: C)

27. A regression model predicts house prices. For a given house, the actual price is \$200,000, and the predicted price is \$180,000. What is the squared error for this prediction?

- A) 20,000
- B) 400,000,000
- C) 40,000
- D) 200,000

Answer: B) 400,000,000

28. You apply k-NN with k=1. If the training dataset has noisy labels, what problem are you most likely to face?

- A) High bias
- B) High variance
- C) Underfitting
- D) Linear separability

Answer: B) High variance

29. A dataset has 90 positive samples and 10 negative samples. A classifier predicts all samples as positive. What is the accuracy?

- A) 0.9
- B) 1.0
- C) 0.1
- D) 0.5

Answer: A) 0.9

30. In a decision tree, which metric is commonly used to measure the quality of a split?

- A) Euclidean distance
- B) Gini index or Information Gain
- C) Mean squared error
- D) Log-likelihood

Answer: B) Gini index or Information Gain

31. You train a linear regression model on a dataset where the relationship is quadratic (nonlinear). What problem are you most likely to face?

- A) Overfitting
- B) Underfitting
- C) Data leakage
- D) High variance

Answer: B) Underfitting

Q32.

Assertion (A): In supervised learning, the model is trained using both input features and their corresponding labeled outputs.

Reason (R): Because supervised learning algorithms require ground-truth labels to evaluate prediction errors and update parameters.

Options:

- A) Both A and R are true, and R is the correct explanation of A
- B) Both A and R are true, but R is not the correct explanation of A
- C) A is true, but R is false
- D) A is false, but R is true

Answer: A) Both A and R are true, and R is the correct explanation of A

33. Which supervised learning algorithm is most suitable when features and decision boundaries are highly nonlinear?

- A) Linear regression
- B) k-Nearest Neighbors
- C) Logistic regression
- D) Naive Bayes

Answer: B) k-Nearest Neighbors

34. You have a training dataset with 1000 samples and test accuracy of 95%. If training accuracy is 99%, what problem might this indicate?

- A) Underfitting
- B) Overfitting
- C) Data imbalance
- D) Low variance

Answer: B) Overfitting

35. Match the Learning Task with the Example

Column A (Task)	Column B (Example)
1. Classification	a. Spam detection
2. Regression	b. Predicting house prices
3. Clustering	c. Grouping customers
4. Reinforcement Learning	d. Chess playing AI

Options:

- A) 1-b, 2-c, 3-a, 4-d
- B) 1-a, 2-b, 3-c, 4-d
- C) 1-c, 2-a, 3-b, 4-d
- D) 1-d, 2-a, 3-b, 4-c

Answer: B

৬. গ্রামের জমিদারের কোন ছেলের জন্মতিথিতে পূজা ছিল?

(ক) বড়

(খ) মেজো

(গ) সেজো

(ঘ) ছোটো

৭. ‘পারাবারে’ কথার অর্থ কী

(ক) নদী

(খ) পুঁক্ষরিণী

(গ) থাল

(ঘ) সাগর

৮. বাঙালির খুনে লাল হল যেথা ক্লাইভের খঙ্গর!

-ক্লাইভ কে ছিলেন?

(ক) গভর্নর জেনারেল

(খ) ফরাসী সেনাপতি

(গ) ভাইসরয়

(ঘ) ইস্ট ইন্ডিয়া কোম্পানির সেনাপতি

৯. কান্দারি! বলো ডুবিছে মানুষ, সন্তান মোর মা-রে!

-মানুষ ডুবিছে কেন?

(ক) লোভের কারণে

(খ) পরাধীনতার কারণে

(গ) সাম্প্রদায়িক হানাহানির কারণে

(ঘ) অঞ্চলিক কারণে

১০. পন্ডিত অলোপিদিন কে ছিলেন?

(ক) পন্ডিত ব্যক্তি

(খ) জমিদার

(গ) সরকারী অফিসার

(ঘ) নায়েব

১১. ‘পৃথিবী আমার কবিতা’ -কার লেখা?

(ক) হীরেন ভট্টাচার্য

(খ) কমলেশ্বর চলিহা

(গ) বাবানাথ হাজারিকা

(ঘ) দেবকান্ত বড়ুয়া

১২. আধঘন্টা না যেতেই ঘঁৎ ঘঁৎ করে নাক ডাকতে আরঞ্জ করেছে। -কে?

(ক) জান্মুবান

(খ) বিভীষণ

(গ) সুগ্রীব

(ঘ) রাম

১৩. ‘শুন সর্বজনে আজিকে এক্ষণে বীর বিভীষণে কর সেনাপতি’ -কার উকি?

(ক) হনুমান

(খ) সুগীব

(গ) লক্ষণ

(ঘ) জামুবান

১৪. ‘লক্ষণের শক্তিশেল’ নাটকটিতে কৈলেস ডাঙ্গার বলতে বোঝানো হয়েছে-

(ক) কৈলেস সমুদ্রকে

(খ) কৈলেশ বৃক্ষকে

(গ) কৈলেস হিমবাহকে

(ঘ) কৈলেশ পাহাড়কে

১৫. পার্শ্বিক ধ্বনি হল-

(ক) ড়

(খ) ম্

(গ) র়

(ঘ) ল্

১৬. বাংলায় মেটলিক স্বরধ্বনি ক-টি?

(ক) ৬ টি

(খ) ৭ টি

(গ) ৮ টি

(ঘ) ১১ টি

১৭. পাশাপাশি উচ্চারিত দুটি ব্যঞ্জনধ্বনির সমাবেশকে কি বলে?

(ক) যুক্ত ধ্বনি

(খ) গুচ্ছ ধ্বনি

(গ) অবিভাজ্য ধ্বনি

(ঘ) বিভাজ্য ধ্বনি

১৮. ‘মৃগ’ শব্দের আদি অর্থ ‘বন্য জন্তু’ কিন্তু পরিবর্তিত অর্থ ‘হরিণ’ -এটি শব্দার্থ পরিবর্তনের যে ধারার অন্তর্গত-

(ক) শব্দার্থের প্রসার

(খ) শব্দার্থের সংকোচন

(গ) শব্দার্থের ক্লিপার

(ঘ) কোনটিই নয়

১৯. সংস্কৃত ভাষায় থিসরাসের প্রথম উদাহরণ কী?

(ক) অমরকোষ

(খ) সদুক্তিকর্ণামৃত

(গ) প্রেমভক্তি তরঙ্গিনী

(ঘ) শ্রীকৃষ্ণবিজয়

২০. শব্দার্থের প্রথম ভাগটির নাম-

(ক) নির্দশন

(খ) খণ্ডিত অর্থ

(গ) সাধারণ অর্থ

(ঘ) ব্যঞ্জনা অর্থ

২১. কোন ধ্বনিটি নাসিক্য ধ্বনি নয়?

(ক) ম্

(খ) ন্

(গ) ঙ্

(ঘ) গ্

২২. বাংলায় দুটি ব্যঙ্গধ্বনির সমাবেশে তৈরী গুচ্ছধ্বনির সংখ্যা

(ক) ৪০০

(খ) ৩০০

(গ) ২০০

(ঘ) ১০০

২৩. সময়ের সঙ্গে সঙ্গে পূর্বতন অর্থের সঙ্গে নতুন অর্থ যুক্ত নয় -

(ক) শব্দার্থের প্রসারে

(খ) শব্দার্থের সংকোচে

(গ) শব্দার্থের উৎকর্ষে

(ঘ) শব্দার্থের রূপান্বয়ে

২৪. ‘চারণকবি’ নামে যিনি খ্যাত-

(ক) জগন্নায় মিত্র

(খ) অখিলবঙ্গ ঘোষ

(গ) মুকুন্দ দাস

(ঘ) অতুলপ্রসাদ সেন

২৫. ‘গুপি গাইন বাঘা বাইন ‘ ছবির পরিচালক কে?

(ক) তপন সিংহ

(খ) তরুণ মজুমদার

(গ) সত্যজিৎ রায়

(ঘ) ঋষিক ঘটক

শূন্যস্থান পূরণের জন্য সঠিক বিকল্পটি বেছে নাওঃ

২৬. বছর দুয়ের মধ্যে সে বার পাঁচেক ইহাকে বন্ধক রাখিয়া _____ করিয়া টালা দিয়াছে।

(ক) একটি

(খ) দুটি

(গ) তিনটি

(ঘ) চারটি

২৭. অসহায় _____ মরিছে ডুবিয়া জানে না সন্তুষ্ট,

(ক) মানুষ

(খ) জাতি

(গ) দেশ

(ঘ) মাঝি

২৮. নদ-নদী-পর্বত চিত্রিত বিপুল মহাদেশের আমি _____,

(ক) কবি

(খ) লেখক

(গ) শিল্পী

(ঘ) রাজা

২৯. উকিলরা রায় শুনে _____ হল,

(ক) নিরাশ

(খ) খুশী

(গ) উচ্ছল

(ঘ) বিষন্ন

৩০. বিভীষণ হনুমানকে বকশিশ স্বরূপ দিতে বলেছিল _____

(ক) চারটি বাতাসা

(খ) চারটি সন্দেশ

(গ) চারটি কলা

(ঘ) চারটি আম

৩১. ১৯৫৬ খ্রিষ্টাব্দে এডমন্ড হিলারি ও তেনজিং নোরগে সর্বপ্রথম _____ আরোহণ করেন।

(ক) এভারেস্ট

(খ) গডউইন অস্টিন

(গ) কাঞ্চনজঙ্গা

(ঘ) সান্দাকফু

সত্য মিথ্যা নির্ণয় কর-

৩২. (i) ফলীন্দ্রকৃষ্ণ ওপ্প অশুবাবুর আখড়ায় কুস্তি লড়েন।

(ii) মোহনবাগান ক্লাব গঠিত হয় ১৮৬৯ সালে।

(iii) বাঙালি মহিলা সাঁতারুদের মধ্যে অন্যতম বুলা চৌধুরী।

(iv) টেনিস খেলার সূত্রপাত হয়েছিল ক্রান্সে।

(ক) (i)-সত্য, (ii)-মিথ্যা (iii) -সত্য, (iv) -সত্য

(খ) (i)-মিথ্যা (ii)-সত্য, (iii)-সত্য, (iv) -মিথ্যা

(গ) (i)-সত্য, (ii)-সত্য, (iii)-সত্য, (iv) -মিথ্যা

(ঘ) (i)-সত্য, (ii)-মিথ্যা (iii)-সত্য, (iv) -মিথ্যা

৩৩. (i) তিমির রাত্রি, মাতৃমন্ত্রী যাত্রীরা সাবধান!

(ii) কান্ডারি! আজ দেখিব তোমার মাত্রমুক্তিপণ!

(iii) লঙ্ঘিত হবে রাত্রি নিশীথে, কান্ডারি হঁশিয়ার!

(iv) ওই গঙ্গায় ডুবিয়াছে হায়, ভারতের দিবাকর!

(ক) (i)-সত্য, (ii)-সত্য, (iii)-মিথ্যা, (iv)-মিথ্যা

(খ) (i)-সত্য, (ii)-মিথ্যা, (iii)-সত্য, (iv)-মিথ্যা

(গ) (i)-মিথ্যা, (ii)-সত্য, (iii)-সত্য, (iv)-সত্য

(ঘ) (i)-মিথ্যা, (ii)-সত্য, (iii)-মিথ্যা, (iv)-মিথ্যা

৩৪. (i) স্বরাধুনির অপর নাম অবিভাজ্য ধ্বনি

(ii) ধ্বনিবিজ্ঞান বাগ্ধুনির উচ্চারণগত উৎপত্তিগত ও ধ্বনিতরঙ্গগত বিশ্লেষণ করে।

(iii) ক থেকে ম্ পর্যন্ত পঁচিশটি হল স্পর্শধূনি

(iv) ধ্বনিতঙ্গের দুটি গুরুত্বপূর্ণ ধারণা হল ধ্বনিচ্ছিহ্ন ও সহধূনি

(ক) (i)-সত্য, (ii)-মিথ্যা (iii)-সত্য, (iv)-মিথ্যা

(খ) (i)-মিথ্যা, (ii)-সত্য, (iii)-সত্য, (iv)-মিথ্যা

(গ) (i)-মিথ্যা, (ii)-সত্য, (iii)-মিথ্যা, (iv)-সত্য

(ঘ) (i)-সত্য, (ii)-সত্য, (iii)-সত্য, (iv)-মিথ্যা

ক্রম অনুযায়ী বাক্যের পুনর্বিন্যাস করো-

৩৫. (i) আমিনা কাঁদিয়া উঠিয়া বলিল, কি করলে বাবা, আমাদের মহেশ যে মরে গেল!

(ii) গফুর কহিল, ফুলবেড়ের চটকলে কাজ করতে।

(iii) ঠাকুরের হাতে ফলমূল ও ভিজা চালের পুঁটুলি ছিল, সেইটা দেখাইয়া কহিল গন্ধ পেয়েছে এক মুর্ঠো খেতে চায়-

(iv) পাঁচ-সাত দিন পরে একদিন পীড়িত গফুর চিকিৎস মুখে দাওয়ায় বসিয়াছিল, তাহার মহেশ জল হইতে এখন পর্যন্ত ঘরে ফিরে নাই।

(ক) (iii), (iv), (i), (ii) (খ) (iv), (i), (ii), (iii)

(গ) (iii), (i), (iv), (ii) (ষ) (ii), (iii), (iv), (i)

৩৬. (i) সুগ্রীব-ব্যাটা, শখের প্রাণ গড়ের মাঠ।

(ii) হনুমান-আঃ হেমিওপ্যাথি লাগাও না।

(iii) জাঞ্চুবান-এই কাগজে যা প্রেসক্রিপশান লিখে দিচ্ছি এই ওষুধগুলো চট করে নিয়ে আসতে হবে।

(iv) হনুমান-আবার এত রাত্তিরে কোথায় যাব? সাপে কাটবে না বাঘে ধরবে।

(ক) (iv), (iii), (ii), (i) (খ) (iii), (iv), (i), (ii)

(গ) (iii), (iv), (ii), (i) (ষ) (i), (iii), (iv), (ii)

ষষ্ঠি মিলিয়ে সঠিক বিকল্পটি নির্বাচন করো

৩৭. **ক-ষষ্ঠি**

খ-ষষ্ঠি

(a) দিবাকর (i) অঙ্ককার

(b) তিমির (ii) পর্বত

(c) গিরি (iii) ঝড়

(d) তুফান (iv) সূর্য

(ক) a-iv, b-i, c-ii, d-iii (খ) a-ii, b-iv, c-i, d-iii

(গ) a-ii, b-i, c-iv, d-iii (ষ) a-iv, b-iii, c-ii, d-i

৩৮. **ক-ষষ্ঠি**

খ-ষষ্ঠি

(a) টেঁশা (i) রঘুনাথ রায়

(b) খেয়াল (ii) রামশঙ্কর ভট্টাচার্য

(c) ঝুঁঝি (iii) নিধুবাবু

(d) ঝুঁপদ (iv) ওয়াজেদ আলি শাহ

(ক) a-ii, b-i, c-iv, d-iii (খ) a-iii, b-i, c-iv, d-ii

(গ) a-i, b-ii, c-iii, d-iv

(ঘ) a-iii, b-iv, c-i, d-ii

৩৯. বিবৃতি (Assertion) ও কারণ (Reason) এর মধ্যে সঠিক সম্পর্ক নিরূপণ করো-

বিবৃতি (A) - পদ্ধিত আলোপিদিন স্তুতি হয়ে গেলেন, গাড়োয়ানদের তেওরে সাড়া পড়ে গেল।

কারণ (R) - বংশীধর উদ্ধৃত স্বরে বলল - যে সব নেমকহারামদের পয়সা দিয়ে কেনা যায়, আমি তাদের দলে নই। আপনাকে গ্রেপ্তার করা হল,

(ক) A ভুল, R ঠিক

(খ) A ঠিক, R ভুল

(গ) A ও R উভয়ই ঠিক এবং R, A-এর সঠিক কারণ

(ঘ) A ও R উভয়ই ঠিক কিন্তু R, A-এর যথার্থ কারণ নয়

বিষয়ভিত্তিক প্রশ্নটির সঠিক বিকল্পটি নির্বাচন করো -

৪০. গফুর দ্বিতীয়বার আঘ্যবিস্মৃত হইল, সেও একটা দুর্বাক্য উচ্চারণ করিয়া কহিল, মহারাজীর রাজস্বে কেউ কারোর গোলাম নয়, খাজনা দিয়ে বাস করি, আমি যাবো না,

-গফুর কোথায় বাস করতো?

(ক) শিবপুর

(খ) কাশীপুর

(গ) রূপপুর

(ঘ) নূরপুর



This document was created with the Win2PDF "Print to PDF" printer available at

<https://www.win2pdf.com>

This version of Win2PDF 10 is for evaluation and non-commercial use only.

Visit <https://www.win2pdf.com/trial/> for a 30 day trial license.

This page will not be added after purchasing Win2PDF.

<https://www.win2pdf.com/purchase/>

1) ମାନବ ଜୀବନ ରାଜ୍ୟ କାହାକୁ ନରପତି ବୋଲି କୁହାଯାଇଛି?
 a) ଜୀବନକୁ b) ମନକୁ c) ମାନବକୁ d) ରାଜ୍ୟକୁ

2) 'ଧୂତ' ଶରର ଅର୍ଥ କ'ଣ?
 a) ଧୌର୍ଯ୍ୟ b) ଧ୍ୟାନ c) ଶମା d) ସହିଷ୍ଣୁତା

3) ସେ ରାଜ୍ୟରେ ମହୀ କିଏ?
 a) ଅର୍ଥଦେବ b) ଧର୍ମଦେବ c) ବିଶ୍ୱଦେବ ଯ) ନ୍ୟାୟଦେବ

4) ରାଜପରିଜନ ଭାବେ କାହାକୁ କୁହାଯାଇଛି?
 a) ପରଜା b) ସଭାସଦ c) ପଞ୍ଚ ଜ୍ଞାନେନ୍ଦ୍ରୟ d) ମହୀ

5) 'ଜ୍ଞାନେନ୍ଦ୍ରୟ' ପଦଟିର ସଠିକ ସର୍ବିରୂପ ବାହ୍ୟ?
 a) ଜ୍ଞାନେ+ନ୍ଦ୍ରୟ b) ଜ୍ଞାନ+ନ୍ଦ୍ରୟ c) ଜ୍ଞାନ+ଜନ୍ମୟ d) ଜ୍ଞା+ନ୍ଦ୍ରୟ

(b)

(a)

(d)

(c)

(c)

**3rd SEMESTER - 202
New Syllabus
Odia
Class - XII**

Time : 1 hr 30 Mins

F.M. : 40

I) ପ୍ରବନ୍ଧ ବିଭାଗ :- **1x7=7**

1) ଆମ ଦେଶର ଲୋକେ ଯାହାକୁ ମାନ୍ୟାତା ଅମଳ କହନ୍ତି ବିଲାତ ଲୋକେ ତାକୁ କ'ଣ କହନ୍ତି?
 a) ଆଫ୍ରିକା ଖାର b) ପ୍ରି-ଇଆର c) ଫିରର-ଖାର d) ପୋଙ୍କ ଖାର (b)

2) ଆମ ବିଦ୍ୟାବୁଣ୍ଡ ଆଉ ମନ୍ତ୍ରିଷ୍ଠ ଚାଳନାକୁ କେଉଁ ନଦୀର ବଢ଼ିପାଣି ସହିତ ତୁଳନା କରିଛନ୍ତି?
 a) ବର୍ଷାଦିନିଆ ଦୟାନଦୀ b) ବର୍ଷାଦିନିଆ କୁଶଭଦ୍ରାନଦୀ
 c) ବର୍ଷାଦିନିଆ ଗଙ୍ଗାନଦୀ d) ବର୍ଷାଦିନିଆ ମହାନଦୀ (d)

3) ପୃଥିବୀକୁ ଶ୍ୟାମଳ ନ ଦେଖିଲେ ମୁଁ କଣ ହୋଇପାରିବିନି?
 a) ବିତ୍ତିତ b) ଦୁଃଖିତ c) ଆନନ୍ଦିତ d) ବ୍ୟଥିତ (c)

4) ନିଜ ଦେଶ ବା ଜୀବି ପ୍ରତି ଅତ୍ୟନ୍ତ ମମତାଯୁକ୍ତ ମତବାଦ କ'ଣ?
 a) ଜାତୀୟତାବାଦ b) ବାନ୍ଧବବାଦ c) ପ୍ରଭାବବାଦ d) କେଉଁଟି ନୁହେଁ (a)

5) ସତ୍ୟ, ସଂସମ ଓ ସାଧୁତା କାହାର ପ୍ରକଳ୍ପ ଲକ୍ଷଣ?
 a) ସାହିତ୍ୟ b) ବିଜ୍ଞାନ c) ଭୂଗୋଳ d) ସଂସ୍କୃତି (d)

6) "ସବ ଲାଲୁ ହୋ ଯାଏଗା" - ଏହା କିଏ କହିଥିଲେ?
 a) ରଣଜିତ ସିଂହ b) ରଗତ ସିଂହ c) ରଦ୍ବାମ ସିଂହ d) ରରଣ ସିଂହ (a)

7) କଲିକତାରେ କେତେ ଖ୍ୟାଲରେ ହିନ୍ଦୁ କଲେଜ ପ୍ରତିଷ୍ଠା ହୋଇଥିଲା?
 a) ୧୯୧୭ b) ୧୭୧୭ c) ୧୮୧୭ d) କେଉଁଟି ନୁହେଁ (c)

II) କବିତା ବିଭାଗ :- **1x7=7**

1) କ'ଣ ଅତିକ୍ରମ କଲେ ମାମୁଁଘର ଗାଁ ଦିଶେ?
 a) ବଣ b) ପାଟ c) ପଡ଼ିଆ d) ନଟା (a)

2) ହଲିଲା ପାଣିରେ ମୁହଁର ଛାଇକୁ କିଏ ଦେଖେ?
 a) ଭୁଆସୁଣା b) ଶାଶ୍ଵତ c) ନଶନ d) ବୋଦୁ (c)

3) ଗ୍ରାମପଥକୁ କବି କାହା ସହିତ ତୁଳନା କରିଛନ୍ତି?
 a) ଗ୍ରାମବଧୁ b) ସନ୍ତ୍ୟାସୀ c) ଗ୍ରାମକୁମାରୀ d) କାହାକୁ ନୁହେଁ (b)

4) ପୃଥିବୀର ସମ ସହନଶୀଳା କିଏ?
 a) ଗ୍ରାମବଧୁ b) ଗ୍ରାମପଥ c) ନଶନ d) ଶାଶ୍ଵତ (a)

5) ଖଣ୍ଡଗିରି ରୁକ୍ଷାରୁ କେଉଁମାନଙ୍କର ପ୍ରାର୍ଥନାର ସ୍ଵର ଭାସି ଆସେ?	5) 'ଘୃତାନ୍ତ' କେଉଁ ସମାସ ଅଟେ?
a) ହିନ୍ଦୁମୁନି b) ବୌଣ ସନ୍ଧ୍ୟାସା c) ଜ୍ଞେନମୁନି d) ଆଧୁନିକ ମୁନି	a) ଦ୍ଵିଗୁପମାସ b) ମଧ୍ୟପଦଲୋପା କର୍ମଧାରୟ c) ଦୁନ୍ଦ ସମାସ d) ଅଲୁକ୍ ସମାସ
6) କେତେ କେଉଁ ନଦୀରୁ ସ୍ଵାନ ତର୍ପଣ ସାରି ଫେରି ଆସନ୍ତି?	6) ଧାତୁ ପୂର୍ବରେ ଅନ୍ୟ ଏକ ପଦ ଯୋଗ ହୋଇ ଯେଉଁ ସମାସ ହୁଏ?
a) କୁଶରଦ୍ଵା b) କାଠଯୋଡ଼ି c) କୁଆଖିଆ d) ଚିତ୍ରୋପ୍ଲା	a) କର୍ମଧାରୟ b) ବହୁବ୍ରୀହି c) ଦୁନ୍ଦ d) ଉପପଦ ତ୍ରପ୍ତୁରୁଷ
7) ନାନା କାର୍ଯ୍ୟ ଉପଲକ୍ଷେ ଯେଉଁ ନାରାର ସ୍ଵାମା ବିଦେଶକୁ ଯାଆନ୍ତି ତାଙ୍କୁ କ'ଣ କୁହାଯାଏ?	7) କେଉଁଟି ବହୁବ୍ରୀହି ସମାସାନ୍ତରେ ସମନ୍ତପଦ?
a) କଳହନ୍ତାରିତା b) ପ୍ରୋଣିତ ଭର୍ତ୍ତକା c) ବାସବଦତ୍ତା d) କୌଣସିଟି ନୁହେଁ	a) ଦେଶାନ୍ତର b) ବୀଶାପାଣି c) ପାଦପଦ୍ମ d) ଆଜୀବନ
III) ଗନ୍ଧ ବିଭାଗ :-	V) ଓଡ଼ିଆ ସାହିତ୍ୟ, ସମାଜ ଓ ସଂକ୍ଷିତିର ଇତିହାସ :-
1) ଭରତଙ୍କ ଘରେ ପ୍ରତିବର୍ଷ କେଉଁ ମାସରେ ଘରଚଟିଆଙ୍କର ଉପ୍ରାତ ବଢ଼େ?	1x7=7
a) ଅଶ୍ଵିନ ମାସ b) କାର୍ତ୍ତିକ ମାସ c) ଭାଦ୍ରବ ମାସ d) ମାଘ ମାସ	1) ଓଡ଼ିଆ ସାହିତ୍ୟରେ 'ବ୍ୟାସକବି' ଭାବରେ କିଏ ଖ୍ୟାତ?
2) ଭରତଙ୍କ ବାପାଙ୍କ ମୃତ୍ୟୁପରେ ଚଟିଆମାନେ କ'ଣ କଲେ?	a) ରାଧା ଛାଡ଼ି ଚାଲିଗଲେ b) ଘରେ ରହିଗଲେ c) ଚାଲିଯାଇ ପୂଣି ଆସିଲେ d) ରହିଗଲେ (a)
3) ଭରତ ବାବୁଙ୍କ ଲୋତକସିଙ୍କ ଆଖି ଉପରେ କାହାର ମୁହଁ ଭାସି ବୁଲୁଥିଲା?	2) ମଧୁସୁଦନ ରାଓ କେଉଁ ଧର୍ମ ଗ୍ରହଣ କରିଥିଲେ?
a) ଚଟିଆମାନଙ୍କ ମୁହଁ b) ତାଙ୍କ ବାପାଙ୍କ ମୁହଁ c) ତାଙ୍କ ମାଆଙ୍କ ମୁହଁ d) କୌଣସିଟି ନୁହେଁ (b)	a) ବୌଣ ଧର୍ମ b) ଜ୍ଞେନ ଧର୍ମ c) ଖ୍ରୀଷ୍ଟଧର୍ମ d) ବ୍ରାହ୍ମଧର୍ମ
4) ପରୀମାନଙ୍କ କର୍ମ ପ୍ରେରତା ମଣିଷ ସମାଜକୁ ଜଣ ଦିଏ?	3) ପ୍ରଥମ ଓଡ଼ିଆ ଉପନ୍ୟାସ 'ପଦ୍ମମାଳୀ'ର ଲେଖକ କିଏ?
a) ଧାରଣା b) ପ୍ରୁତାରଣା c) ପ୍ରେରଣା d) ନିରାଶା	a) ଗୋରାଶଙ୍କର b) ରାମଶଙ୍କର c) ଉମେଶଚନ୍ଦ୍ର d) ଗଙ୍ଗାଧର
5) କେଉଁମାନେ ଉପର ପାହ୍ୟାର ଶିକ୍ଷାରୀ?	4) ନନ୍ଦ କିଶୋର କେଉଁ କବି ଭାବରେ ପରିଚିତ?
a) ତହୁସିଲଦାର b) ମାମଲତକାର c) ଗଦିଦାର d) ଠିକାଦାର	a) ପଲ୍ଲୀକବି b) ପ୍ରକୃତିକବି c) କବିବର d) କବିଶେଖର
6) 'ଉଗ୍ରସେନ ଉବାଚ' ଗନ୍ଧର ମୁଖ୍ୟ ସ୍ଵର କ'ଣ?	5) ରାଧାନାଥଙ୍କ ରଚିତ ପ୍ରଥମ ଓଡ଼ିଆ ପ୍ରବନ୍ଧର ନାମ କ'ଣ?
a) ଶିଶୁରଙ୍ଗର ବିରୋଧ b) ଦୂର୍ଲଭିତି ବିରୋଧ c) ସରକାରଙ୍କ ବିରୋଧ d) କୌଣସିଟି ନୁହେଁ (b)	a) ଉକ୍ତଳର ନାରୀ b) ବିବେଜୀ c) ମାନବଧର୍ମ d) ସେବା
7) ଗାଁ ମୁଣ୍ଡରେ କିଏ ତା ଦୋକାନ ବନ୍ଦକରି ଘରକୁ ଗଲାଣି?	6) ଗୋରାଶଙ୍କର ରାମ୍ଭଦ୍ରାର ସମ୍ବନ୍ଧିତ ପତ୍ରିକାର ନାମ କ'ଣ?
a) ହରିଆନା b) ଶଙ୍କରାନା c) ମାଧ୍ୟାନା d) ସତରାନା	a) ଉକ୍ତଳପୂତ୍ର b) ଉକ୍ତଳ ମଧ୍ୟପ c) ଉକ୍ତଳ ଦୀପିକା d) ଉକ୍ତଳ ଦର୍ପଣ
IV) ବ୍ୟାକରଣ ବିଭାଗ :-	7) ଫଙ୍କାର ମୋହନଙ୍କ ଦ୍ଵାରା ରଚିତ 'ଉକ୍ତଳ ଭ୍ରମଣ' କେଉଁ ଧରଣର ସାହିତ୍ୟ?
1) ଓଡ଼ିଆ ଭାଷାରେ କେତୋଟି ସ୍ଵରବର୍ଣ୍ଣ ଅଛି?	a) ଧର୍ମ ସାହିତ୍ୟ b) ପ୍ରବନ୍ଧ ସାହିତ୍ୟ c) ଉପନ୍ୟାସ ସାହିତ୍ୟ d) ଭ୍ରମଣ ସାହିତ୍ୟ
a) ୧୧ଟି b) ୧୩ଟି c) ୧୪ଟି d) ୧୫ଟି	1x5=5
2) ଓଡ଼ିଆ ବର୍ଗ୍ୟ ବ୍ୟଞ୍ଜନବର୍ଣ୍ଣ କେତୋଟି?	VI) ଅପଠିତ ପଦ୍ୟାଂଶ୍ଳ :-
a) ୧୫ଟି b) ୨୦ଟି c) ୨୫ଟି d) ୩୦ଟି	(ନେମ୍ନ ଲିଖିତ ପଦ୍ୟାଂଶ୍ଳଟିକୁ ପଢ଼ି ପରବର୍ତ୍ତୀ ପ୍ରଶ୍ନଗୁଡ଼ିକର ଉତ୍ତର ଦିଅ ।
3) କେଉଁ ବର୍ଣ୍ଣର ମାତ୍ରା ନାହିଁ?	ମାନବ ଜୀବନ ରାଜ୍ୟ ମନ ନରପତି
a) 'ଲ' ବର୍ଣ୍ଣର b) 'ର' ବର୍ଣ୍ଣର c) 'ଅ' ବର୍ଣ୍ଣର d) 'ଆ' ବର୍ଣ୍ଣର	ନ୍ୟାୟଦେବ ସେ ରାଜ୍ୟର ଉପ୍ରୟୁକ୍ତ ମହୀୟ
4) 'ଫ' କେଉଁ ବର୍ଣ୍ଣର ଧୂନି ଅଟେ?	ବୁଦ୍ଧି ବିବେଚନା, ଧୂତି, ରାଜସଭାସଦ
a) କଣ୍ୟବର୍ଗ b) ତାଲବାୟ ବର୍ଗ c) ଦନ୍ତ୍ୟବର୍ଗ d) ଓଷ୍ୟବର୍ଗ	ବ୍ୟବହାର ଦିଅନ୍ତି ଯହିଁ ନ ହେବ ଆପଦ ।
(d)	ଜ୍ଞାନେନ୍ଦ୍ରିୟ ପଞ୍ଚ ହେବେ ରାଜ ପରିଜନ
	ପରଜା ଅଟ୍ଟନ୍ତି ମାତ୍ର କର୍ମେନ୍ଦ୍ରିୟଗଣ ।

SCIENCE OF WELL-BEING

CLASS XII - SEMESTER III

Time: 1 hours 15 Mins

Full Marks: 40

1) Consider the following statements:

1. Odd climatic pattern
2. Melting of glaciers
3. Increase in sea level
4. Droughts and floods

Which of the above increasing events are related with global warming?

- (a) 1, 2 and 3
- (b) 1, 3 and 4
- (c) 2, 3 and 4
- (d) All the above

2) _____ is a waste disposal method where solid organic wastes are converted to the residue and gaseous products through combustion.

- (a) Incarnation
- (b) Incineration
- (c) Incarceration
- (d) Incubation

3) Which of the following soil conservation methods is generally implemented in the coastal and dry regions?

- (a) Contour ploughing
- (b) Terrace farming
- (c) Mulching
- (d) Shelter belts

4) The phenomenon of using a predator to control pests is

- (a) artificial control
- (b) biological control
- (c) confusion technique
- (d) genetic engineering

5) The worker require foot protection in workplace with

- find dust and fluff
- hot and poisonous fumes
- electrical hazards
- penetrating material such as nails or spikes

6) Which of the following statements is true about the Air Quality Index?

- It indicates the colour of the air.
- It predicts ozone levels in your area.
- It determines the intensity of sound and sound pollution.
- It estimates air pollution mainly sulphur content in the air.

7) Which group of waste materials can be classified as non-biodegradable?

- Plant waste, used tea bags
- Polythene bags, plastic toys
- Used tea bags, paper straw
- Old clothes, broken footwear

8) What are the three R's that are used to save the environment which includes forest?

- Reduce, Reuse, Recycle
- Reserve, Reduce, Recycle
- Reuse, Reserve, Reduce
- Reserve, Reuse, Reduce

9) Assertion: Air pollutants are either gaseous or particulate.
Reason: Catalytic converters greatly reduce emission from diesel vehicle.

- Both the assertion and reason are true but the reason is the correct explanation of the assertion
- Both the assertion and reason are true but the reason is not the correct explanation of the assertion
- Assertion is true but reason is false
- Assertion is false but reason is true

10) You can get better sleep if you

- turn off the TV
- charge your phone away from your bedroom

c) power down your computer at night
d) all of the above

11) Which of the following skill is not a life skill to ensure Environmental well being?
a) Development of critical thinking
b) Development of analytical thinking
c) Development of problem creating
d) Development of decision making

12) What natural substance can replace chemical-based fertilizers?
a) Compost
b) Manure
c) Worm casting
d) all of the above

13) Silicosis is caused by industry.
a) Textile
b) Sugar
c) Stone crushers
d) Distillery

14) Which of the following can effectively help to minimise waste?
a) Do not opt for paperless billing
b) Refuse to buy vegetables in plastic bag
c) Purchase product that do not last longer
d) Use paper napkin instead of cloth napkin

15) Consider the following statements:
1. The nuclear energy is a non-polluting power source.
2. Accidental leakage and safe disposal are the main issue with it.
3. At low doses, radiation is harmless to living being.
Which of the above mentioned statements is/are incorrect?
a) 1 and 2
b) 1 and 3
c) 2 and 3
d) All the above

16) Match the column:

Column A

1. Biomedical Waste
2. Chlorofluorocarbon
3. Carcinogen
4. Minamata

Column B

- A. Cause of Ozone layer depletion
- B. Mercury pollution
- C. Contaminated syringe
- D. Cause of Cancer

(a) 1-C, 2-A, 3-D, 4-B
(b) 1-A, 2-C, 3-D, 4-B
(a) 1-C, 2-A, 3-B, 4-D
(a) 1-B, 2-A, 3-D, 4-C

17) Match the column:

Column A

1. Refuse
2. Reuse
3. Rethink
4. Repair

Column B

- A. Consider the environmental impact of your consumption and waste habits
- B. Learn to fix things instead of buying new ones
- C. avoid single-use items
- D. Say no to products you don't need

(a) 1-D, 2-A, 3-C, 4-B
(b) 1-A, 2-C, 3-D, 4-B
(c) 1-D, 2-C, 3-A, 4-B
(d) 1-B, 2-A, 3-D, 4-C

18) Assertion: Average temperature of earth has increased by 0.6 degree centigrade during the past century.

Reason: There has been a progressive increase in the use of fossil fuels generating more green house gases.

- a) Both the assertion and reason are true but the reason is the correct explanation of the assertion
- b) Both the assertion and reason are true but the reason is not the correct explanation of the assertion
- c) Assertion is true but reason is false
- d) Assertion is false but reason is true

19) Which of the following pair is incorrect?

- (a) Asbestosis Occupational disease
- (b) Typhoid water borne disease
- (c) Asthma Noise pollution disease -
- (d) Malaria Vector borne disease -

20) You can reduce your exposure to radiation by doing the following:

- (a) Increasing your distance from the source
- (b) Decreasing the amount of time near the source
- (c) Provide shielding between yourself and the source
- (d) All of the above

21. What are the four indicators of financial well being?

- (A) Earn, Spend, Save, Donate
- (C) Earn, Save, Plan, Donate
- (B) Spend, Borrow, Save, Plan
- (D) Spend, Borrow, Save, Donate

22. Match the following -

COLUMN A	COLUMN B
(i) Credit score	(a) Shares
(ii) Bank loan	(b) Investment diversification
(iii) Portfolio management	(c) CRISIL
(iv) Dividend	(d) EMI

- (A) (i)-(d); (ii)-(c); (iii)-(b); (iv)-(a)
- (B) (i)-(a); (ii)-(b); (iii)-(c); (iv)-(d)
- (C) (i)-(c); (ii)-(d); (iii)-(b); (iv)-(a)
- (D) (i)-(b); (ii)-(d); (iii)-(a); (iv)-(c)

23. A budget is a.....and/or.....statement of future plan

- (A) Qualitative; quantitative
- (B) Qualitative; financial
- (C) Qualitative; non-financial
- (D) Quantitative; financial

24. Which of the following sources of finance yields fixed rate of return?

- a. Equity Share
- b. Preference share
- c. Debenture
- d. Term loan
- e. Public deposit

(A) b, c, d, e
(C) a, c, d, e
(B) a, b, c, d
(D) All of these
(B) Increasing price levels.
(D) Currency devaluation

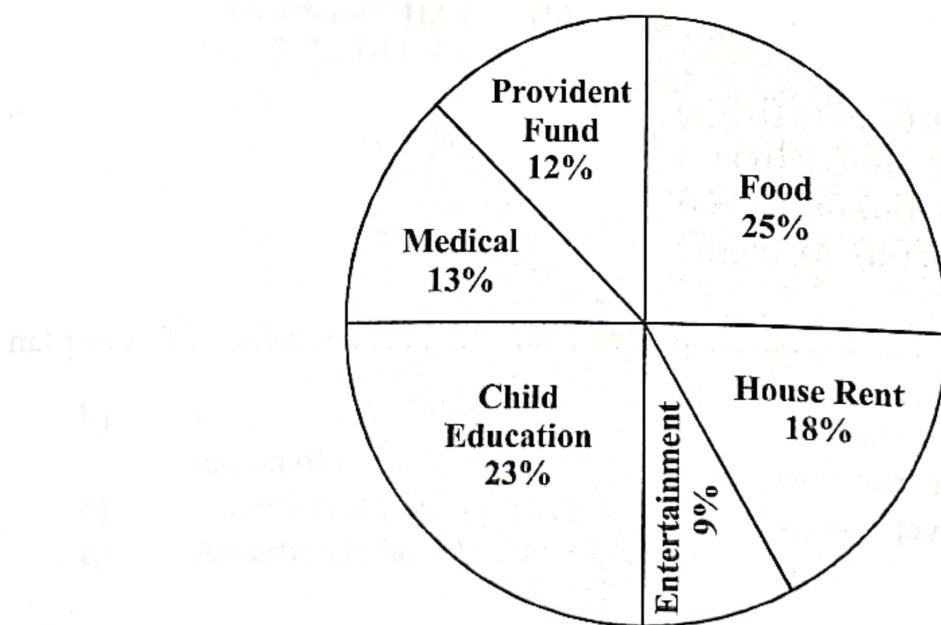
25. Which of the following is not a cause of financial crisis?

- (A) Increasing debt
- (B) Increasing price levels
- (C) Market boom
- (D) Currency devaluation

Study the following chart and answer question nos. 26-30 that follow:

The pie chart given below represents the domestic expenditure of a family in percentage - the total monthly income of the family being Rs. 52,500.

Expenditure of Family



26. The total amount spent by the family per month on essentials (food and medicines) is
(A) Rs. 19,950
(B) Rs. 13,125
(C) Rs. 6,825
(D) Rs. 239,400

27. The house rent per month is
(A) Rs. 9,050
(B) Rs. 9,450
(C) Rs. 9,500
(D) Rs. 9,800

28. The family spends equal amounts on the education of their two children. The amount spent on each child per month is
(A) Rs. 144,900
(B) Rs. 24,150
(C) Rs. 12,075
(D) Rs. 6,037.50

29. The annual savings in the form of Provident Fund will be
(A) Rs. 75,600
(B) Rs. 75,000
(C) Rs. 7,560
(D) Rs. 6,300

30. After Provident Fund deductions and payment of house rent, the monthly income that remains with the family is
(A) Rs. 15,750
(B) Rs. 46,200
(C) Rs. 43,050
(D) Rs. 36,750

31. Choose the steps required to manage financial load
a. Paying off debt
b. Planning for retirement savings
c. Lowering monthly expenses

d. Selling shares in share market
e. Creating an emergency fund
(A) a.-c.-d.-e.
(B) b.-c.-d.-e.
(C) a.-b.-c.-e.
(D) a.-b.-d.-e.

32. Short-term budget is prepared for
(A) Liquidity
(B) Working capital management
(C) Control over day-to-day expenditure
(D) All of these

33. The full form of SIP is
(A) Simulated Intelligence Programme
(B) Systematic Investment Plan
(C) Schematic Investment Programme
(D) Sequential Investment Plan

34. State TRUE or FALSE -
I. Fixed deposits have higher rates of interest.
II. Eliminating impulse buying helps to cope up with financial stress.
III. Insurance helps to eliminate risk.
IV. Cryptocurrency is considered a low-risk asset.
(A) I & II True; III & IV False
(B) I, III & IV True; II False
(C) III & IV True; I & II False
(D) III True; I, II & IV False

35. Which of the following is not a coping mechanism of stress?
(A) Identify triggers
(B) Get into a fight
(C) Eat healthy
(D) Exercise regularly

36. Neha lost her job six months ago, but she hasn't told her family about it yet. She has been the primary earner in her family of four, the only other source of income being her father's pension of Rs. 28,000. What other sources of income she may explore till she gets another job?

- (A) Rental income
- (B) Social media influencer earnings
- (C) Both (A) & (B)
- (D) None of these

37. With reference to the above case study mentioned in Ques No. 36, Neha can successfully maintain control over her finances by.....

- (A) Identifying spending patterns
- (B) Listing debts
- (C) Correct financial planning
- (D) All of these

38. Which of the following is not a merit of investment in shares?

- (A) Market volatility
- (B) High returns
- (C) Ownership
- (D) None of these

39. High inflation in the economy leads to prices of commodities

- (A) No change
- (B) Falling
- (C) Rising
- (D) None of these

40. Financial stress can lead to

- (A) Anxiety
- (B) Social withdrawal
- (C) Depression
- (D) All of these

Model Question Paper (New Syllabus)

Class –XII, F.M -35

Subject-Statistics

SEM-III

1. A series is said to be infinite

- a) The sum of the first n terms tends to $+\infty$
- b) The sum of the first n terms tends to $-\infty$
- c) Number of terms is infinite
- d) None of these

2. The value $B(\frac{1}{2}, \frac{1}{2})$ is

- a) 1
- b) π
- c) -1
- d) $\sqrt{\pi}$

3. The value of $\Gamma(5/2)$ is

- a) $1/2 \sqrt{\pi}$
- b) $\frac{3}{2} \sqrt{\pi}$
- c) $\frac{3}{4} \sqrt{\pi}$
- d) $\frac{4}{3} \sqrt{\pi}$

4. The value of the integral $\int_0^1 x^4 (1-x)^2 dx$ is

- a) B(3, 4)
- b) B(4, 3)
- c) B(5, 3)
- d) B(2, 5)

5. A sequence $\{x_n\}$ is said to be convergent if $\lim_{n \rightarrow \infty} x_n$ is

- a) Must be equal to zero
- b) Infinite
- c) finite
- d) Positive

6. A sequence $\{x_n\}$ is said to be divergent if $\lim_{n \rightarrow \infty} x_n$ is

- a) Must be equal to zero
- b) $-\infty$ or ∞
- c) Finite
- d) Negative

7. For what value of 'a'

$$f(x) = a (1/2)^x, x = 0, 1, 2, \dots, \\ = 0, \text{ elsewhere}$$

is a probability mass function of a random variable X?

- a) 1/2
- b) 1/3
- c) 1/4
- d) 1/5

Data for Q. Nos. 8 – 10: X and Y are two random variables having the joint probability distribution as given below:

X \ Y	0	1	2
0	0.1	0.1	0.1
1	0.1	0.2	0.1
2	0.1	0.1	0.1

8. Variance of X will be:

- a) 0.66
- b) 0.77
- c) 0.88
- d) 0.99

9. Correlation coefficient between X and Y is:

- a) 0
- b) 1
- c) -1
- d) none of these

10. Value of $P(X+Y \geq 3)$ will be

- a) 0.1
- b) 0.2
- c) 0.3
- d) 0.4

11. A continuous random variable X has density function given by

$$f(x) = \frac{1}{2} - \frac{1}{8}x, \quad 0 \leq x \leq 4$$

= 0, otherwise

Then $E(X)$ of X is

- a) 3/16
- b) 5/16
- c) 4/17
- d) none of these

12. $E(XY) = E(X) E(Y)$ implies that the random variable X and Y are

- a) Independent
- b) Uncorrelated
- c) Linearly related
- d) None of these

13. If the p.d.f. of a continuous random variable X is

$$f(x) = 6(x-1)(2-x); \quad 1 \leq x \leq 2,$$

then the cumulative distribution function will be

- a) $5 - 12x + 9x^2 - 2x^3$
- b) $3 - 15x^2 + 12$
- c) $5 + 12x^2 - 2x^3$
- d) none of these

14. X is said to be random variable if it maps

- a) sample space to real line
- b) real line to sample space
- c) sample space to sample space
- d) real line to real line.

15. If $\text{Var}(X) = 1$, then $\text{Var}(2X - 3)$ is

- a) 5
- b) 13
- c) 4
- d) -5

16. $E(X - K)^2$ is minimum when

- a) $K < E(X)$
- b) $K > E(X)$
- c) $K = E(X)$
- d) None of these

17. The coefficient of variation of Poisson distribution with mean 4 is:

- a) 1/4
- b) 1/2
- c) 4
- d) 2

18. The mean of the binomial distribution $\binom{10}{x} \left(\frac{2}{5}\right)^x \left(\frac{3}{5}\right)^{10-x}$; $x = 0, 1, 2, \dots, 10$ is

- a) 4
- b) 6
- c) 5
- d) 0

19. The mean of Poisson variable is:

- a) Greater than its variance
- b) Less than its variance
- c) Equal to its variance
- d) Twice its variance.

20. The skewness in a binomial distribution will be zero, if

- a) $p < 1/2$
- b) $p = 1/2$
- c) $p > 1/2$
- d) $p < q$

21. The mean and variance are same for

- a) Binomial distribution
- b) Poisson distribution
- c) Geometric distribution
- d) Discrete uniform distribution

22. The distribution of throwing a die experiment follows:

- a) Binomial distribution
- b) Discrete uniform distribution
- c) Bernoulli distribution
- d) Geometric distribution

23. Number of accidents in some units of time follows:

- a) Binomial distribution
- b) Discrete uniform distribution
- c) Poisson distribution
- d) Geometric distribution

24. For which distribution the variance is greater than mean?

- a) Binomial distribution
- b) Discrete uniform distribution
- c) Poisson distribution
- d) Geometric distribution

25. Which discrete distribution has "Lack of Memory"

- a) Binomial distribution
- b) Discrete uniform distribution
- c) Poisson distribution
- d) Geometric distribution

26. For which value of p for a binomial variable X , $9P(X = 4) = P(X = 2)$ if $n = 6$

- a) $p = 1/2$
- b) $p = 1/3$
- c) $p = 1/4$
- d) $p = -1/2$

27. Determine the modal value of binomial distribution for which mean is 4 and variance is 3.

- a) 4.25
- b) 2
- c) 3
- d) 4

28. If X follows Poisson variable such that $P(X=2) = 9 P(X=4)$, which value of the mean of this distribution

- a) 2
- b) 3
- c) $2/\sqrt{3}$
- d) 1

29. In least square method we minimize

- a) The sum of squares of the errors
- b) The sum of the squares of the observed values
- c) The sum of the squares of the predicted value
- d) None of these

30. Least squares method is used in a time series for

- a) Determination of trend equation
- b) Determination of seasonal component
- c) Determination of cyclical component
- d) Determination of irregular component

31. In a time series trend means:

- a) long term regular movement
- b) short term regular movement
- c) long term irregular movement
- d) None of the above

32) Which of the following component of the time series cannot be eliminated?

- a) Secular trend
- b) Cyclical component
- c) Seasonal component
- d) Irregular Component

33) The method of measurement of secular trend is:

- a) Ratio to trend method
- b) Method of moving averages
- c) Ratio to moving average method
- d) Method of semi average

34) If the trend line with 2000 as origin is $y = 20.6 + 1.68x$ then trend line with 1995 as origin will be:

- a) $y = 12.2 + 1.68x$
- b) $y = 29.0 + 1.68x$
- c) $y = 20.6 + 1.68x$
- d) $y = 20.6 + 8.40x$

35) Cyclical variations in a time series are caused by:

- a) Lockouts and strikes
- b) Boom and depression
- c) Seasonal changes
- d) None of these.

MODEL QUESTION PAPER

CLASS : XII, SEMISTER:III, FULL MARKS :40.

TIME : 1h.30min.

(One mark for all questions)

(POETRY, PROSE, NONDETALED TEXT - 2, GRAMMER(ALL ALANKAARAMULU))

I. Answer all the questions. choose correct answer from the options given below and write in the brackets :

క్రింది అన్ని ప్రశ్నలకు సరియైన సమాధానం ఎన్నుకుని కుండలీకరణముల లో ప్రాయము.

1. నివేదనం పార్యభాగం ఏ గ్రంథం నుంచి గ్రహించబడింది. ()

అ. భాగవతం ఆ. భారతం ఇ. రామాయణం ఈ. నీతిచంద్రిక.

2. సాంత్వనం పార్యభాగం రచించిన కవి ()

అ. తిక్కన ఆ. ఎర్రన ఇ. పెద్దన ఈ. బట్టన.

3. ఎట్టి వికాశానికి సుభాషితాలు ఎంతో అవసరం ()

అ. ఆర్థిక ఆ. వ్యక్తిత్వ ఇ. సామాజిక ఈ. మానసిక

4. వేయపడగలు రచయిత ()

అ. దాశరథి ఆ. శ్రీ శ్రీ ఇ. శ్రీనాథుడు ఈ. విశ్వనాథ

5. నా తెలంగాణ కోటి రత్నాల వీణ - అన్నహారు()

అ. శ్రీ శ్రీ ఆ. శ్రీనాథుడు ఇ. దాశరథి ఈ. విశ్వనాథ

6.

6. మధురశ్రీనాథ ఎవరి బిరుదు ()

అ. ధూర్ధటి ఆ. జూమువా ఇ. ఇలాంగో ఈ. బిరుదు రామరాజు.

7. 'తన కింక పతితోద తగులు లేదనుకుంది'- తగులు లేదనుకొన్నది ఎవరు ? ()

అ. పర్వతము ఆ. కిన్నెరసాని. ఇ. సత్యభామ ఈ. కవి మనతో.

8. కిళాంబి వేంకట నరసింహచార్యుల కలం పేరు..()

అ. ఆరుద్ర ఆ. ఆత్మేయ ఇ. ఒల్లా ఈ. కరుణాశ్రీ

9. పేరలుకం జెందిన యట్టి కాంతలుచిత వ్యాపారముల్ నేర్చురే? - కవి ఈ మాటలు ఎవరిని ఉద్దేశించి అన్నారు.

()

అ. సత్యభామను ఆ. కృష్ణుని ఇ. శకుంతలను ఈ. వరూధిని ని.

10. శకుంతల తండ్రి ()

అ. శ్రీనాథుడు ఆ. కణ్వుడు ఇ. ఆత్మి మహార్షి ఈ. గౌతముడు

11. మానసంబున నెలకొన్న క్రోధరసము - దీనిలో ఏ అలంకారము కలదు ()

అ. రూపక ఆ. ఉపమ ఇ. వృత్యనుప్రాసము ఈ. ఉత్స్వేష్ట

12. 'వనధి నను మ్రింగ నోరు విచ్చినది'- ఇందు వనధి అనగా.. ()

అ. వనము ఆ. మేఘము ఇ. వనిత ఈ. సముద్రము.

13. 'సీ కరావలంబ నిభృతమైనపడెల్ల రాతి రాతి లోనే నాతిదీచు'- కవి ఎవరిని ఉద్దేశించి ఈ మాటలు అన్నారు?

అ. శిల్పమును ఆ. శిల్పిని ఇ. పారకులను ఈ. తనను తానే.

14. హరిరాద్వైత మతాన్ని సమాజంలో స్థాపించిన కవి

అ. నన్నయ ఆ. చిన్నయ సూరి ఇ. తిక్కన ఈ. ఎర్రన

15. కులాంగన నిట్లోనర్చురే?... కులాంగన ఎవరు?

అ. శకుంతల ఆ. పాంచాలి ఇ. సత్యభామ ఈ. సుభద్ర

16. పంచతంత్రానికి తెలుగు అనువాదమే..

అ. భగవద్గీత ఆ. రామాయణం ఇ. శిల్పి ఈ. నీతిచంద్రిక 17. కిళాంబి వేంకటనరసింహచార్యుల కలం పేరు..

అ. ఆరుద్ర ఆ. ఆత్మేయ ఇ. ఒల్లా ఈ. కరుణాశ్రీ

18. మొఘలాయి కథలు నుంచి గ్రహించబడిన పార్యభాగం..

అ. శిల్పి ఆ. పండితపామర భేదం ఇ. గ్యారా కద్దూ సారా కోత్స్వాల్ ఈ. క్షమాభిక్

19. అవ్యాబస్థని ప్రయాణం కవి..

అ. దేవులపల్లి ఆ. రాయప్రోలు ఇ. జంధ్యాల ఈ. గురజాడ

20. ఊరబావి కథాసంకలన కర్త..

అ. ఇనాక్ ఆ. జమువా ఇ. ఆరుద్ర ఈ. పులికంటీ.

21. చెంచయ్య కొడుకు పేరు..

అ. కమలాకర్ ఆ. జయరాం ఇ. రఘురాం ఈ. సుధాకర్ 22. పొహుకారు బన్ను లో ఎవరికి సీటు ఇవ్వలేదు?

అ. రచయితకు ఆ. నోకరుకు ఇ. ఆవ్యకు ఈ. వీరయ్య కు

23. గోల్కొండ పుత్రీక శ్వాపకుడు..

అ. సురవరం ప్రతాపరెడ్డి ఆ. వీరేశలింగం ఇ. ఆత్రేయ ఈ. శ్రీశ్రీ

24. వర్ధమానుడను వ్యాపారి నివసించు పట్టణం..

అ. భోగవతీ ఆ. కాశీ ఇ. దరిదుర్ధము ఈ. రక్షాపత్ని 25.

25. కమల తండ్రి పేరు..

అ. ధనపతి ఆ. నారయ్య ఇ. శ్రీపతి ఈ. భద్రయ్య 26.

26. క్రిందివానిలో కృష్ణ శాస్త్రి రచన...

అ. కృష్ణ పక్కం ఆ. శుక్ల పక్కం ఇ. ఊరబావి ఈ. ముసలమై మరణం

27. రఘురామ్ ఒక...

అ. టీచరు ఆ. డాక్టరు ఇ. డ్రైవర్ ఈ. కలెక్టర్

28. ఇనాక్ గారికి పద్మశ్లేష లభించిన సంవత్సరం

అ. 2015 ఆ. 2014 ఇ. 2021 ఈ. 2022

29. చలపతి అభిమానము పొందిన యువతి..

అ. అమల ఆ. పంకజం ఇ. కాంతం ఈ. కమల.

30. మనము పయి బెట్టుకోరానిది...

అ. పరథనము ఆ. పరాధీకారము ఇ. పరనింద ఈ. పరసుఖము

II. Fill in the blanks with correct answers:

క్రింది ఖాళీలను సరియైన సమాధానముల తో పూరింపుము:

1. సీతిచంద్రిక అను గద్యకావ్యమును రచించి, తెలుగు గద్యమునకు ఆద్యాత్మనవాడు-----
2. శ్రీ కృష్ణ భారతము అను గ్రంథ రచయిత -----
3. ప్రకృతి కవితకు ప్రథములైన జంటకవులు-----
4. పాశ్చాత్య మిస్టీక్ హోయిట్ నుంచి పుట్టిన తెలుగు కవిత్వం -----
5. నూరు పద్యములు కల కావ్యమే-----
6. ముక్కక కావ్యములు అనీ పేరుగాంచినవి-----
7. విశేష, సామాన్య వాక్యము ల పరస్పర సమర్పణం వర్ణింపబడే అలంకారం -----
8. "అప్పుర భవనములు చుక్కలు తాకుచున్నవి" - ఇందలి అలంకారం -----
9. ఉపమానథర్మము ఉపమేయము నందు ఆరోపించి వర్ణించుట----- అలంకారము.
10. వలె, పోలె, కరణి మొదలగునవి ఉపయోగింపబడే అలంకారము -----.

**Visual Arts
Class - XII
Semester - I
Theory**

F.M- 20

**Group A
(Indian & Western Art)**

বিকল্প উত্তরগুলি থেকে সঠিক উত্তর নির্বাচন করো।

$1 \times 12 = 12$

১) কোন বিখ্যাত মুঘল স্মার্টের আমলে 'রাজমনামা' চিত্রিত করা হয়েছিল?

- ক) বাবর
- খ) জাহাঙ্গীর
- গ) শাহজাহান
- ঘ) আকবর

২) মুঘল অনুচ্চিতগুলি কী মাধ্যমে আঁকা হয়েছিল?

- ক) ক্যানভাসে অ্যাক্রিলিক রঞ্জে
- খ) কাগজের উপর জলরঞ্জে (টেম্পারা)
- গ) ক্যানভাসে তেলরঞ্জে
- ঘ) কাগজে প্যাস্টেল রঞ্জে

৩) বিখ্যাত 'বানি থানি' চিত্রটি কোন চিত্রকলার স্কুলের অন্তর্গত?

- ক) বুন্দি
- খ) কাংড়া
- গ) কোটা
- ঘ) কোনোটিই নয়

৪) কাংড়া অনুচ্চিতশিল্প কোন রাজ্যে চিত্রিত হয়েছিল?

- ক) আসাম
- খ) অরুণাচল প্রদেশ
- গ) হিমাচল প্রদেশ
- ঘ) গুজরাট

৫) জোড় বাংলা মন্দিরটি নির্মাণ করেছিলেন

- ক) রঘুনাথ সিং দেব

খ) বীর হাস্তীর
গ) কৃষ্ণ সিংহ
ঘ) জগত মাল্লা

৬) উত্তর ভারতের প্রাচলিত মন্দির স্থাপত্যশৈলীটি কী?

ক) দ্রাবিড়
খ) নাগর
গ) বেসর
ঘ) ল্যাটিন

৭) কোন চিত্রকলাশৈলীতে তালপাতা চিত্রণের জমি হিসাবে ব্যবহৃত হত?

ক) মুঘল
খ) কোম্পানি
গ) বাবর
ঘ) পাল

৮) রোমাণ্টিক চিত্রশিল্পীদের পছন্দের বিষয় ছিল

ক) রাজা ও রাজত্ব
খ) ধর্ম
গ) আবেগ ও সংগ্রাম
ঘ) আদর্শায়িত রূপ

৯) শিল্পী _____ ছিলেন রিয়েলিজম শিল্প আন্দোলনের প্রবক্তা।

ক) পিকাসো
খ) পল সেজান
গ) গুস্তাভ কুরবেট
ঘ) জন কনস্টেবল

১০) ইম্প্রেশনিজম শিল্প আন্দোলন কবে শুরু হয়েছিল?

ক) ১৮৬০
খ) ১৮৪০
গ) ১৯৬০
ঘ) ১৭৮০

১১) ব্যালে ডাঙ বিষয়টির জন্য কোন ইম্প্রেশনিস্ট চিত্রশিল্পী বিখ্যাত ছিলেন?

ক) ক্লদ মোনে
খ) এডগার দেগা

- গ) এডুয়ার্ড মানে
- ঘ) ভ্যান গথ

১২) ইম্প্রেশনিস্ট চিত্রশিল্পের প্রথম প্রদর্শনী হয়েছিল _____।

- ক) ইটালি
- খ) প্যারিস
- গ) আমস্টারডাম
- ঘ) লন্ডন

Group-B

(Handicrafts, Design and sculpture)

সঠিক উত্তরটি নির্বাচন করো।

1x8=8

১) বাংলার _____ জেলায় দশাবতার তাসের উৎপত্তি হয়েছিল।

- ক) পুরাণিয়া
- খ) হুগলি
- গ) জলপাইগুড়ি
- ঘ) বাঁকুড়া

২) পশ্চিমবঙ্গের _____ জেলা শাঁখের কাজের জন্য বিখ্যাত।

- ক) মুর্শিদাবাদ
- খ) মেদিনীপুর
- গ) হাওড়া
- ঘ) পুরাণিয়া

৩) নকশী কাঁথা অলংকরণ করতে সাধারণত _____ সিটচ ব্যবহৃত হয়।

- ক) ক্রস সিটচ
- খ) রানিং সিটচ
- গ) চেইন সিটচ
- ঘ) ব্ল্যাকেট সিটচ

৪) ফুলিয়া _____ শাড়ীর জন্য বিখ্যাত।

- ক) মটকা
- খ) মসলিন
- গ) রেশম
- ঘ) তাঁত

৫) প্লাস্টার কাস্টিং করতে _____ উপকরণের প্রয়োজন হয়।

- ক) কাঠ
- খ) প্লাস্টার অফ প্যারিস
- গ) ম্যাগনেসিয়াম সল্ট
- ঘ) বাঁশ ও বেত

৬) প্লাস্টার মোল্ড বের করে আনার জন্য _____ 'রিলিজ এজেন্ট' রূপে ব্যবহার করা হয়।

- ক) মাটি
- খ) লিকুইড সোপ
- গ) জল নুন

৭) পোস্টার তৈরি করার সময় পোস্টারের মেসেজটিকে _____ বলা হয়।

- ক) ঝোগন
- খ) বাক্য
- গ) উক্তি
- ঘ) ভাবনা

৮) পোস্টারের অক্ষর ও ছবির _____ দর্শকের দৃষ্টি ও মনোযোগ আকর্ষিত করে।

- ক) কর্ণার
- খ) টেক্সচার
- গ) সাইজ
- ঘ) মূলভাব

(English Version)

Group-A
Indian and Western Art

Find out the correct answer out of the options given against each questions.

1x12=12

1.' Razamnama' was painted during the period of which Mughal Emperor?

- a) Babur
- b) Jahangir
- c) Shahjahan

d) Akbar

2. What is the medium of Mughal miniature painting?

- a) Acrylic on Canvas
- b) Water colour (Tempera) on Paper
- c) Oil on Canvas
- d) Oil Pastel colour on paper

3. The well-known painting "Bani-Thani" belongs to which school of painting?

- a) Bundi
- b) Kangra
- c) Kota
- d) None of These

4. Kangra miniature paintings are made in which state?

- a) Assam
- b) Himachal Pradesh
- c) Arunachal Pradesh
- d) Gujarat

5. Jor Bangla temple was built by_____

- a) Raghunath Singha Dev
- b) Bir Hambir
- c) Krishna Singha
- d) Jagat Malla

6. What is the name of temple architecture popular in Northern India?

- a) Dravida
- b) Nagara
- C) Vesara
- d) Latina

7. In which school of art Palm leaves were used as painting support?

- a) Mughal
- b) Company
- c) Babur
- d) Pal

8. Romantic artists were fascinated by_____

- a) King and kingdom
- b) Religions
- c) Passionate and struggle
- d) Ideal images

9. Artist _____ was the pioneer of Realism Art movement.

- a) Picasso
- b) Paul Cezanne
- c) Gustav Courbet
- d) John Constable.

10. When did impressionism movement start?

- a) 1860
- b) 1840
- c) 1960
- d) 1780

11. Which impressionist artist was known for his fascination with ballet dancers?

- a) Claude Monet
- b) Edgar Degas
- c) Edward Manet
- d) Van Gogh

12. First 'Impressionist' art exhibition was held in _____

- a) Italy
- b) Paris
- c) Amsterdam
- d) London

Group-B

(Handicrafts, Design and sculpture)

1x8=8

1. Dasavatar cards was originated in _____ district, West Bengal.

- a) Purulia
- b) Hooghly
- c) Jalpaiguri
- d) Bankura

2. _____ district of West Bengal is famous for conch shell crafts.

- A) Murshidabad
- b) Medinipur
- c) Howrah
- d) Purulia

3. The stich commonly used to design a Nakshi Kantha is _____.

- a) Cross stich
- b) Chain stich
- C) Running stich
- d) Blanket stich

4. Phulia is famous for _____ saree.

- a) matka
- b) maslin
- c) resham
- d) taant

5. The material need for plaster casting is _____.

- a) wood

- b) magnesium salt
- c) plaster of paris
- d) cane and bamboo

6. Release agent used for plaster moulds ____.

- a) clay
- b) liquid soap
- C) water
- d) salt

7 .When creating posters the message of poster is considered?

- a) slogan
- b) sentence
- c) statement
- d) thought

8. The _____ of the lettering and images on your posters attract your viewers' attention.

- A) corners
- B) textures
- C) sizes
- d) concept