

**R3071**

**Sub. Code**

**301NM2**

**B.Voc. DEGREE EXAMINATION, APRIL – 2025**

**Fashion Technology**

**NME : VISUAL MERCHANDISING**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** questions by choosing the correct option.

1. Name the practice of organizing and displaying products in a retail space used to highlight products and increase sale (CO1, K1)
  - (a) Merchandising
  - (b) Visual merchandising
  - (c) Store exterior
  - (d) Store interior
2. The purpose of visual merchandising is to \_\_\_\_\_ the customer towards making a purchased. (CO1, K1)
  - (a) Attract
  - (b) Engage
  - (c) Motivate
  - (d) All the above
3. Principle of dominance and subordination is (CO2, K1)
  - (a) Rhythm
  - (b) Balance
  - (c) Proportion
  - (d) Emphasis
4. Which of the following makes first impression on the shopper? (CO2, K1)
  - (a) Awnings
  - (b) Marquees
  - (c) Signs
  - (d) Planter

5. When you want aisle after aisle of products packed wall-to-wall, which layout will you need? (CO3, K1)
- (a) Herringbone (b) Grid  
(c) Free flow (d) Race track
6. Choose the design element used to create mood in store layout planning. (CO3, K1)
- (a) Proportion (b) Colour  
(c) Emphasis (d) Balance
7. If you want to create a feeling of royalty which of the following colour would you choose? (CO4, K2)
- (a) Blue (b) Green  
(c) Yellow (d) Purple
8. Which of the following colour schemes relies on black, white and neutrals? (CO4, K1)
- (a) Analagous (b) Monochromatic  
(c) Achromatic (d) Complimentary
9. What is a façade? (CO5, K1)
- (a) Structure over entrance  
(b) Aisle  
(c) Front exterior of a building  
(d) Flooring
10. Name the doll, often articulated, used by window dressers and others, especially to display or fit clothing and show materials. (CO5, K1)
- (a) Marquee (b) Façade  
(c) Mannequin (d) Merchandise

**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Outline the role of atmosphere in garment retailing.  
(CO1, K2)

Or

- (b) Discuss the concepts and role of visual merchandising  
(CO1, K2)

12. (a) Suggest tips to create appealing store atmosphere.  
(CO2, K2)

Or

- (b) How can emphasis be achieved in display? Explain.  
(CO2, K2)

13. (a) How does simplicity and repetition help create mood?  
(CO3, K2)

Or

- (b) Write about direction of flow and planogram.  
(CO3, K2)

14. (a) Brief on psychology of colour.  
(CO4, K2)

Or

- (b) Explain the following (i) Assortment (ii) Ensemble (iii) Theme  
(CO4, K3)

15. (a) Choose two types of lightings suitable for store interior and explain them.  
(CO5, K3)

Or

- (b) Brief on campaign and promotional aspects.  
(CO5, K2)

**Part C**

(5 × 8 = 40)

Answer **all** the questions, not more than 1000 words each

16. (a) Discuss the role of visual merchandisers in garment retailing. (CO1, K3)

Or

- (b) Discuss the basic visual merchandising techniques to improve a stores appeal. (CO1, K2)
17. (a) Discuss about the factors considered in organizing effective displays in a store. (CO2, K3)

Or

- (b) Discuss about execution of store layout. (CO2, K3)
18. (a) Discuss about the design elements that creates mood in store planning. (CO3, K2)

Or

- (b) Write about the various types of layouts suitable for an apparel retail store. (CO3, K3)
19. (a) With example explain how you will create a display for current trend. (CO4, K1)

Or

- (b) Discuss the role of colour in display. (CO4, K3)
20. (a) Summarize the interior and exterior displays used in garment retail outlet. (CO5, K2)

Or

- (b) How are graphics and signage useful in creating a theme for display? (CO5, K3)

**R3072**

**Sub. Code**

**302NM2**

**B.Voc. DEGREE EXAMINATION, APRIL – 2025**

**Software Development**

**NME : WEB DESIGNING**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions  
by choosing the correct option.

1. How many layers are there in the ISO OSI reference model? (CO1, K1)  
(a) 7 (b) 5  
(c) 4 (d) 6
2. The Internet is formed by \_\_\_\_\_. (CO1, K1)  
(a) Single packet switching  
(b) Multiple packet switching  
(c) Service provider  
(d) Multiple service provider
3. When the mail server sends mail to other mail servers, it becomes \_\_\_\_\_. (CO2, K3)  
(a) SMTP server (b) SMTP client  
(c) Peer network (d) Master page

4. If you have to send multimedia data over SMTP, it has to be encoded into \_\_\_\_\_. (CO2, K3)  
(a) Binary code (b) Signal code  
(c) ASCII code (d) Hash code
5. \_\_\_\_\_ method returns the day of the month. (CO3, K5)  
(a) getDate (b) getMonth  
(c) getDay (d) getHours
6. \_\_\_\_\_ button clears all the controls in the form to their initial states. (CO3, K5)  
(a) Reset (b) Submit  
(c) Ok (d) Text area
7. \_\_\_\_\_property defines labels for a list of items in JavaScript. (CO4, K5)  
(a) list-style-type  
(b) list-style-image  
(c) list-stylelist-style-type  
(d) none of the mentioned
8. \_\_\_\_\_ operator has highest precedence in JavaScript. (CO4, K5)  
(a) ++ (b) ==  
(c) > (d) &
9. In Bootstrap, the \_\_\_\_\_ element is used to embed and style images in document. (CO5, K3)  
(a) <image> (b) <link>  
(c) <class> (d) <style>
10. \_\_\_\_\_class in Bootstrap is used to provide a responsive fixed width container. (CO5, K3)  
(a) .container-fixed (b) .container-fluid  
(c) .container (d) all of the above

**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) What are the parts of Internet? Explain. (CO1, K1)

Or

- (b) Write a note on Data Communication. (CO1, K1)

12. (a) Explain SMTP in detail. (CO2, K3)

Or

- (b) Discuss the key standards of WWW. (CO2, K3)

13. (a) Explain how to insert a link in HTML. (CO3, K5)

Or

- (b) Write the procedure to use Audio and Video element in HTML. (CO3, K5)

14. (a) Describe about JavaScript Objects in detail.  
(CO4, K5)

Or

- (b) Describe about JavaScript Objects in detail.  
(CO4, K5)

15. (a) Why Bootstrap is a promising framework?  
Explain. (CO5, K3)

Or

- (b) Discuss how to add offset to columns using Bootstrap Grid Classes. (CO5, K3)

**Part C**

(5 × 8 = 40)

Answer **all** questions, not more than 1000 words each

16. (a) Illustrate the growth of Internet with neat sketch.  
(CO1,K1)

Or

- (b) Discuss in detail about OSI reference model.  
(CO1, K1)

17. (a) Write a detailed note on Domain Name System with examples.  
(CO2, K3)

Or

- (b) Explain any two standardized Email Representation.  
(CO2, K3)

18. (a) How Total Validator tool works in Images? Explain.  
(CO3, K5)

Or

- (b) Write a HTML code to create Application Form.  
(CO3, K5)

19. (a) Explain in detail about Conditional Statements in JavaScript with example.  
(CO4, K5)

Or

- (b) Write a program to handle events from button elements in JavaScript.  
(CO4, K5)

20. (a) Write the procedure to install and include Bootstrap in HTML file.  
(CO5, K5)

Or

- (b) How to customize the grid for small devices in Bootstrap? Explain.  
(CO5, K5)



**R3073**

**Sub. Code**

**303NM1**

**M.Voc. DEGREE EXAMINATION, APRIL – 2025**

**Fashion Technology**

**NME – FASHION DESIGNING**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct option.

1. Which term described a short-lived fashion trend?  
(CO1, K1)  
(a) Chic (b) Knock-off  
(c) Avant-garde (d) Fad
2. Which of the following is NOT a type of design? (CO1, K1)  
(a) Structural (b) Decorative  
(c) Abstract (d) Sustainable
3. Which of the following is NOT an element of design?  
(CO2, K1)  
(a) Line (b) Shape  
(c) Balance (d) Texture
4. Which type of balance is achieved when elements are identical on both sides? (CO2, K1)  
(a) Symmetrical (b) Asymmetrical  
(c) Radial (d) Proportional

5. Which of the following is a secondary colour? (CO3, K1)
- (a) Red (b) Green  
(c) Yellow (d) Blue
6. A Monochromatic colour scheme uses: (CO3, K1)
- (a) One colour in different shades  
(b) Opposite colours on the colour wheel  
(c) Three equidistant colours  
(d) Two adjacent colours
7. Who is considered the first modern fashion designer? (CO4, K1)
- (a) Ritu Kumar (b) Charles Frederick Worth  
(c) Coco Chanel (d) Rohit Bal
8. Which designer was appointed head of the French fashion house, Jean Louis Scherrer, to design their pret-a-porter collections in 2002? (CO4, K1)
- (a) Ritu Ben (b) Ritu Kumar  
(c) Rohit Bal (d) Coco Chanel
9. Which city is known as the fashion capital of the world? (CO5, K1)
- (a) Paris (b) Tokyo  
(c) New York (d) London
10. What is a wardrobe? (CO5, K1)
- (a) Fashion styling  
(b) Collection of clothes  
(c) Image management  
(d) Portfolio collection

**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Define fashion forecasting and explain its importance. (CO1, K2)

Or

- (b) Describe a fashion cycle. (CO1, K2)

12. (a) Explain the significance of balance in fashion design. (CO2, K2)

Or

- (b) How does proportion influence garment design? (CO2, K2)

13. (a) Describe the importance of colour psychology in fashion. (CO3, K2)

Or

- (b) What are analogous colours? Provide examples. (CO3, K2)

14. (a) Discuss the responsibilities of a fashion designer. (CO4, K3)

Or

- (b) Recall the works of J.J. Valaya. (CO4, K2)

15. (a) Discuss the role of a fashion stylist. (CO5, K3)

Or

- (b) List the major world fashion centres and their significance. (CO5, K2)

**Part C**

(5 × 8 = 40)

Answer **all** questions not more than 1000 words each.

16. (a) Outline the factors influencing fashion trends with examples. (CO1, K3)

Or

- (b) Illustrate the difference between fad, classic, and avant- garde fashion with real-world examples. (CO1, K3)

17. (a) Evaluate the importance of emphasis in a garment and how it affects the overall design. (CO2, K5)

Or

- (b) Analyze the elements of Design and their importance. (CO2, K4)

18. (a) Demonstrate how split complementary and triadic colours can be used in a fashion collection. (CO3, K3)

Or

- (b) Assess the impact of warm and cool colours on visual perception and clothing choices. (CO3, K4)

19. (a) Compare the design philosophies of any two famous fashion designers. (CO4, K4)

Or

- (b) Discuss about the international fashion designers. (CO4, K3)

20. (a) Develop a personal styling guide for professionals in the fashion industry. (CO5, K5)

Or

- (b) Analyze the different boards used in portfolio development and their significance. (CO5, K4)

**R3074**

**Sub. Code**

**304NM1**

**M.Voc. DEGREE EXAMINATION, APRIL – 2025**

**Software Development**

**NME : WEB DESIGNING**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions  
by choosing the correct option.

1. \_\_\_\_\_ network can serve an individual consumer.  
(CO1, K1)  
(a) Private (b) Public  
(c) Physical (d) MAC
2. ISO 9000 was introduced in \_\_\_\_\_. (CO1, K1)  
(a) 1978 (b) 1987  
(c) 1981 (d) 1998
3. What was the name of the first network? (CO2, K3)  
(a) ASAPNET (b) ARPANET  
(c) CNET (d) NSFNET
4. \_\_\_\_\_ can transfer any type of data, including documents, images and music. (CO2, K3)  
(a) FTP (b) DNS  
(c) IMAP (d) POP

5. Which entity is not for both HTML and XML? (CO3, K4)  
(a) apos (b) It  
(c) cent (d) quot
6. Web pages are written in \_\_\_\_\_. (CO3, K4)  
(a) Hmtl (b) Css  
(c) Html (d) JavaScript
7. \_\_\_\_\_ special functions that create and initialize the properties of newly created objects. (CO4, K4)  
(a) Constructor (b) Destructor  
(c) Arrays (d) Object
8. What is the observation made in the following JavaScript code? if (!a[i]) continue; (CO4, K4)  
(a) Skips the defined elements  
(b) Skips the existent elements  
(c) Skips the null elements  
(d) both (a) and (b)
9. The maximum width of the container for Tablet screen is \_\_\_\_\_. (CO5, K6)  
(a) 750px (b) 650px  
(c) 850px (d) 950px
10. Which of the following is not the default style used in Bootstrap CSS? (CO5, K6)  
(a) Headings (b) Lists  
(c) Forms (d) Class

**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Describe about Recent trends of Multimedia. (CO1,K2)

Or

- (b) Why Networking seems difficult? Explain. (CO1,K2)

12. (a) Write a note on: (CO2, K3)  
(i) MIME (ii) RFC2822

Or

- (b) Discuss about Domain Name System. (CO2, K3)

13. (a) Illustrate HTML Structure in detail. (CO3, K4)

Or

- (b) Describe rowspan and colspan attributes in HTML Frame. (CO3, K4)

14. (a) Explain about: (CO4,K4)  
(i) Math Object (ii) Number Object in JavaScript.

Or

- (b) Difference between Implicit and Explicit type conversion. (CO4, K4)

15. (a) Describe about Emphasis classes. (CO5, K6)

Or

- (b) Differentiate Bootstrap Grid variables and Grid mixins. (CO5, K6)

**Part C**

(5 × 8 = 40)

Answer **all** questions, not more than 1000 words each

16. (a) Discuss in detail about packet switching and networking technologies. (CO1, K2)

Or

- (b) Write a detailed note on TCP/IP Internetworking. (CO1, K2)

17. (a) Illustrate FTP communication with neat sketch. (CO2, K3)

Or

- (b) How to transfer web documents with HTTP? Explain. (CO2, K3)

18. (a) Describe in detail about Forms and its attributes. (CO3, K4)

Or

- (b) Write a HTML code to create timetable. (CO3, K4)

19. (a) Explain the events that can be created using Textboxes and Passwords. (CO4, K5)

Or

- (b) Discuss about string properties and methods in JavaScript. (CO4, K5)

20. (a) Write a bootstrap program to create blog layout using Bootstrap mixins and variables. (CO5, K6)

Or

- (b) How to implement Bootstrap Base CSS? Explain. (CO5, K6)



**R3075**

**Sub. Code**

**311NM2**

**B.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Catering Science and Hotel Management**

**NME : ADVANCED CATERING SERVICES**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions  
by choosing the correct option.

1. The concept of Fast food was first introduced in \_\_\_\_\_.  
(CO1, K1)  
(a) UK (b) USA  
(c) USSR (d) Japan
2. IRCTC offers \_\_\_\_\_ services for its passengers.  
(CO1, K1)  
(a) Ticket bookings (b) Hotels  
(c) Cab services (d) All the above
3. The central kitchen in cruise liners are known as \_\_\_\_\_.  
(CO2, K2)  
(a) Live kitchen (b) Satelite kitchen  
(c) Galley (d) Cloud Kitchen
4. \_\_\_\_\_ kind of menu is prepared in cargo vessels.  
(CO2, K2)  
(a) fixed menu (b) static menu  
(c) a la carte menu (d) cyclic menu

5. Kitchen in the hospitals can be ————— type.  
(CO3, K1)
- (a) Centralized (b) Decentralized  
(c) (a) only (d) Both (a) and (b)
6. The food items provided at hospital catering are  
(CO3, K1)
- (a) Fibre diet (b) Protein diet  
(c) Low fat diet (d) All the above
7. Which one of the following table plans is suitable for sensitive discussion?  
(CO3, K2)
- (a) Theatre style (b) Starfish style  
(c) Herring bone (d) Classroom style
8. The area allowance per guest in theatre style arrangement is  
(CO4, K1)
- (a) 6' (b) 8'  
(c) 10' (d) 12'
9. Banquet means —————?  
(CO5, K1)
- (a) Welfare catering  
(b) Function catering  
(c) Transport catering  
(d) Institutional catering
10. The small raised platform either on a stage or on floor with or without a mic is  
(CO5, K1)
- (a) Side board  
(b) Head Table  
(c) News Paper Stand  
(d) Podium

**Part B**

(5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Examine the operations of airline catering services.  
(CO1, K2)

Or

- (b) How does menu planning is carried out in railway catering sector?  
(CO1, K2)
12. (a) How does the menu is compiled in cruise line catering?  
(CO2, K1)

Or

- (b) What are the different types of food offered Palace on wheels?  
(CO2, K1)
13. (a) Illustrate the difficulties faced on a hospital catering.  
(CO3, K2)

Or

- (b) Why does the importance needs to be given for hospital menu planning?  
(CO3, K1)
14. (a) Discuss the recent trends on school meal services provided for students.  
(CO4, K4)

Or

- (b) Difference between: CSIR and ICAR in food research.  
(CO4, K2)
15. (a) How does the contract food preparation helps in outdoor catering?  
(CO5, K1)

Or

- (b) What do you mean by miscellaneous forms of catering services?  
(CO5, K4)

**Part C**

(5 × 8 = 40)

Answer **all** questions not more than 1000 words each

16. (a) Explain importance of flight kitchen units and their food preparation. (CO1, K1)

Or

- (b) List out the characteristics of railway catering services. (CO1, K1)

17. (a) Outline the procedure for carrying out the service of snacks and beverages in cruise lines. (CO2, K2)

Or

- (b) What kind of menu is planned in cruise liners? Write with examples. (CO2, K2)

18. (a) List out the equipment commonly found in hospital kitchens. (CO3, K4)

Or

- (b) Prepare a detailed diet menu for a diabetic patient in a private hospital. (CO3, K5)

19. (a) Describe the importance of nutritive value in menu planning. (CO4, K6)

Or

- (b) Distinguish between: Menu planning in Institutional and Industrial Catering. (CO4, K6)

20. (a) Hospital diet food is the fastest way to cure. — Justify the statement. (CO5, K2)

Or

- (b) Explain the concept of speculative functions. Give examples. (CO5, K1)

<b>R3076</b>
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<b>Sub. Code</b>
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<b>316NM1</b>
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**B.A. DEGREE EXAMINATION, APRIL – 2025**

**Gender Studies**

**NME : WOMEN'S STUDIES FOR COMPETITIVE  
EXAMINATION**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions by choosing  
the correct option.

1. Which legislation, passed in 1856, legalized widow remarriage in India? (CO1, K1)
  - (a) The Child Marriage Restraint Act
  - (b) The Widow Remarriage Act
  - (c) The Hindu Marriage Act
  - (d) The Dowry Prohibition Act
  
2. Who was the first Indian woman to become a physician and advocate for women's education in pre-independence India? (CO1, K1)
  - (a) Sarojini Naidu
  - (b) Rani Lakshmibai
  - (c) Anandi Gopal Joshi
  - (d) Kasturba Gandhi

3. Who was the first woman from Tamilnadu to become a Supreme Court judge in India? (CO2, K1)
- (a) Justice B. Sudha
  - (b) Justice R. Banumathi
  - (c) Justice M. Fathima Beevi
  - (d) Justice G. Rohini
4. Which Tamilnadu-born astronaut became the first woman of Indian origin in space? (CO2, K1)
- (a) Sunita Williams
  - (b) Kalpana Chawla
  - (c) Tessy Thomas
  - (d) None of the above
5. Who is known as the “Iron Lady of Tamilnadu”? (CO3, K2)
- (a) Rukmini Lakshmipathi
  - (b) Smt. Jayalalitha
  - (c) Muthulakshmi
  - (d) Janaki Ammal
6. Which dancer and reformer from Tamil Nadu was instrumental in reviving the traditional Indian dance form Bharatanatyam? (CO3, K1)
- (a) Balasaraswati
  - (b) Yamini Krishnamurthy
  - (c) Rukmini Devi Arundale
  - (d) Mrinalini Sarabhai

7. Under which article of the Indian Constitution can the state make special provisions for women and children? (CO4, K2)
- (a) Article 14
  - (b) Article 15(3)
  - (c) Article 16
  - (d) Article 19
8. Which legal provision in Tamilnadu provides for the reservation of seats for women in local bodies? (CO4, K1)
- (a) Tamilnadu Panchayats Act
  - (b) To prohibit dowry practices
  - (c) Tamilnadu Reservation of Seats Act
  - (d) Tamilnadu Women's Empowerment Act
9. Which program in Tamilnadu aims to improve maternal and child health by providing free medical services to pregnant women and children? (CO5, K1)
- (a) Amma Baby Care Kit Scheme
  - (b) Dr. Muthulakshmi Reddy Maternity Benefit Scheme
  - (c) Amma Maternity Nutrition Kit Scheme
  - (d) Amma Kudineer Thittam
10. What is the goal of the Tamilnadu Women Development Corporation? (CO3, K1)
- (a) To provide housing loans to women
  - (b) To implement welfare schemes for women's economic development
  - (c) To offer free legal aid to women
  - (d) To ensure women's participation in sports

**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Analyse the impact of education on status of women in India. (CO1, K4)

Or

- (b) Analyse the status of women in India pre and post-Independence. (CO1, K4)

12. (a) Discuss about the achievements of any one women of India. (CO2, K3)

Or

- (b) Write a short note on achievements of women in Tamilnadu. (CO2, K3)

13. (a) Discuss the impact of women reformers in India (CO3, K3)

Or

- (b) Discuss about any one of women reformer. (CO3, K3)

14. (a) What are the Constitutional provisions for Women in India? Explain. (CO4, K3)

Or

- (b) Write a short note on the legal rights for Women in India. (CO4, K4)

15. (a) Explain any one policy for Women in India. (CO5, K3)

Or

- (b) Analyse the programmes for Women in Tamilnadu. (CO5, K4)



**Part C**

(5 × 8 = 40)

Answer **all** questions not more than 1000 words each.

16. (a) Examine the factors affecting the status of women in India. (CO1, K4)

Or

- (b) Write a short note on status of women in contemporary society. (CO1, K3)

17. (a) Write about any two women achievers in Tamilnadu (CO2, K3)

Or

- (b) Discuss the impact of women achiever in India (CO2, K3)

18. (a) Examine the impact of women reformers in India. (CO3, K4)

Or

- (b) Write about any two social women reformers in India. (CO3, K3)

19. (a) Explain the constitutional provision for women at work. (CO4, K3)

Or

- (b) Briefly explain the legal rights of women on property. (CO4, K3)

20. (a) Write a short note on the programmes for women/girls education in Tamilnadu. (CO5, K3)

Or

- (b) Explain the programmes in India for women empowerment. (CO5, K3)
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R3077

Sub. Code

411NM1

M.A. DEGREE EXAMINATION, APRIL – 2025

Tamil

NME : நாட்டுப்புறவியல் (Folklore)

(CBCS – 2022 onwards)

Time : 3 Hours

Maximum : 75 Marks

பகுதி அ

(10 × 1 = 10)

அனைத்து வினாக்களுக்கும் சரியான விடையை தேர்ந்தெடுத்து  
எழுதுக.

1. 'தமிழ் நாட்டுப் பழங்கதைகள்' எனும் நூலின் ஆசிரியர்  
(CO1, K1)  
(அ) கா. அப்பாதுரை (ஆ) சு.அ. இராமசாமிப் புலவர்  
(இ) கு. சின்னப்ப பாரதி (ஈ) வை. கோவிந்தன்
2. 'நாட்டுப்புறக் கதைகளின் உள்ளமைப்பு' எனும் நூலை  
வெளியிட்டவர் (CO1, K1)  
(அ) ரோஸ்லெட் டேனிபாய்  
(ஆ) விளாதிமிர் பிராப்  
(இ) ஆலன் டண்ட்ஸ்  
(ஈ) ஸ்டீபன்
3. 'Popular antiquities' என்ற இலத்தீன் சொல்லுக்கு மாற்றாக  
'Folklore' என்ற ஆங்கிலத் தொடரை உருவாக்கியவர்  
(CO2, K1)  
(அ) வில்லியம் ஜான் தாமஸ்  
(ஆ) தே. லார்து  
(இ) நா. வானமாமலை  
(ஈ) அ. பிச்சை

4. Folklore க்கு இணையான தமிழ்ச் சொல்லாக “நாட்டுப்புறவியல்” என்ற கலைச் சொல்லை முதன்முதலில் பயன்படுத்தியவர் (CO2, K1)
- (அ) சு.சண்முக சுந்தரம்  
(ஆ) அ.மு. பரமசிவானந்தம்  
(இ) நா. வானமாமலை  
(ஈ) செ. அன்னகாழு
5. ‘தமிழகப் பழமொழிகள்’ எனும் நூலின் ஆசிரியர் (CO1, K1)
- (அ) கே.என். லெட்சுமணன்  
(ஆ) எஸ். வேணுகோபால் நாயுடு  
(இ) க. கருப்பண்ண பிள்ளை  
(ஈ) தி. செல்வ கேசவராய முதலியார்
6. ‘நாட்டுப்புறவியலின் தந்தை’ என அழைக்கப்படுபவர் (CO4, K4)
- (அ) ஜேக்கப் கிரீம் (ஆ) மாக்ஸ் முல்லர்  
(இ) கி.வா. ஜகந்நாதன் (ஈ) ஆறு அழகப்பன்
7. நாடகத் துறையில் தமிழக அரசிடம் கலைமாமணி விருது பெற்றவர் (CO4, K4)
- (அ) ஆறு. அழகப்பன் (ஆ) நா. வானமாமலை  
(இ) கி.வா. ஜகந்நாதன் (ஈ) சு. சண்முக சுந்தரம்
8. ‘பழமொழி நானூறு’ எனும் நூலின் ஆசிரியர் (CO4, K4)
- (அ) முன்றுறையரையனார்  
(ஆ) அமிர்தசாகரர்  
(இ) காரியாசான்  
(ஈ) கபிலர்
9. முதன்முதலில் தமிழ்ப் பழமொழிகளைத் தொகுத்து உள்ளது உள்ளபடி வெளியிட்டவர் (CO1, K1)
- (அ) ஜேக்கப் கிரீம் (ஆ) பீட்டர் பெர்சிவல்  
(இ) மாக்ஸ் முல்லர் (ஈ) வில்லியம் ஜான் தாமஸ்

10. தென் மாவட்டங்களில் மக்கள் வேளாண் தொழிற்பாடல்களை எவ்வாறு அழைக்கின்றனர்? (CO1, K1)

(அ) நாட்டுப்பாட்டு (ஆ) காட்டுப் பாட்டு

(இ) கும்மிப் பாட்டு (ஈ) சுத்திப் பாட்டு

**பகுதி ஆ**

(5 × 5 = 25)

**அனைத்து** வினாக்களுக்கும் 500 சொற்களுக்கு மிகாமல் விடையளிக்கவும்.

11. (அ) 'பழமொழியும் மரபுத் தொடரும்' - விளம்புக. (CO5, K1)

(அல்லது)

(ஆ) வேளாண்மைப் பழமொழிகள் குறித்துப் பகர்க. (CO5, K1)

12. (அ) ஒப்பாரிப் பாடல்கள் குறித்து இயம்புக. (CO2, K1)

(அல்லது)

(ஆ) கொண்டாட்டப் பாடல்கள் பற்றிப் பகர்க. (CO2, K2)

13. (அ) தாலாட்டுப் பாடல்கள் விளம்புக. (CO2, K4)

(அல்லது)

(ஆ) குழந்தைப் பாடல்கள் குறித்து இயம்புக. (CO2, K4)

14. (அ) தேவராட்டம் குறித்துப் பகர்க. (CO3, K4)

(அல்லது)

(ஆ) ஓயிலாட்டம் குறிப்பு வரைக. (CO3, K2)

15. (அ) கைவினைப் பொருட்கள் பற்றி எழுதுக. (CO4, K1)

(அல்லது)

(ஆ) நாட்டுப்புற நம்பிக்கைகள் குறித்து விளம்புக. (CO4, K2)

**அனைத்து** வினாக்களுக்கும் 1000 சொற்களுக்கு மிகாமல் விடையளிக்கவும்.

16. (அ) நாட்டுப்புறக் கூத்து வகைகளைக் கட்டுரை வரைக. (CO3, K1)

(அல்லது)

- (ஆ) நாட்டுப்புறக் கலைகளை விரித்துரைக்க. (CO3, K2)

17. (அ) 'நாட்டுப்புறப் பாடல்' வகைகளை விவரிக்க. (CO4, K1)

(அல்லது)

- (ஆ) இறப்புச் சடங்குப் பாடல்களைத் தொகுத்துரைக்க. (CO4, K2)

18. (அ) 'நாட்டுப்புறக் கதைகள்' கட்டுரைக்க. (CO2, K4)

(அல்லது)

- (ஆ) நாட்டுப்புற நாடகங்கள் - விரித்துரைக்க. (CO2, K4)

19. (அ) விளையாட்டுகள் - கட்டுரை வரைக. (CO4, K4)

(அல்லது)

- (ஆ) நாட்டுப்புற மரபுகள் குறித்து விரித்துரைக்க. (CO4, K4)

20. (அ) 'நாட்டுப்புற மருத்துவம்' குறித்து கட்டுரை வரைக. (CO5, K1)

(அல்லது)

- (ஆ) நாட்டுப்புற விழாக்கள் குறித்துத் தொகுத்துரைக்க. (CO5, K2)

**R3078**

**Sub. Code**

**414NM1**

**M.A. DEGREE EXAMINATION, APRIL – 2025**

**Theatre and Film Studies**

**NME : STREET THEATRE**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. Thrust stage often refers to \_\_\_\_\_ (CO1, K2)  
(a) Closed (b) Open  
(c) Round (d) Intimate
2. Arena theatre means (CO1, K2)  
(a) Round (b) Open  
(c) Closed (d) No spot
3. Parody rock songs was written by (CO2, K2)  
(a) Ilyan Mass (b) Boris Vian  
(c) Jazz player (d) Boris Sam
4. Jana natya Manch was founded by (CO2, K2)  
(a) Safdar Hashmi (b) Badal Sarkar  
(c) Girish Karnad (d) Vijay Tendulkar

5. Unplanned performance is usually \_\_\_\_\_ (CO3, K2)  
 (a) Authentic  
 (b) Improved  
 (c) Stage performance  
 (d) Mime
6. Nukkad Natak means \_\_\_\_\_ (CO3, K4)  
 (a) Street plays (b) Mime plays  
 (c) Mask plays (d) State Plays
7. One of the new technology in street theatre is \_\_\_\_\_ (CO4, K4)  
 (a) Sound system (b) 3D Painting  
 (c) Amphi theatre (d) Noh Theatre
8. Bim Mason wrote book on \_\_\_\_\_ (CO4, K4)  
 (a) Thrust theatre (b) Street theatre  
 (c) Amphi theatre (d) Noh theatre
9. Terrukuthu belongs to \_\_\_\_\_ (CO5, K6)  
 (a) Karnataka (b) Tamil-Nadu  
 (c) Kerala (d) North-India
10. In Punjab street plays are called \_\_\_\_\_ (CO5, K6)  
 (a) Nautanki (b) Bhas  
 (c) Rahts (d) Budhi Nataka

**Part B**

(5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Explain the changing attitude towards street theatre. (CO1, K2)

Or

- (b) Outline the historical context of street theatre. (CO1, K2)



12. (a) Classify the props and sets used in street theatre.  
(CO2, K2)

Or

- (b) Express, how audience are controlled in street theatre.  
(CO2, K2)
13. (a) Explain the concept of group coordination in street theatre performance.  
(CO3, K4)

Or

- (b) Summarize on the women performers of street theatre.  
(CO3, K4)
14. (a) Elaborate on the economic situation in street theatre.  
(CO4, K6)

Or

- (b) Formulate the role of public reaction in a performance.  
(CO4, K4)
15. (a) Elaborate the concept of beyond theatre. (CO5, K6)

Or

- (b) Discuss on the space in street theatre. (CO5, K6)

**Part C** (5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Explain the situation of performing artists of street theatre.  
(CO1, K2)

Or

- (b) Summarise the origin and development of street theatre in India.  
(CO1, K2)

17. (a) Elaborate on the properties and set used in street theatre. (CO2, K2)

Or

- (b) Compare small - scale and large scale groups in street theatre. (CO2, K2)

18. (a) Illustrate on the street theatre festivals. (CO3, K2)

Or

- (b) Explain the blending and contrasting with the environment of street theatre (CO3, K2)

19. (a) Illustrate with references on street theatre performers and their performance. (CO4, K4)

Or

- (b) Explain the financial challenges faced by street theatre. (CO4, K4)

20. (a) Elaborate on the role of new technologies in street theatre. (CO5, K6)

Or

- (b) As an audience, discuss on any one street theatre performance. (CO5, K6)

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<b>R3079</b>
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<b>Sub. Code</b>
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<b>415NM1</b>
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**M.A. DEGREE EXAMINATION, APRIL – 2025**

**History**

**NME : GENERAL STUDIES FOR COMPETITIVE  
EXAMINATION**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. Which city was the largest urban center of the Indus Valley civilization? (CO1, K1)  
  
(a) Mohenjo–Daro      (b) Harappa  
  
(c) Chanhū–Daro      (d) Lathal
  
2. Which of the following was a characteristic feature of the Mahojanapadas? (CO1, K1)  
  
(a) Tribal System  
  
(b) Monarchical System  
  
(c) Republican System  
  
(d) Federal System

3. Who was the Delhi Sultan who introduced the token currency system? (CO2, K1)
- (a) Iltutmish
  - (b) Balban
  - (c) Alauddin Khalji
  - (d) Muhammad bin Tughlaq
4. What was the name of the treaty signed in 1756 between the Mughal Empire and the East India Company? (CO2, K1)
- (a) Treaty of Allahabad
  - (b) Treaty of Surat
  - (c) Treaty of Bengal
  - (d) Treaty of Aggarh
5. Who led the Indigo Rebellion in Bengal in 1859–1860? (CO3, K1)
- (a) Dinabandhu Mitra
  - (b) Bankim Chandra Chattopadhyay
  - (c) Rabindranath Tagore
  - (d) Mahatma Gandhi
6. What was the main slogan of the Quit India Movement? (CO4, K1)
- (a) “Quit India”
  - (b) “Leave India”
  - (c) “India for Indians”
  - (d) “Freedom Now”

7. What was the main objective of the Indian National Congress? (CO4, K1)
- (a) To overthrow the British government
  - (b) To promote Indian culture and heritage
  - (c) To secure greater autonomy for India
  - (d) To promote economic development in India
8. Which of the following was a key feature of the Santal Hul rebellion? (CO3, K1)
- (a) Armed straggle against British forces
  - (b) Non-violent protests and demon stations
  - (c) Boycott of British goods and services
  - (d) All the above
9. Which article of the Indian Constitution guarantees the Right to freedom of speech and expression? (CO5, K1)
- (a) Article 14                      (b) Article 19
  - (c) Article 21                      (d) Article 25
10. What is the name of the committee that dratted the Indian Constitution? (CO5, K1)
- (a) Constituent Assembly
  - (b) Drafting Committee
  - (c) Advisory Committee
  - (d) Steering Committee

**Part B**

(5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Examine the economic system of the Vedic Period.  
(CO1, K4)

Or

- (b) Simplify the cultural achievements of the Gupta period.  
(CO1, K4)

12. (a) Classify the significance of the Kushana Empire in the spread of Buddhism.  
(CO1, K4)

Or

- (b) Distinguish between the significance of the Vedas in Aryan Society.  
(CO1, K4)

13. (a) Examine the significance of the Malwa Sultanate ruler, Muhamud Khalji.  
(CO2, K5)

Or

- (b) Describe the characteristics of the Paleolithic age in India.  
(CO1, K4)

14. (a) Describe the causes of the Mopla Rebellion in Malabar.  
(CO3, K2)

Or

- (b) Describe the significance of the Deccan Rebellion in Indian History.  
(CO3, K2)

15. (a) Examine the concept of “We the people” in the preamble. (CO5, K2)

Or

- (b) Explain the significance of the Directive principles of state policy in the Indian constitution. (CO5, K2)

**Part C** (5 × 8 = 40)

Answer **all** the questions not more than 1,000 words each.

16. (a) Describe the characteristics of the Mesolithic culture in India. (CO1, K4)

Or

- (b) Explain the administrative system of the Vijayanagara Empire. (CO2, K5)

17. (a) Explain the causes of the Kol Rebellion of 1831–1832. (CO3, K2)

Or

- (b) Evaluate the main objectives of the Moderate group in the Indian National Congress. (CO4, K5)

18. (a) Describe the role of Bal Gangadhar Tilak in the Extremist Movement. (CO4, K5)

Or

- (b) Explain the reasons for the boycott of the Simon Commission by Indian leaders. (CO4, K5)

19. (a) Explain the salient features of the Constitution. (CO5, K2)

Or

- (b) Explain the Directive principles of state policy. (CO5, K2)

20. (a) Evaluate the main causes of the Civil Disobedience Movement in India. (CO4, K5)

Or

- (b) Justify the role of Mahatma Gandhi in the Non-Co-operation Movement. (CO4, K5)
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<b>R3080</b>
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<b>Sub. Code</b>
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<b>452NM1</b>
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**M.S.W. DEGREE EXAMINATION, APRIL – 2025**

**Social Work**

**NME : SOCIAL ENTREPRENEURSHIP**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. \_\_\_\_\_ is the attempt to draw upon business techniques to find solutions to social problems. (CO1, K2)
  - (a) social entrepreneurship
  - (b) business entrepreneurship
  - (c) entrepreneurship
  - (d) social policy
2. \_\_\_\_\_ drive social innovation and transformation in various fields including education health, and environment and enterprise development. (CO1, K2)
  - (a) social entrepreneurs
  - (b) businessman
  - (c) social workers
  - (d) social reformers

3. What is the primary focus of social entrepreneurship?  
(CO2, K2)
- (a) Maximizing shareholder profits
  - (b) Creating positive social impact
  - (c) Minimizing competition
  - (d) Expanding market share
4. Which characteristic is typically associated with social entrepreneurs?  
(CO2, K4)
- (a) Sole focus on financial gains
  - (b) Risk-averse behavior
  - (c) Innovation for social change
  - (d) Emphasis on traditional business models
5. What role does government policy play in supporting women entrepreneurship?  
(CO3, K4)
- (a) Irrelevant to business success
  - (b) Can provide funding, training, and incentives
  - (c) Creates unnecessary bureaucracy
  - (d) Discourages women from starting businesses
6. Which factor is often cited as a challenge for women entrepreneurs in accessing funding for their businesses?  
(CO3, K4)
- (a) Lack of interest in entrepreneurship
  - (b) Limited educational qualifications
  - (c) Gender bias and discrimination
  - (d) Overemphasis on family responsibilities

7. What is a common characteristic of small enterprises?  
(CO4, K2)
- (a) Extensive bureaucratic structures
  - (b) Limited employee count and revenue
  - (c) Global market dominance
  - (d) Exclusive focus on short-term goals
8. How does innovation contribute to the success of small enterprises?  
(CO4, K2)
- (a) By hindering adaptability
  - (b) By increasing operational costs
  - (c) By fostering competitiveness and growth
  - (d) By discouraging employee creativity
9. Which financial institution in India provides credit support and development assistance to startups and small businesses?  
(CO5, K4)
- (a) State Bank of India (SBI)
  - (b) Reserve Bank of India (RBI)
  - (c) Small Industries Development Bank of India (SIDBI)
  - (d) National Bank for Agriculture and Rural Development (NABARD)
10. The National Small Industries Corporation (NSIC) facilitates the growth of small businesses by providing what type of support?  
(CO5, K6)
- (a) Financial assistance
  - (b) Export promotion
  - (c) Market research
  - (d) Technological innovation

**Part B**

(5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Illustrate the characteristics of Social Entrepreneurship. (CO1, K1)

Or

- (b) Write note on determinants of Entrepreneurial success. (CO1, K1)

12. (a) How would you infer the factors influencing the Entrepreneurial group? (CO2, K2)

Or

- (b) Estimate the role of NGOS in promoting intervention in Entrepreneurship. (CO2, K2)

13. (a) Explain the Challenges and barriers faced by Women Entrepreneurs. (CO3, K3)

Or

- (b) Sketch the initiatives for Women Social Entrepreneurship. (CO3, K3)

14. (a) How would you identify the business opportunity for setting up a Small business Enterprise? (CO4, K4)

Or

- (b) How would you appraise the importance of marketing in small business Enterprises? (CO4, K3)

15. (a) Collaborate your thoughts about the functions of SIDBI. (CO4, K4)

Or

- (b) Write a note NSIC in promoting Social Entrepreneurship. (CO5, K5)

**Part C** (5 × 8 = 40)

Answer **all** the questions not more than 1,000 words each.

16. (a) Discuss in detail the historical Development of Social Entrepreneurship. (CO1, K1)

Or

- (b) How can social entrepreneurship be leveraged to address environmental challenges? (CO1, K2)

17. (a) Evaluate the role of collaboration and partnerships in advancing social entrepreneurship. (CO2, K4)

Or

- (b) Classify steps involved in developing the Entrepreneurship Plan. (CO2, K3)

18. (a) Relate the significance of Women Entrepreneurship, and why is it considered an essential component of economic development. (CO3, K3)

Or

- (b) Discuss the potential benefits and risks of scaling up a successful social enterprise. (CO3, K3)

19. (a) Distinguish the scope of Micro Enterprise Development. (CO4, K4)

Or

- (b) How would evaluate the scope of Financial Management in Small Business Enterprises? (CO4, K4)

20. (a) Connect the role of NSIC in promoting Social Entrepreneurship. (CO5, K5)

Or

- (b) Justify the functions of State Trade corporation of India. (CO5, K5)

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**R3081**

**Sub. Code**

**455NM1**

**M.A. DEGREE EXAMINATION, APRIL – 2025**

**Economics**

**NME : ECONOMIC FOR COMPETITIVE  
EXAMINATIONS**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions  
by choosing the correct option.

1. National income estimates in India is prepared by \_\_\_\_\_.  
(CO1, K1)
  - (a) Planning Commission
  - (b) RBI
  - (c) Finance Ministry
  - (d) C.S.O
2. Population density means \_\_\_\_\_. (CO1, K1)
  - (a) No. of persons living per s.q.km
  - (b) No. of persons living peer kilometer
  - (c) Ratio of population living below poverty line to total poverty
  - (d) No. of persons in a village
3. What is the main objective of India's economic planning?  
(CO2, K2)
  - (a) Industrialization
  - (b) Eradication of poverty
  - (c) Self-reliance
  - (d) All of the above

4. Which of the following is not a component of the 1991 economic reforms? (CO2, K2)  
(a) Liberalization (b) Privatization  
(c) Nationalization (d) Globalization
5. Which agency is responsible for procurement, distribution, and storage of food grains in India?(CO3, K1)  
(a) NABARD (b) FCI  
(c) NITI Aayog (d) ICAR
6. Which State is known as the 'Silicon Valley of India's due to its prominent IT industry? (CO3, K2)  
(a) Maharashtra (b) Tamil Nadu  
(c) Karnataka (d) Andhra Pradesh
7. What does CRR stand for in banking terms? (CO4, K1)  
(a) Cash Reserve Ratio  
(b) Credit Reserve Ratio  
(c) Current Reserve Ratio  
(d) Capital Reserve Ratio
8. Which of the following is an instrument of fiscal policy? (CO4, K2)  
(a) Open market operation  
(b) Government spending  
(c) Bank Rate  
(d) Repo Rate
9. What organization in India is responsible for compiling and publishing the balance of payment? (CO5, K1)  
(a) Ministry of Finance  
(b) Ministry of commerce and Industry  
(c) RBI  
(d) NITI Aayog
10. Which of the following is not a member of SAARC? (CO5, K1)  
(a) Nepal (b) Pakistan  
(c) Bangladesh (d) Myanmar



**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Describe the role of agriculture in India's national income. (CO1, K3)

Or

- (b) Write a short note on demographic transition. (CO1, K2)

12. (a) Briefly state the long – term objectives of planning in India. (CO2, K2)

Or

- (b) Explain the impact of privatization on the Indian economy post -1991. (CO2, K4)

13. (a) Illustrate the importance of the Auto-Mobile industry in Tamil Nadu. (CO3, K2)

Or

- (b) Interpret the industrial policy -1991. (CO3, K2)

14. (a) Discuss briefly about history of Indian banking system. (CO4, K1)

Or

- (b) Prepare a note on VAT and GST. (CO4, K2)

15. (a) What are the major challenges faced by Indian exporters in the global market? (CO5, K4)

Or

- (b) Give the brief history of SAARC. (CO5, K1)

**Part C**

(5 × 8 = 40)

Answer **all** questions not more than 1000 words each.

16. (a) Analyze the difficulties in the calculation of national income in India. (CO1, K4)

Or

- (b) Examine the trends in India's GDP growth over the past decade. (CO1, K4)

17. (a) Elucidate the types of economic planning in India. (CO2, K2)

Or

- (b) Critically evaluate the impact of the new economic policy on India's economic development. (CO2, K5)

18. (a) Apprise the impact of new economic policy on Indian agricultural sector. (CO3, K2)

Or

- (b) Give a critical account of the industrial development under five-year plans. (CO3, K2)

19. (a) Explain the functions of RBI. (CO4, K3)

Or

- (b) Explain the role of commercial banks in the Indian economy. (CO4, K3)

20. (a) Discuss the significance of foreign trade in the Indian economy. (CO5, K2)

Or

- (b) Assess the impact of exchange rate fluctuations on India's balance of payments. (CO5, K5)

<b>R3082</b>
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<b>Sub. Code</b>
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<b>464NM1</b>
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**M.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Applied Geology**

**NME — DISASTER MANAGEMENT AND MITIGATION**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct option.

1. Which type of disaster is characterized by a prolonged period of abnormally low rainfall? (CO2, K2)  
(a) Flood (b) Earthquake  
(c) Landslide (d) Drought
2. Which term refers to the ability of a community to withstand and recover from disasters? (CO2, K2)  
(a) Resilience (b) Vulnerability  
(c) Hazard (d) Risk
3. Which of the following is a key component of community-based Disaster Risk Reduction (DRR)? (CO1, K1)  
(a) Community involvement  
(b) Individual preparedness  
(c) Private sector engagement  
(d) Government intervention

4. What is the primary role of Panchayat Raj Institutions (PRIs) in disaster management? (CO1, K1)
- (a) Funding disaster relief
  - (b) Local-level implementation
  - (c) International coordination
  - (d) Policy making
5. Which scenario is most likely to result from extensive changes in land-use? (CO1, K1)
- (a) Improved air quality
  - (b) Greater environmental degradation
  - (c) Increased wildlife habitats
  - (d) Enhanced agricultural productivity
6. Why is local resource utilization important in climate change adaptation? (CO2, K2)
- (a) It is time-consuming and inefficient
  - (b) It leads to increased costs
  - (c) It ensures sustainability and relevance
  - (d) It increases dependency on foreign technology
7. Which component involves providing temporary housing to affected individuals? (CO1, K1)
- (a) Waste Management
  - (b) Food
  - (c) Health
  - (d) Shelter

8. What role does GIS play in the recovery phase of disaster management? (CO1, K1)
- (a) Distributing resources
  - (b) Mapping affected areas
  - (c) Providing medical aid
  - (d) Forecasting weather
9. Field work related to disaster management typically involves (CO2, K2)
- (a) Laboratory experiments
  - (b) Literature review
  - (c) Onsite surveys and data collection
  - (d) Theoretical modeling
10. Manmade disasters often result from (CO1, K1)
- (a) Human negligence or error
  - (b) Geological processes
  - (c) Natural causes
  - (d) Climatic changes

**Part B**

(5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Outline the factors contributing to community vulnerability in disaster prone areas. (CO2, K2)

Or

- (b) Illustrate how resilience can be built in communities to mitigate the effects of disasters. (CO3, K3)

12. (a) Justify the involvement of the central government in community-based Disaster Risk Reduction efforts and its impact on disaster preparedness. (CO3, K4)

Or

- (b) Explain how community participation can enhance the effectiveness of disaster mitigation strategies in rural areas. (CO5, K5)

13. (a) Assess the impact of development projects such as dams on local ecosystems. (CO6, K6)

Or

- (b) Evaluate the relevance of indigenous knowledge in developing climate change adaptation strategies. (CO5, K5)

14. (a) Interpret the significance of GIS in disaster preparedness. (CO4, K4)

Or

- (b) Evaluate the role of information technology in the response phase of disaster management. (CO4, K4)

15. (a) Compare fluvial flooding and pluvial flooding in terms of their causes and impacts. (CO2, K3)

Or

- (b) Interpret the significance of structural assessments in Earthquake Vulnerability Assessment. (CO4, K4)

**Part C**

(5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Discuss the political and psychosocial impacts of large scale disasters on affected populations.  
(CO3, K3)

Or

- (b) Relate the concept of risk to the various types of natural disasters and provide examples. (CO5, K5)
17. (a) Determine the challenges faced by local communities in implementing disaster prevention and preparedness measures. (CO4, K4)

Or

- (b) Prioritize the steps that communities should take to prepare for natural disasters, considering the roles of various stakeholders. (CO4, K4)
18. (a) Assess the potential impacts of climate change adaptation scenarios in the context of India.  
(CO5, K5)

Or

- (b) Interpret the role of appropriate technology in enhancing climate change adaptation efforts in India. (CO3, K3)
19. (a) Assess the impact of effective waste management on public health during disaster relief operations.  
(CO3, K3)

Or

- (b) Justify the need for comprehensive disaster damage assessment in the recovery phase. (CO3, K3)

20. (a) Distinguish between various types of man-made disasters and analyze their long-term effects on human infrastructure and the environment.  
(CO3, K3)

Or

- (b) Evaluate the impact of drought on agricultural practices, citing relevant case studies for assessment methods.  
(CO4, K4)
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<b>R3083</b>
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<b>Sub. Code</b>
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<b>502NM1</b>
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**M.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Bioinformatics**

**NME – MOLECULAR MODELING AND DRUG DESIGN**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. Which approach is commonly used during target identification? (CO1, K2)
  - (a) Knockdown or over expression of target genes
  - (b) High-throughput screening of compounds
  - (c) Clinical trials on large patient groups
  - (d) In vivo toxicity testing only
  
2. Which phase involves testing the drug on large groups of patients to confirm its efficacy? (CO1, K1)
  - (a) Phase 1 clinical trial
  - (b) Phase 2 clinical trial
  - (c) Phase 3 clinical trial
  - (d) Pre-clinical phase

3. Hybrid QM/MM methods are used because they allow:  
(CO2, K2)
- (a) Simultaneous simulation of large systems with detailed quantum calculations for specific regions
  - (b) Faster computation by ignoring quantum effects entirely
  - (c) Modeling of only non-bonded interactions in molecules
  - (d) Simplification of all molecular systems into classical mechanics models
4. What is the primary role of force fields in molecular mechanics?  
(CO2, K1)
- (a) To calculate the quantum states of molecules directly
  - (b) To define potential energy functions based on bonded and non-bonded interactions
  - (c) To simulate chemical reactions at the atomic level using wave functions
  - (d) To determine the temperature and pressure of a system experimentally
5. What does a Ramachandran Plot primarily show?  
(CO3, K2)
- (a) The secondary structure of a protein
  - (b) The tertiary structure of a protein
  - (c) The allowed conformations of amino acid residues in a protein
  - (d) The sequence similarity between proteins

6. What is the purpose of geometry optimization in protein structure prediction? (CO3, K2)
- (a) To refine the overall structure by minimizing energy
  - (b) To predict secondary structures
  - (c) To predict tertiary structures
  - (d) To visualize protein structures
7. What does QSAR modeling aim to achieve? (CO4, K2)
- (a) Predicting the biological activity of compounds based on their chemical structure
  - (b) Synthesizing new drugs from scratch
  - (c) Visualizing protein-ligand interactions
  - (d) Identifying pharmacophores based on receptor structures
8. Which statement best describes molecular descriptors? (CO4, K1)
- (a) They are numerical values that describe the properties or characteristics of molecules
  - (b) They are graphical representations of molecular structures
  - (c) They are methods used for synthesizing new drugs
  - (d) They are specific types of pharmacophores
9. What is a key characteristic of drug-like molecules according to Lipinski's Rule of Five? (CO5, K2)
- (a) High molecular weight and low lipophilicity
  - (b) Low molecular weight and high lipophilicity
  - (c) High molecular weight and high lipophilicity
  - (d) Low molecular weight and low lipophilicity

10. What type of enzyme inhibition involves the inhibitor binding only to the enzyme-substrate complex? (CO5, K1)
- (a) Competitive inhibition
  - (b) Uncompetitive inhibition
  - (c) Non-competitive inhibition
  - (d) Irreversible inhibition

**Part B**

(5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Describe the different methods of lead optimization.  
(CO1, K2)
- Or
- (b) Write a brief note on the significance of Pharmacophore Modelling in drug discovery.  
(CO1, K4)
12. (a) Explain how potential energy surfaces influence the interaction of molecules in MM.  
(CO2, K5)
- Or
- (b) What is energy minimization and explain the different methods employed.  
(CO2, K3)
13. (a) Briefly describe the Geometry optimization procedure using Density Functional theory.(CO3, K3)
- Or
- (b) Explain the importance of structure validation tools and give examples.  
(CO3, K4)
14. (a) Explain how molecular descriptors help in QSAR analysis.  
(CO4, K5)
- Or
- (b) Describe the advantages of High throughput virtual screening in molecular docking.  
(CO4, K3)

15. (a) Explain the chemistry of ADME and toxicity properties for drug molecules. (CO5, K3)

Or

- (b) Write a note on Receptor theories and drug-receptor interactions. (CO5, K2)

**Part C**

(5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Explain the different ways of target identification and validation. (CO1, K3)

Or

- (b) Describe in detail, the various Phases of drug discovery process. (CO1, K4)

17. (a) Discuss the general features of molecular mechanics force fields and its applications. (CO2, K3)

Or

- (b) Describe in detail, the various bonds and bond angles that are involved in molecular modelling. (CO2, K2)

18. (a) Explain the algorithms used in the protein Secondary structure prediction. (CO3, K3)

Or

- (b) Describe in detail, the steps involved in homology modeling and *ab-initio* modeling. (CO3, K5)

19. (a) Explain the different approaches of pharmacophore identification and mapping in drug design. (CO4, K5)

Or

- (b) Elaborate the methodology involved in De-novo ligand design and 3D database searching for molecular docking. (CO4, K3)

20. (a) Discuss in detail, the different phases and sites of Drug metabolism with the reactions involved.

(CO5, K3)

Or

- (b) Explain the various theories of enzyme inhibition and inactivation, its application in drug discovery.

(CO5, K4)

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**R3084**

<b>Sub. Code</b>
<b>24MBM2N1</b>

**M.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Biomedical Science**

**NME –LIFESTYLE DISEASES AND MANAGEMENT**

**(CBCS – 2024 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. What is the primary characteristic of lifestyle diseases?  
(CO1, K2)
  - (a) Communicable through contact
  - (b) Long latency period
  - (c) Caused by viruses
  - (d) Only affects elderly people
2. What is the main feature of metabolic syndrome?  
(CO2, K3)
  - (a) Low blood sugar
  - (b) Central obesity
  - (c) High physical activity
  - (d) Overproduction of insulin

3. Which disease is characterized by progressive airflow obstruction? (CO2, K3)
- (a) Asthma
  - (b) COPD
  - (c) Lung cancer
  - (d) Hypertension
4. Which of these is a superfood? (CO3, K4)
- (a) White rice                      (b) Blueberries
  - (c) Processed meat              (d) French fries
5. Which condition is characterized by reduced bone density? (CO4, K4)
- (a) Arthritis                      (b) Osteoporosis
  - (c) PCOS                      (d) Obesity
6. Cervical cancer is most commonly linked to (CO4, K4)
- (a) HPV infection              (b) Obesity
  - (c) Smoking                      (d) Stress
7. Public health campaign are most effective when (CO5, K5)
- (a) Focused on individual behavior change
  - (b) Ignored by media
  - (c) Supported by community engagement
  - (d) Targeted at specific age groups only
8. Which type of diet is most effective in reducing cardiovascular disease risk? (CO3, K4)
- (a) High-fat diet
  - (b) Low-sodium diet
  - (c) Processed food-rich diet
  - (d) Low-protein diet



9. What is a key preventative measure for cervical cancer?  
(CO4, K4)
- (a) Pap smear screening
  - (b) High protein diet
  - (c) Increased sugar intake
  - (d) Weight training exercises
10. What is the goal of the Global Action Plan for NCDs (2013-2030)?  
(CO5, K5)
- (a) Increase sedentary behavior
  - (b) Achieve a 25% reduction in premature deaths from NCDs
  - (c) Promote tobacco use
  - (d) Reduce health literacy

**Part B** (5 × 5 = 25)

Answer **all** the questions in not more than 500 words each.

11. (a) Write short notes on the key contributing factors of lifestyle diseases.  
(CO1, K2)
- Or
- (b) Discuss the relationship between sedentary lifestyle and the development of major lifestyle diseases, citing relevant examples.  
(CO1, K2)
12. (a) Explain the pathophysiology of asthma and its association with lifestyle factors.  
(CO2, K3)
- Or
- (b) Describe the pathophysiology of atherosclerosis and its role in cardiovascular diseases.  
(CO2, K3)

13. (a) Evaluate public health policies and strategies aimed at promoting smoking cessation and alcohol moderation. (CO3, K4)

Or

- (b) Explain the role of physical activity in the prevention and management of lifestyle diseases, providing examples of age-appropriate exercises. (CO3, K4)

14. (a) Discuss the lifestyle and hormonal factors influencing the risk of breast cancer in women. (CO4, K4)

Or

- (b) Evaluate the social and medical implications of infertility in women caused by lifestyle diseases, and discuss possible solutions. (CO4, K4)

15. (a) Evaluate the role of technology, including e-health and telemedicine, in monitoring and managing lifestyle diseases. (CO5, K5)

Or

- (b) Write a brief note on the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS). (CO5, K5)

**Part C**

(5 × 8 = 40)

Answer **all** the questions in not more than 1000 words each.

16. (a) Explain the relationship between urbanization, environmental changes, and the increasing prevalence of lifestyle diseases globally. (CO1, K2)

Or

- (b) Evaluate the impact of smoking, alcohol consumption, and stress on the progression of lifestyle diseases. (CO1, K2)

17. (a) Explain the mechanisms of metabolic syndrome in type 2 diabetes and discuss the complications associated with poor disease management. (CO2, K3)

Or

- (b) Analyze the pathophysiology of obesity, including its classification, causes, and associated health risks, with examples. (CO2, K3)

18. (a) Evaluate the effectiveness of dietary guidelines, balanced nutrition, and the role of superfoods in preventing lifestyle diseases. (CO3, K4)

Or

- (b) Analyze the role of stress management techniques in promoting psychological and physical well-being, with examples of effective practices. (CO3, K4)

19. (a) Evaluate the importance of regular screening and early intervention in managing women-specific lifestyle diseases. (CO4, K4)

Or

- (b) Discuss in detail the pathophysiology and management strategies of PCOS. (CO4, K4)

20. (a) Discuss the barriers to implementing public health policies for lifestyle disease prevention and suggest practical strategies to overcome these challenges.  
(CO5, K5)

Or

- (b) Discuss the role of government programs and policies in combating lifestyle diseases, with examples of successful national and international initiatives.  
(CO5, K5)
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**R3085**

**Sub. Code**

**509NM1**

**M.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Zoology**

**NME: BUSINESS SKILLS IN ZOOLOGY**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following questions by choosing the correct option.

1. Using spiders to control the insect pest is called (CO1, K2)  
(a) Pesticide (b) Predation  
(c) Carnivory (d) Biological control
2. Ichneumon wasp is a (CO1, K1)  
(a) Predator (b) Pest  
(c) Parasitoid (d) None of these
3. The Kangayam variety is famous for (CO2, K1)  
(a) Goat (b) Donkey  
(c) Bull (d) Buffalo
4. The chickens that are raised for meat are called (CO2, K2)  
(a) Layers (b) Hen  
(c) Chicken (d) Broilers
5. The species *Philosamia ricini* is called as (C03, K2)  
(a) Mulberry silkworm  
(b) Eri silkworm  
(c) Muga  
(d) None of these

6. Prawn is considered as (CO4, K2)  
(a) Fin fish (b) No fish  
(c) Shell fish (d) None of these
7. Stocking five or six difference species of fish in a single pond is called as (CO4, K3)  
(a) Monoculture (b) Aquaculture  
(c) Composite culture (d) None of these
8. Epigeic earthworms or found on \_\_\_\_\_ part of earth. (CO4, K2)  
(a) Very deep (b) Deep  
(c) Surface (d) None of these
9. A type of farming which involves cultivation of crop as well as live stock (CO5, K3)  
(a) Mixed farming (b) Monoculture  
(c) Polyculture (d) None of these
10. A sustainable method of producing both fish and vegetables is called (CO5, K2)  
(a) IPM (b) Aqua culture  
(c) Aqua-phonics (d) None of these

**Part B** (5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Discuss briefly about the indigenous varieties of cattle for milk production. (CO1, K3)

Or

- (b) Write short note on the uses of lady bird beetles to the farmers. (CO1, K2)

12. (a) Write short note on the National status of Dairy farming. (CO2, K2)

Or

- (b) Briefly mention about the parasitoids which are helpful for the biological control of insects. (CO2, K2)

13. (a) What are the benefits of growing country chicken? (CO3, K2)

Or

- (b) Write short note on chilled fish processing. (CO3, K3)

14. (a) Briefly discuss about the role of quality control and quality check. (CO4, K4)

Or

- (b) Discuss about the advantages of fruit processing units. (CO4, K3)

15. (a) Write a brief account on food adulterant acts. (CO5, K3)

Or

- (b) Give a brief account on integrated farming practices. (CO5, K3)

**Part C** (5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Evaluate live stocks and its importance in the Indian economy. (CO1, K5)

Or

- (b) Discuss about the role of beneficial insects in the agricultural sector. (CO1, K3)

17. (a) Give an account on the types and management of dairy farming. (CO2, K3)

Or

- (b) Discuss about the advantages and challenges in the farming of Broiler and Layers. (CO2, K4)

18. (a) Discuss about the different types of production methods of vermicomposting. (CO3, K3)

Or

- (b) Discuss about the pros and cons of Integrated farming management. (CO3, K4)

19. (a) Write about different types of silkworms and their culture methods. (CO4, K3)

Or

- (b) Analyze the advantages and disadvantages of different types of fish culture practices. (CO5, K5)

20. (a) Discuss about the composite fish culture method and its advantages. (CO5, K3)

Or

- (b) Discuss about the status and economics of apicultural practices. (CO3, K4)



<b>R3086</b>
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<b>Sub. Code</b>
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<b>515NM1</b>
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**M.A. DEGREE EXAMINATION, APRIL – 2025**

**Journalism and Mass Communication**

**NME – COMMUNICATION AND PRESENTATION  
SKILLS**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct option.

1. To overcome language barriers in a multicultural team, which of the following strategies would be most effective?  
(CO1, K2)
  - (a) Increasing the use of jargon
  - (b) Avoiding all forms of verbal communication
  - (c) Using simple and clear language
  - (d) Ignoring the issue
  
2. Which of the following is an example of non-verbal communication in the workplace?  
(CO1, K2)
  - (a) An email memo
  - (b) A handshake
  - (c) A staff meeting
  - (d) A phone call

3. The stage of the listening process where the listener interprets the meaning of the message is called \_\_\_\_\_. (CO2, K4)
- (a) Receiving
  - (b) Understanding
  - (c) Evaluating
  - (d) Remembering
4. Why is effective listening considered an essential skill in the workplace? (CO2, K4)
- (a) It allows for more time for personal tasks
  - (b) It helps in understanding and following instructions accurately
  - (c) It reduces the need for meetings
  - (d) It eliminates all forms of workplace conflict
5. Which type of meeting is typically used for brainstorming and generating new ideas? (CO3, K5)
- (a) Status update meeting
  - (b) Decision-making meeting
  - (c) Informal meeting
  - (d) Creative meeting
6. A \_\_\_\_\_ meeting is conducted to evaluate the progress of ongoing projects and discuss any issues or roadblocks. (CO3, K5)
- (a) brainstorming
  - (b) status update
  - (c) annual review
  - (d) conflict resolution
7. Which type of cover letter is written to inquire about possible job openings in a company? (CO4, K1)
- (a) Application Cover Letter
  - (b) Prospecting Cover Letter
  - (c) Networking Cover Letter
  - (d) Referral Cover Letter

8. Which job interview technique involves providing detailed answers to questions using specific examples? (CO4, K1)
- (a) STAR Method
  - (b) Group Interview
  - (c) Behavioral Interview
  - (d) Telephone Interview
9. What is one characteristic of a well-written memo? (CO5, K6)
- (a) Lengthy descriptions
  - (b) Clarity and conciseness
  - (c) Informal tone
  - (d) Use of complex vocabulary
10. The primary purpose of a notice is to \_\_\_\_\_. (CO5, K6)
- (a) Provide detailed information
  - (b) Negotiate terms
  - (c) Invite opinions
  - (d) Inform about an event or announcement

**Part B**

(5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Discuss the significance of time management in conducting successful meetings and suggest strategies to manage time effectively. (CO3, K5)

Or

- (b) Identify and explain the characteristics of effective communication. (CO1, K2)

12. (a) Explain the process of listening. (CO2, K4)

Or

- (b) Discuss the importance of job interviews in the employment process and the key factors that influence their success. (CO4, K4)

13. (a) Describe the purpose of communication in a professional setting. (CO1, K2)

Or

- (b) List and explain the manners and etiquettes to be maintained during a job interview to make a positive impression. (CO4, K4)

14. (a) Outline the steps involved in making a successful oral presentation, from research and planning to delivery. (CO3, K5)

Or

- (b) Describe the significance of pronunciation in oral presentations. Provide examples to illustrate its impact. (CO5, K6)

15. (a) Why is listening considered an important skill in the workplace? Provide examples. (CO2, K4)

Or

- (b) Analyze the causes of podium panic during public speaking. How can speakers overcome this challenge effectively? (CO5, K6)

**Part C**

(5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Differentiate between the various types of listening.  
(CO2, K4)

Or

- (b) Compare chronological, functional and combination resumes, highlighting their respective advantages and disadvantages.  
(CO4, K4)

17. (a) Compare and contrast verbal and non-verbal communication.  
(CO1, K2)

Or

- (b) Outline the best practices for delivering an oral presentation. What techniques can be used to engage the audience and ensure clear communication?  
(CO3, K5)

18. (a) Explain the importance of body language in delivering an effective presentation.  
(CO5, K6)

Or

- (b) Define the different types of business meetings and explain their importance in a corporate setting.  
(CO3, K5)

19. (a) Discuss the importance of feedback in the communication process.  
(CO1, K2)

Or

- (b) Describe the format and content that should be included to create a compelling cover letter.  
(CO4, K4)

20. (a) Explain the structure of a report and describe different types of reports and their formats.  
(CO5, K6)

Or

- (b) Identify and discuss common barriers to effective listening. How can these barriers be mitigated?  
(CO2, K4)
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**R3087**

**Sub. Code**

**525NM1**

**M.Sc. DEGREE EXAMINATION, APRIL – 2025.**

**Botany**

**NME – MUSHROOM CULTIVATION**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following questions type questions by choosing the correct option.

1. Which of the following substrates is commonly used for the cultivation of button mushrooms (*Agaricus bisporus*)?  
(CO1, K2)  
(a) Wheat straw                      (b) Rice husks  
(c) Sawdust                              (d) Corn cobs
2. Which edible mushroom is known for its meaty texture and umami flavor?  
(CO1, K1)  
(a) Shiitake (*Lentinula edodes*)  
(b) Enoki (*Flammulina velutipes*)  
(c) Lion's Mane (*Hericium erinaceus*)  
(d) King Oyster (*Pleurotus eryngii*)
3. What is spawn in mushroom cultivation?  
(CO2, K2)  
(a) Reproductive structure of mushrooms  
(b) Mycelium of mushroom fungus  
(c) Spores produced by mushrooms  
(d) Fruiting body of the mushroom
4. Which of the following materials is commonly used as a substrate for mushroom spawn production?  
(CO2, K1)  
(a) Compost                              (b) Grain  
(c) Sawdust                              (d) Soil

5. Why casing soil used in mushroom cultivation? (CO3, K3)
- (a) Providing nutrients to the mushrooms
  - (b) Controlling temperature
  - (c) Improving substrate texture
  - (d) Promoting humidity
6. The optimal temperature range for the cultivation of most mushroom species (CO3, K3)
- (a) 10-15°C                      (b) 20-25°C
  - (c) 30-35°C                      (d) 40-45°C
7. How do mushrooms contribute to dietary fiber intake? (CO4, K2)
- (a) They contain soluble fiber
  - (b) They contain insoluble fiber
  - (c) They do not contain fiber
  - (d) They contain both soluble and insoluble fiber
8. Which of the following nutrients is found in mushrooms? (CO4, K4)
- (a) Iron                              (b) Omega-3 fatty acids
  - (c) Vitamin C                      (d) Fiber
9. What is the primary ingredient used in pickling mushrooms? (CO5, K3)
- (a) Vinegar                      (b) Soy sauce
  - (c) Olive oil                      (d) Lemon juice
10. How should fresh mushrooms be stored to prolong their shelf life? (CO5, K5)
- (a) In a plastic bag at room temperature
  - (b) In a paper bag in the refrigerator
  - (c) In a cardboard box in direct sunlight
  - (d) In a glass jar in the freezer



**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Describe the physical characteristics of an edible mushroom. (CO1, K2)

Or

- (b) Distinguish an edible mushroom from a poisonous mushroom. (CO1, K2)

12. (a) Explain the process of mushroom spawn production using grain. (CO2, K2)

Or

- (b) Describe the process of composting for mushroom cultivation. (CO2, K2)

13. (a) Summarize the cultivation of oyster mushroom. (CO3, K3)

Or

- (b) Discuss the significance of temperature in mushroom cultivation. (CO3, K3)

14. (a) Highlight the best practices for storing fresh mushrooms to prolong their shelf life? (CO4, K4)

Or

- (b) Evaluate the advantages and disadvantages of freezing mushrooms. (CO4, K4)

15. (a) Provide a step by step recipe of any mushroom that you studied. (CO5, K3)

Or

- (b) Discuss the market potential and consumer demand for value-added mushroom products in India. (CO5, K3)

**Part C**

(5 × 8 = 40)

Answer **all** questions not more than 1,000 words each.

16. (a) Describe the potential health benefits associated with mushrooms. (CO1, K2)

Or

- (b) Enumerate the role of mushrooms in providing essential minerals to diet. (CO1, K2)

17. (a) Explain the process of inoculating substrate with mushroom spawn. (CO2, K2)

Or

- (b) Discuss the importance of moisture and temperature control during composting. (CO2, K2)

18. (a) Comment on substrate characteristics for mushroom cultivation. (CO3, K5)

Or

- (b) Discuss the impact of microbes on mushroom cultivation. (CO3, K5)

19. (a) Illustrate long-term storage conditions of mushrooms. (CO4, K4)

Or

- (b) Describe the canning and alginate coating in storage of mushroom. (CO4, K4)

20. (a) Analyze the challenges and opportunities faced by mushroom growers in India. (CO5, K3)

Or

- (b) Explicate the process of pickling mushrooms. (CO5, K3)

**R3088**

**Sub. Code**

**530NM2**

**M.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Microbiology**

**NME — AGRICULTURE AND ENVIRONMENTAL  
MICROBIOLOGY**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective questions by choosing  
the correct option.

1. Mycorrhizal fungi form mutualistic relationships with which type of organism? (CO1, K3)  
(a) Plants                      (b) Bacteria  
(c) Viruses                      (d) Animals
2. What is the role of mycorrhizal bacteria in soil? (CO1, K3)  
(a) Decomposition organic matter  
(b) Forming symbiotic relationships with plant roots to enhance nutrient uptake  
(c) Nitrogen fixation  
(d) Causing plant diseases
3. The insecticidal activity of *Bacillus thuringiensis* is primarily due to \_\_\_\_\_ (CO2, K3)  
(a) Antibiotics                      (b) Endotoxins  
(c) Exotoxins                      (d) Crystal proteins

4. What is the primary symptom of bacterial leaf blight in rice plants? (CO2, K3)
- (a) Formation of water-soaked lesions that turn yellow and then brown
  - (b) Yellowing of leaves
  - (c) Stunted growth
  - (d) Wilting of the entire plant
5. Which device is commonly used to collect airborne particles for aerobiological studies? (CO3, K4)
- (a) Air sampler
  - (b) Microscope
  - (c) Thermometer
  - (d) Anemometer
6. Which of the following enzymes is involved in the denitrification process? (CO3, K4)
- (a) Urease
  - (b) Nitrate reductase
  - (c) Ammonia monooxygenase
  - (d) Nitrogenase
7. Which of the following groups of microorganisms is commonly found in estuarine environments? (CO4, K2)
- (a) Psychrophiles
  - (b) Thermophiles
  - (c) Halophiles
  - (d) Acidophiles
8. Which of the following factors greatly influences microbial diversity in mangrove ecosystems? (CO4, K2)
- (a) Light intensity
  - (b) Salinity
  - (c) Air pressure
  - (d) Altitude
9. Which species of earthworm is most commonly used for vermi composting? (CO5, K1)
- (a) *Dendrobaena veneta*
  - (b) *Allolobophora chlorotica*
  - (c) *Lumbricus terrestris*
  - (d) *Eisenia fetida*

10. What is the process of burning solid waste at high temperatures to reduce its volume called? (CO5, K1)
- (a) Incineration            (b) Composting  
(c) Land filling            (d) Recycling

**Part B** (5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Briefly describe mutualism. (CO1, K3)

Or

- (b) Why Frankia as a biofertilizer? Explain. (CO1, K3)

12. (a) Explain the bacterial blight on rice. (CO2, K3)

Or

- (b) Explain the bacterial diseases of agricultural crops like mango. (CO2, K3)

13. (a) Write a detailed account of aerobiology. (CO3, K4)

Or

- (b) Write a detailed account of the iron cycle. (CO3, K4)

14. (a) Write a detailed account of the food chain and food web. (CO4, K2)

Or

- (b) Write a detailed account of the microbial habitats of estuaries. (CO4, K2)

15. (a) Describe a treatment for liquid wastes. (CO5, K1)

Or

- (b) Describe the production of biogas. (CO5, K1)

**Part C**

(5 × 8 = 40)

Answer **all** questions not more than 1000 words each.

16. (a) Give an account of the soil microflora and the factors that influence the soil microflora. (CO1, K3)

Or

- (b) Why Rhizobium as a biofertilizer? Explain it. (CO1, K3)

17. (a) Give a detailed account of any two bacterial diseases of agricultural crops and their symptoms, and control measures for pathogens. (CO2, K3)

Or

- (b) Write a brief note on bacteria as bioinsecticides and their applications. (CO2, K3)

18. (a) Explain in detail the nitrogen cycle. (CO3, K4)

Or

- (b) Explain in detail the carbon cycle. (CO3, K4)

19. (a) Write a detailed account of the factors affecting microbial growth in aquatic ecosystems. (CO4, K2)

Or

- (b) Explain the aquatic habitats of microorganisms in fresh water and lakes. (CO4, K2)

20. (a) Write a type of waste and explain the treatment of solid wastes. (CO5, K1)

Or

- (b) Define composting. Explain the vermicomposting technology. (CO5, K1)

<b>R3089</b>
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<b>Sub. Code</b>
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<b>533NM1</b>
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**M.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Nanoscience and Technology**

**NME : INTRODUCTION TO NANOSCALE IN SCIENCE  
AND TECHNOLOGY**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective questions by choosing  
the correct option.

1. Surface energy of a material is directly related to  
(CO1, K1)
  - (a) The number of atoms on the surface
  - (b) The temperature of the surroundings
  - (c) The material's density
  - (d) The wavelength of incident light
2. The phase transition from gas to plasma is called  
(CO1, K1)
  - (a) Ionization                      (b) Sublimation
  - (c) Deposition                      (d) Condensation
3. Which of the following statements about covalent bonding  
is TRUE? (CO2, K2)
  - (a) It involves electron transfer between atoms
  - (b) It occurs only between metals
  - (c) It results from electron sharing between atoms
  - (d) It is weaker than Van der Waals forces

4. In sol-gel processing, the starting material is typically (CO, K2)
- (a) A gas
  - (b) A solution containing metal alkoxides
  - (c) A solid bulk material
  - (d) A polymer
5. In a solid, the band structure arises due to (CO3, K4)
- (a) The interaction of atomic orbitals
  - (b) The splitting of nucleus
  - (c) The movement of free protons
  - (d) The formation of Van der Waals forces
6. The energy barrier between two states in an energy landscape determines (CO3, K4)
- (a) The speed of electron movement
  - (b) The activation energy required for a transition
  - (c) The Fermi energy level
  - (d) The absolute zero temperature of a system
7. The energy band gap of a quantum dot: (CO4, K3)
- (a) Increases as the dot size decreases
  - (b) Decreases as the dot size decreases
  - (c) Remains the same regardless of size
  - (d) Becomes negative
8. The primary function of biological membranes is (C04, K3)
- (a) To act as a rigid protective shield
  - (b) To control the movement of molecules in and out of cells
  - (c) To store genetic information
  - (d) To convert glucose into ATP directly



9. Quantum dots exhibit size-dependent optical properties due to (CO5, K5)
  - (a) Quantum confinement effect
  - (b) Electrostatic repulsion
  - (c) Strong covalent bonding
  - (d) Large atomic mass
10. Which of the following is a common method used to create self-assembled monolayers? (CO5, K5)
  - (a) Dip-coating in a functionalized solution
  - (b) Mechanical grinding
  - (c) High-pressure application
  - (d) Ion implantation

**Part B** (5 × 5 = 25)

Answer **all** the questions in not more than 500 words each.

11. (a) Write a short note on Top down and bottom up approach. (CO1, K1)

Or

- (b) Describe Atomic structure and phase energy. (CO1, K1)

12. (a) Compare Intermolecular and Inter particle forces. (CO2, K2)

Or

- (b) Explain Sol-Gel method. (CO2, K2)

13. (a) Define Fermi surface. (CO3, K4)

Or

- (b) Write a short note on energy landscapes. (CO3, K4)

14. (a) Explain Quantum dots. (CO4, K3)

Or

- (b) Write a short note on Miscelles bilayers (CO4, K3)

15. (a) Explain the Properties of Nanomaterials in Detail with an Example. (C05, K5)

Or

- (b) Explain carbon Nanotubes. (CO5, K5)

**Part C** (5 × 8 = 40)

Answer **all** the questions in not more than 1000 words each.

16. (a) Describe molecular and Atomic Size (CO1, K1)

Or

- (b) Distinguish top down and bottom up approach with Example. (CO1, K1)

17. (a) Explain in detail about the electrostatic and Vander Waals forces. (CO2, K2)

Or

- (b) Explain the Basic Principles of Nano-Scale materials. (CO2, K2)

18. (a) Define Inter-Molecular Forces. (CO3, K4)

Or

- (b) Describe the Evolution of Band structure. (CO3, K4)

19. (a) Compare Nano-wires and nano tubes with an example. (CO4, K3)

Or

- (b) Write a short note on Biological Membranes. (CO4, K3)

20. (a) Explain in detail about monolayer-self assembling (C05, K5)

Or

- (b) Explain the optical properties of Quantum dots and Quantum wires. (CO5, K5)

**R3090**

**Sub. Code**

**540NM1**

**M.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Energy Science**

**NME – BASIC CONCEPTS IN ENERGY SCIENCES**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct option.

1. Which of the following is a renewable energy source?  
(CO1, K1)  
(a) Coal (b) Solar  
(c) Natural Gas (d) Oil
2. Energy source commonly used in vehicles for transportation?  
(CO1, K2)  
(a) Coal (b) Natural Gas  
(c) Biofuels (d) Nuclear
3. What is the process of converting sunlight into electricity called?  
(CO2, K1)  
(a) Photosynthesis (b) Solarization  
(c) Solar panels (d) Photovoltaics
4. Solar panels are made up of individual units called  
(CO2, K2)  
(a) Photons (b) Cells  
(c) Modules (d) Arrays

5. Wind energy conversion system uses rotating blades to generate electricity. (CO3, K2)
- (a) Solar panels            (b) Hydroelectric turbines  
(c) Wind turbines        (d) Geothermal plants
6. The main challenges faced in harnessing wind energy in India? (CO3, K2)
- (a) Lack of technology  
(b) High installation costs  
(c) Land availability  
(d) Grid integration issues
7. Which of the following is a common source of bioenergy? (CO4, K1)
- (a) Coal                      (b) Natural Gas  
(c) Biomass                (d) Geothermal heat
8. Biodiesel is a type of biofuel derived from (CO4, K1)
- (a) Corn                      (b) Sugarcane  
(c) Algae                    (d) Animal fats
9. The advantage of geothermal energy over other energy forms. (CO5, K2)
- (a) High environmental impact  
(b) Limited availability of suitable sites  
(c) Low environmental impact  
(d) Inconsistency in power generation
10. \_\_\_\_\_ is geothermal energy? (CO5, K1)
- (a) Energy generated from the Earth's core  
(b) Energy generated from solar panels  
(c) Energy generated from wind turbines  
(d) Energy generated from nuclear power plants

**Part B**

(5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Explain the energy sources and their importance for sustainable development. (CO1, K4)

Or

- (b) Outline the sustainability of relying on fossil fuels for energy production. (CO1, K4)

12. (a) Explain the solar thermal energy conversion system and their applications. (CO2, K6)

Or

- (b) Discuss the challenges and prospects of solar photovoltaic systems for energy generation. (CO2, K6)

13. (a) Discuss the advantages and disadvantages of using wind power as a renewable energy source. (CO3, K4)

Or

- (b) Examine the prospects of technologies for wind energy conversion. (CO3, K4)

14. (a) Discuss the classification of biomass, based on its source and characteristics. (CO4, K6)

Or

- (b) Explain the process of converting biomass into biodiesel. (CO4, K6)

15. (a) Briefly explain the geothermal energy generation. (CO5, K4)

Or

- (b) Elaborate the applications of geothermal energy. (CO5, K4)

**Part C**

(5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Distinguish the role of renewable and non-renewable energy sources in global energy production. (CO1, K4)

Or

- (b) Interpret the India's energy scenario and global energy scenario. (CO1, K4)

17. (a) Explain the solar concentrators with a neat sketch and block diagram, with its Applications. (CO2, K6)

Or

- (b) Elaborate the photovoltaic conversion of solar energy in solar photovoltaic systems. (CO2, K6)

18. (a) Classify the wind energy conversion systems and their advantages. (CO3, K4)

Or

- (b) Elaborate the biological indicators to assess the potential for wind energy generation in a particular area. (CO3, K4)

19. (a) Explain the source and characterizations of biofuels (CO4, K6)

- (i) Biodiesel and
- (ii) Bioethanol.

Or

- (b) Show the Schematic representation of biogas digesters. (CO4, K6)

20. (a) Compare the types of tidal power plants and explain the advantages and limitations. (CO5, K4)

Or

- (b) Discuss the importance of materials selection in geothermal power plant design and operation. (CO5, K4)



4. Which of the following is used in an optical mouse?  
(CO2, K2)
- (a) Infrared light
  - (b) Light Emitting Diode (LED)
  - (c) Sensor
  - (d) Microwave
5. Microsoft word is \_\_\_\_\_ software. (CO3, K6)
- (a) Application (b) Compiler
  - (c) System (d) Programming
6. \_\_\_\_\_ is not a function in Excel. (CO3, K6)
- (a) SUM (b) MIN
  - (c) SUBTRACT (d) MAX
7. A computer network employs \_\_\_\_\_ processing. (CO4, K2)
- (a) Centralized (b) Distributed
  - (c) Both (a) and (b) (d) None
8. Arrange the Following Types of Networks according to their size, from largest to smallest? (CO4, K2)
- (a) LAN, WAN, MAN (b) WAN, LAN, MAN
  - (c) MAN, LAN, WAN (d) WAN, MAN, LAN
9. Which of the following is a programming language?  
(CO5, K2)
- (a) Python (b) Photoshop
  - (c) Microsoft Word (d) Adobe Illustrator



10. What is the term used for a block of code that is executed repeatedly until a certain condition is met? (CO5, K2)
- (a) Function (b) Loop  
(c) Condition (d) Variable

**Section B**

(5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) List out the differences between RAM and ROM. (CO1, K2)

Or

- (b) Explain the types of Computers. (CO1, K2)

12. (a) List the Laser Printer features. (CO2, K2)

Or

- (b) Narrate the Working principles of Laser Printer. (CO2, K2)

13. (a) Explain the basic formatting techniques. (CO3, K6)

Or

- (b) Describe the Chart types. (CO3, K6)

14. (a) Explain the Bus architecture. (CO4, K2)

Or

- (b) Define (i) Antialiasing (ii) Morphing. (CO4, K2)

15. (a) Discuss the block structured programming. (CO5, K2)

Or

- (b) Write a short note on Modular programming. (CO5, K2)

**Section C**

(5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Elaborate on basic anatomy of a computer.(CO1, K2)

Or

- (b) Describe the Applications of computer. (CO1, K2)

17. (a) Explain the screen types. (CO2, K2)

Or

- (b) Different kinds of Pointing devices. (CO2, K2)

18. (a) Elaborate on word processing features. (CO3, K6)

Or

- (b) Describe the spreadsheet window. (CO3, K6)

19. (a) Describe the applications areas of Multimedia.  
(CO4, K2)

Or

- (b) Elaborate on the different types of Networks.  
(CO4, K2)

20. (a) Discuss the 1<sup>st</sup> and 2<sup>nd</sup> generation programming languages.  
(CO5, K2)

Or

- (b) Explain branching and looping techniques in detail.  
(CO5, K2)

<b>R3092</b>
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<b>Sub. Code</b>
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<b>542NM1</b>
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**M.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Materials Science**

**NME – ELECTRONICS FOR DAILY LIFE**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. An electrical insulation prevents (CO1, K2)  
(a) electric shock (b) open circuit voltage  
(c) power maximum (d) none of the above
2. Flow of \_\_\_\_ through the body heats the tissues, leading to burns (CO1, K2)  
(a) electricity (b) blood  
(c) Water (d) none of the above
3. The primary function of a fuse is (CO2, K2)  
(a) Open the circuit  
(b) to prevent excessive currents from flow through the circuit  
(c) Earthing  
(d) None of the above

4. Fill up: \_\_\_\_\_ is the role of a trip bar in a circuit breaker? (CO2, K2)
- (a) To physically disconnect the circuit
  - (b) To sense excessive current
  - (c) To reset the breaker after tripping
  - (d) None of the above
5. Fill up: \_\_\_\_\_ is comes under smart electronics (CO3, K1)
- (a) Smart phone                      (b) Thermometer
  - (c) Plug                                (d) None of the above
6. LCD means (CO3, K2)
- (a) Liquid Crystal Display
  - (b) Logic Circuit Data
  - (c) Logic Circuit Design
  - (d) None of the above
7. Fill up: \_\_\_\_\_ coupled with additional lenses can be used to visualize samples and detect diseases like norovirus or viral infections (CO4, K2)
- (a) Smart phone                      (b) Speaker
  - (c) memory device                (d) None of the above
8. Chemical energy is converted to \_\_\_\_\_ energy by a fuel cell (CO4, K1)
- (a) solar                                (b) electrical
  - (c) potential                          (d) mechanical
9. What is the primary characteristic of renewable energy? (CO5, K1)
- (a) It is derived from fossil fuels
  - (b) It requires long periods to be replenished
  - (c) It can be used indefinitely without depleting resources
  - (d) None of the above

10. Compact fluorescent lamp has (CO5, K2)
- (a) no filament (b) nichrome filament
- (c) tungsten filament (d) chromium filament

**Part B** (5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Illustrate the importance of electrical safety measures. (CO1, K4)

Or

- (b) Discuss the importance of electrical insulation. (CO1, K4)

12. (a) Write short notes on switches and sockets. (CO2, K5)

Or

- (b) Explain the working principle of circuit breaker. (CO2, K4)

13. (a) Explain the difference between LCD and LED TV. (CO3, K4)

Or

- (b) Give an account on smartness in phone and watch. (CO3, K5)

14. (a) Discuss the difference between energy density and power density. (CO4, K4)

Or

- (b) Write an essay on supercapacitor and list out its advantages and disadvantages. (CO4, K4)

15. (a) Describe about various renewable energy sources. (CO5, K4)

Or

- (b) Discuss the working principle of photovoltaic cell. (CO5, K4)

**Part C**

(5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Elaborate the safety against over and residual voltages. (CO1, K5)

Or

- (b) Explain about electrical fires and arc flash. (CO1, K4)
17. (a) Give an account on different types earthing/grounding and its importances. (CO2, K5)

Or

- (b) Discuss the working principles of electrical sockets and fuses. (CO2, K4)
18. (a) Write an essay on concept of medical diagnostics based on smart phones. (CO3, K4)

Or

- (b) Elaborate the importances of human computer interaction. (CO3, K5)
19. (a) Explain about the primary and secondary batteries also its importances. (CO4, K4)

Or

- (b) Outline the working principles of fuel cell. (CO4, K5)
20. (a) Write an essay on the energy efficient lamps. (CO5, K4)

Or

- (b) Discuss about the solar car and its benefits. (CO5, K4)

**R3093**

**Sub. Code**

**547NM1**

**M.Sc. DEGREE EXAMINATION, APRIL 2025.**

**Fisheries Science**

**NME – INTEGRATED FISH FARMING**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct answers.

1. In fish culture ponds, the inlets and outlets are constructed in (CO1, K1)
  - (a) Opposite side
  - (b) Right angle to each other
  - (c) Same side
  - (d) None
2. Fish food is the major source of (CO1, K3)
  - (a) Fat
  - (b) Iron
  - (c) Protein
  - (d) Carbohydrates
3. Name the water used for mariculture (CO2, K2)
  - (a) Fresh water
  - (b) Salt water
  - (c) Chlorinated water
  - (d) All of these
4. More than one species of fish is culture at a time, then it is called (CO2, K5)
  - (a) Aquaculture
  - (b) Monoculture
  - (c) Polyculture
  - (d) Mariculture

5. The following is/are the example for brackish water fish  
(CO3, K2)
- (a) Asian seabass      (b) Milk fish  
(c) Grey mullet      (d) All of the above
6. The following animals are associated with integrated fish farming system  
(CO3, K2)
- (a) Cow      (b) Pigs  
(c) Duck      (d) All of these
7. Fish live near the surface of the sea or lake      (CO4, K4)
- (a) Pelagic fish      (b) Deep sea fish  
(c) Demersal fish      (d) Coastal fish
8. National Fisheries Development Board is located in  
(CO4, K1)
- (a) Chennai  
(b) Hyderabad  
(c) Delhi  
(d) Mumbai
9. The following fibre is obtained from the coconut husk  
(CO5, K5)
- (a) Rockwool      (b) Coir  
(c) Perlite      (d) None
10. Hydroponics is a method of cultivation of plants without the use of  
(CO5, K3)
- (a) Air      (b) Water  
(c) Soil      (d) Sunlight



**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Describe polyculture with suitable examples.  
(CO1, K2)

Or

- (b) Write a brief note on composite fish culture.  
(CO1, K1)

12. (a) Brief note on different types of economically important agricultural crops.  
(CO2, K5)

Or

- (b) Describe the different types of economically important agricultural crops.  
(CO2, K3)

13. (a) What is the role of sericulture in integrated fish farms?  
(CO3, K1)

Or

- (b) Explain the advantages of apiculture in fish farm.  
(CO3, K2)

14. (a) What is the importance of epiculture in fish farms.  
(CO4, K3)

Or

- (b) Write about the different types of integrated farming system.  
(CO4, K1)

15. (a) Write a brief note on aquaponics.  
(CO5, K2)

Or

- (b) How do you produce the fish and plants using aquaponics?  
(CO5, K6)

**Part C**

(5 × 8 = 40)

Answer **all** questions not more than 1,000 words each.

16. (a) Write an essay on present status of coastal aquaculture in India. (CO1, K2)

Or

- (b) Explain in detail – Integrated fish farming. (CO1, K1)

17. (a) Describe in detail about mushroom cultivation. (CO2, K1)

Or

- (b) Give a detailed note on suitable agricultural crops for integrated fish farming. (CO2, K5)

18. (a) Write about the values and benefits of keeping different animals on fish farms. (CO3, K3)

Or

- (b) Explain about different types of animals for integrated fish farming system. (CO3, K2)

19. (a) Describe in detail — Current status of integrated fish farming in India. (CO4, K5)

Or

- (b) Explain the role of cattle farming in integrated fish farms. (CO4, K3)

20. (a) Describe the design and construction of an aquaponics system. (CO5, K4)

Or

- (b) Describe feed and health management in aquaponics. (CO5, K2)

<b>R3094</b>
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<b>Sub. Code</b>
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<b>549NM1</b>
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**M.A. DEGREE EXAMINATION, APRIL – 2025**

**Public Administration**

**NME — INTRODUCTION TO PUBLIC  
ADMINISTRATION**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct option.

1. Good governance should not be worked with (CO1, K1)  
(a) Transparency (b) Accountability  
(c) Nepotism (d) The rule of law
2. Bureaucracy is based on (CO1, K1)  
(a) Corporate Authority  
(b) Personal Authority  
(c) Traditional Authority  
(d) Charismatic Authority
3. Number of subordinates a manager can effectively direct is called (CO2, K2)  
(a) Span of management  
(b) Esprit de corps  
(c) Gangplank  
(d) None of the above

4. The role of Staff Agency is (CO2, K2)
- (a) Performing the field task
  - (b) Advisory
  - (c) Housekeeping function
  - (d) None of the above
5. \_\_\_\_\_ of leadership means that a leader's effectiveness depends on how well their style fits the context in which it is practised. (CO3, K4)
- (a) Trait Theory
  - (b) Behavioural Theory
  - (c) Contingency Theory
  - (d) None of the above
6. \_\_\_\_\_ is the person who develops and sends the message (CO3, K4)
- (a) Encoder
  - (b) Decoder
  - (c) Receiver
  - (d) None of the above
7. The shares of a Government Company are purchased in the name of \_\_\_\_\_ (CO4, K5)
- (a) The Indian Government
  - (b) The President of India
  - (c) The Chief Minister of the state
  - (d) The Managing Director of the company
8. Public Corporation held liable for (CO4, K5)
- (a) Contractual Liability
  - (b) Tortious Liability
  - (c) Crime
  - (d) All the above
9. Public Interest Litigation helps to solve \_\_\_\_\_ issue (CO5, K1)
- (a) Individual
  - (b) Public
  - (c) Government
  - (d) Terrorist

10. The relationship between Citizen and Government should be (CO5, K6)
- (a) Cardial (b) Rigid
- (c) Violent (d) None of the above

**Part B** (5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) How Public Administration helps for the growth of Indian society? (CO1, K1)

Or

- (b) List the difference between Public Administration and Private Administration. (CO1, K1)

12. (a) Explain the functions of Line Agencies. (CO2, K2)

Or

- (b) Explain the function of Staff Agencies. (CO2, K2)

13. (a) Examine the role of NITI Aayog. (CO3, K4)

Or

- (b) Examine Communication Process. (CO3, K4)

14. (a) Explain the bases on which a department is organised. (CO4, K5)

Or

- (b) Determine how the relationship between the headquarters and the field can be organised. (CO4, K5)

15. (a) “The doctrine of ministerial responsibility is a cardinal principle of Parliamentary system”– Discuss. (CO5, K6)

Or

- (b) Discuss Peoples Participation in Governance. (CO5, K6)

**Part C**

(5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Describe the relation of Public Administration with other Social Sciences. (CO1, K1)

Or

- (b) Describe the growth of New Public Management. (CO1, K1)

17. (a) Explain Henry Fayol's 14 principles of organisation. (CO2, K2)

Or

- (b) Explain the decentralization of powers in India. (CO2, K2)

18. (a) Examine the leadership in Indian Democracy. (CO3, K4)

Or

- (b) Examine the process of decision making. (CO3, K4)

19. (a) Assess the role of Public Corporations. (CO4, K5)

Or

- (b) Evaluate the characteristics of Government Companies. (CO4, K5)

20. (a) Elaborate Judicial Control over Public Administration. (CO5, K6)

Or

- (b) Elaborate the role of media in Public Administration. (CO5, K6)

**R3095**

**Sub. Code**

**551NM1**

**M.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Computer Science**

**NME — OFFICE AUTOMATION**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. What is the default operating system of Microsoft?  
(CO1, K2)  
(a) Windows XP                      (b) Windows 7  
(c) Windows 10                      (d) Windows Server
2. Which can be used for quick access to commonly used commands and tools?  
(CO1, K1)  
(a) Status bar                      (b) Tool bar  
(c) Menu bar                      (d) Title bar
3. Ctrl + J is used to  
(CO2, K4)  
(a) Align Justify                      (b) Insert Hyperlink  
(c) Search                      (d) Print
4. What is the default left margin in Word 2003 document?  
(CO2, K2)  
(a) 1                      (b) 1.25  
(c) 1.5                      (d) 2

5. Which area in an Excel window allows entering values and formulas? (CO3, K4)
- (a) Title bar (b) Menu bar  
(c) Formula bar (d) Standard toolbar
6. Shortcut key CTRL + D is used to \_\_\_\_\_ (CO3, K2)
- (a) Open font dialog box  
(b) Open format cells dialog box  
(c) Shift current cells value in the right cell  
(d) Fill down in the selection
7. It is a collection of data that is organized in such manner that it can be easily accessed. (CO4, K1)
- (a) Information (b) Database  
(c) Data (d) None of these
8. The key in MS-Access differentiates the records in a file. (CO4, K2)
- (a) Common Key (b) Primary key  
(c) Foreign key (d) Master key
9. Which of the following font effect is available in PowerPoint Font dialog box? (CO5, K4)
- (a) Underline (b) Shadow  
(c) Emboss (d) Strikethrough
10. Which of the following is the shortcut key to open the existing presentation in the power point? (CO5, K2)
- (a) Ctrl + M (b) Ctrl + N  
(c) Ctrl + O (d) Ctrl + K



**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Explain how to view computer details in windows with diagram. (CO1, K3)

Or

- (b) Discuss about how to create and save files in MS-Office. (CO1, K3)

12. (a) Write notes on text editing in MS-Office. (CO2, K5)

Or

- (b) Illustrate about the various formatting facilities with suitable example. (CO2, K5)

13. (a) Describe how to resize the rows and columns in Excel. (CO3, K1)

Or

- (b) Explain how to improve the appearance of Worksheet. (CO3, K1)

14. (a) Write notes on features of MS-Access. (CO4, K1)

Or

- (b) Explain how to create form in MS-Access. (CO4, K1)

15. (a) Discuss how will create and manipulate slides in Power Point. (CO5, K4)

Or

- (b) Write notes on Outlook Window. (CO5, K4)

**Part C**

(5 × 8 = 40)

Answer **all** questions not more than 1000 words each.

16. (a) Discuss about copying and moving a document with example. (CO1, K5)

Or

- (b) Enumerate about title bar and status bar. (CO1, K5)

17. (a) Discuss about different font styles in MS-Word document. (CO3, K3)

Or

- (b) How to modify row and column in the existing table with example. (CO3, K3)

18. (a) Elucidate how formulas and functions are used in Excel work sheet with examples. (CO3, K5)

Or

- (b) Explain about how to improve the appearance of the worksheet. (CO3, K5)

19. (a) Describe about create a query in MS-Access. (CO4, K4)

Or

- (b) Discuss about report preparation in MS-Access. (CO4, K4)

20. (a) Illustrate how to merge an access report from an Excel list. (CO5, K4)

Or

- (b) Enumerate about word hand out from power point binder. (CO5, K4)

**R3096**

**Sub. Code**

**558NM1**

**M.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Nutrition and Dietetics**

**NME : BASICS OF HUMAN NUTRITION**

**(CBCS – 2023 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct option.

1. Protein RDA for Indians is determined on the fact that the diet is based on cereals and \_\_\_\_\_. (CO1, K2)  
(a) Meat                      (b) Legumes  
(c) Vegetables              (d) Fruits
2. Wasting, stunting, underweight and deficiencies in vitamins and minerals are shown in the \_\_\_\_\_ nutrition condition. (CO1, K2)  
(a) Normal                  (b) Over  
(c) Under                    (c) Both over and under
3. This mineral helps build strong bones and teeth and helps with muscle function. (CO2, K1)  
(a) Calcium                  (b) Iron  
(c) Magnesium              (d) Potassium

4. Which one of the following nutrients provides 9 calories per gram? (CO2, K1)  
(a) Carbohydrate (b) Protein  
(c) Fat (d) Dietary fiber
5. Cobalamin is also called as \_\_\_\_\_. (CO3, K2)  
(a) Vitamin A (b) Vitamin B2  
(c) Vitamin B12 (d) Vitamin E
6. Which one is the best source of riboflavin? (CO3, K2)  
(a) Organ meats (b) Citrus fruits  
(c) Milk (d) Lean meat
7. Marasmus is a deficiency of \_\_\_\_\_. (CO4, K1)  
(a) Carbohydrates (b) Protein  
(c) Fats (d) All macronutrients
8. Binge eating is a \_\_\_\_\_ disorder. (CO4, K1)  
(a) Physiological (b) Mental  
(c) Psychiatric (d) Nerve
9. Diseases in which cholesterol and fatty materials accumulates in wall of arteries is \_\_\_\_\_. (CO5, K1)  
(a) Diabetic syndrome  
(b) Tuberculosis  
(c) Arteriosclerosis  
(d) Atherosclerosis
10. Late (progressive) stage of liver disease is called \_\_\_\_\_. (CO5, K1)  
(a) Cirrhosis (b) Fatty liver  
(c) Liver cancer (d) Liver failure

**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Briefly discuss the classification of food groups.  
(CO1, K2)

Or

- (b) Under nutrition-Explain. (CO1, K2)

12. (a) Discuss the functions of protein. Give five sources of good quality proteins. (CO2, K4)

Or

- (b) Write the recommended intake of protein and fat.  
(CO2, K4)

13. (a) Give a note on vitamin C and its functions in our body. (CO3, K3)

Or

- (b) Summarize the functions of calcium and list out the food sources. (CO3, K3)

14. (a) List out the benefits of breast milk. (CO4, K5)

Or

- (b) What are the risk factors associated with old age people? (CO4, K5)

15. (a) Differentiate communicable and non-communicable diseases. (CO5, K2)

Or

- (b) Write about the causes, symptoms and risk factors of cancers. (CO5, K2)

**Part C**

(5 × 8 = 40)

Answer **all** questions not more than 1000 words each.

16. (a) Give a detailed account on the malnutrition.  
(CO1, K2)

Or

- (b) Write about the functions of food in human health.  
(CO1, K2)

17. (a) Explain the functions and requirements of carbohydrate.  
(CO2, K4)

Or

- (b) Describe the deficiencies and recommended intake of fats.  
(CO2, K4)

18. (a) Discuss the fat-soluble vitamins functions, requirements and food sources.  
(CO3, K3)

Or

- (b) Elaborate the functions and deficiencies of iron.  
(CO3, K3)

19. (a) Measure the nutritional needs and dietary allowances for pregnancy.  
(CO4, K5)

Or

- (b) Explain the nutritional needs for old age people.  
(CO4, K5)

20. (a) Write a detailed note on the SARS and Covid-19.  
(CO5, K2)

Or

- (b) Explain in detail the liver disorders and their dietary management.  
(CO5, K2)

**R3097**

**Sub. Code**

**24MHR2N1**

**M.A. DEGREE EXAMINATION, APRIL – 2025**

**Human Resource Development**

**HUMAN RESOURCE DEVELOPMENT**

**(CBCS – 2024 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. Which of the following is a function of both HRM and HRD? (CO1, K2)
  - (a) Managing employee compensation
  - (b) Identifying training needs for employee growth
  - (c) Conducting performance reviews
  - (d) Handling employee grievances
2. Which of the following is a common challenge faced by HRD professionals in organization? (CO1, K2)
  - (a) Managing employee compensation
  - (b) Ensuring effective leadership development
  - (c) Ensuring the legal compliance of recruitment process
  - (d) Handling employee grievances

3. What is the primary purpose of assessing the need for HRD in an organization? (CO2, K2)
- (a) To reduce employee salaries
  - (b) By reducing employee salaries
  - (c) To increase workload on employees
  - (d) To eliminate the need for HR Policies
4. How does HRD contribute to Intellectual Capital? (CO2, K2)
- (a) By enhancing employee knowledge and skills
  - (b) To identify gaps in employee skills and competence
  - (c) By eliminating the need for training
  - (d) By discouraging innovation
5. Industrial relations primarily deal with the relationship between (CO3, K3)
- (a) Employer and Government
  - (b) Employer and Employee
  - (c) Employer and Customer
  - (d) Government and Trade Unions
6. Development centre is mainly focused on (CO3, K3)
- (a) Identifying Training needs
  - (b) Firing Underperforming employees
  - (c) Payroll processing
  - (d) Resolving industrial disputes



7. Which of the following is a key benefit of using Assessment Centers in organizations? (CO4, K2)
- (a) Reducing employee salaries
  - (b) Improving reelection and promotion decisions
  - (c) Eliminating workplace conflicts
  - (d) Avoiding legal compliance
8. Which of the following is a coaching technique? (CO4, K2)
- (a) Role-playing      (b) Dictating solutions
  - (c) Avoiding feedback   (d) Ignoring performance gaps
9. Which of the following is a key benefit of mentoring? (CO5, K5)
- (a) Faster promotions for the mentor
  - (b) Increased knowledge transfer and career growth
  - (c) Immediate skill mastery
  - (d) Reduced need for training program
10. Which of the following is a critical success factor when implementing a Balanced Scorecard? (CO5, K5)
- (a) Clear communication of strategic objectives
  - (b) Ignoring employee feedback
  - (c) Focusing only on financial metrics
  - (d) Avoiding customer feedback

**Part B**

(5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Discuss about the difference between HRD and HRM. (CO1, K2)

Or

- (b) Summarise the key competencies required for HRD professional. (CO1, K2)

12. (a) Outline about HR audit and why is it important. (CO2, K2)

Or

- (b) Discuss on how organizations identify the need for an HRD program. (CO2, K2)

13. (a) Summarise an assessment centre and how does it differ from a development center? (CO3, K3)

Or

- (b) Outline HRD initiatives shape workplace culture in relation to industrial relations? (CO3, K3)

14. (a) Discuss coaching and mentoring contribution to employee development. (CO4, K2)

Or

- (b) Summarize on competency mapping help in recruitment and selection. (CO4, K4)

15. (a) Discuss about HRD practices differ across countries and culture. (CO5, K5)

Or

- (b) Discuss on how government organization handle employee training and development. (CO5, K5)

**Part C** (5 × 8 = 40)

Answer **all** questions not more than 1000 words.

16. (a) Elaborate on how HRD address the skills gap in rapidly changing industries. (CO1, K2)

Or

- (b) Outline the emerging trends in HRD mechanisms. (CO1, K2)

17. (a) Elaborate on how HRD culture impact employee retention and job satisfaction. (CO2, K2)

Or

- (b) Elaborate the importance of evaluating the effectiveness of HRD programs. (CO2, K2)

18. (a) Elaborate the different approaches to employee development? (CO3, K3)

Or

- (b) Summarize the relationship between motivation and development activities in an organization. (CO3, K3)

19. (a) Outline on how digital transformation changed the way organizations approach HRD? (CO4, K2)

Or

- (b) Summarise on how the employer branding affect an organizations ability to attract top talent in competitive industries. (CO4, K2)

20. (a) Outline HRD strategies which are most effective for improving productivity in manufacturing and service industry. (CO5, K5)

Or

- (b) Discuss on how does HRD address workforce diversity and inclusion in government institutions. (CO5, K5)
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**R3098**

**Sub. Code**

**622NM1**

**M.B.A. DEGREE EXAMINATION, APRIL – 2025.**

**Corporate Secretarship**

**NME – INTRODUCTION TO GST**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following questions by choosing the correct option.

1. In India, GST became effective from (CO1, K1)  
(a) 1<sup>st</sup> April 2017 (b) 1<sup>st</sup> January, 2017  
(c) 1<sup>st</sup> July, 2017 (d) 1<sup>st</sup> March, 2017
2. The tax IGST charged by (CO1, K1)  
(a) Central government  
(b) State government  
(c) Concerned Department  
(d) Both (a) and (b)
3. Who is the Chairperson of the GST Council? (CO2, K1)  
(a) Union Finance Minister  
(b) Finance Secretary  
(c) Prime Minister  
(d) State's finance Minister
4. A supply made in the course or furtherance of business is (CO2, K1)  
(a) Inward Supply (b) Supply in transit  
(c) Outward supply (d) Dead supply

5. Who will notify the rate of tax to be levied under CGST Act? (CO3, K1)
- (a) Central Government suo moto
  - (b) State Government suo moto
  - (c) GST Council suo moto
  - (d) Central Government as per the recommendations of the GST council
6. What are the taxes levied on intra-state supply?(CO3, K1)
- (a) CGST and SGST (b) CGST
  - (c) SGST (d) IGST
7. The value of the supply of goods and services shall be the (CO4, K1)
- (a) Transaction value (b) MRP
  - (c) Market value (d) Cost price
8. Input tax credit as credited in Electronic Credit Ledger can be utilised for payment of (CO4, K1)
- (a) Liability
  - (b) Taxes
  - (c) Interest and penalty
  - (d) Fine
9. The tax invoice incase of supplier of goods is issued in (CO5, K1)
- (a) Triplicate
  - (b) Duplicate
  - (c) Either(a) or(b) at the option of taxpayer
  - (d) Either(a)or(b) at the option of
10. Under GST a Credit note can he issued by (CO5, K1)
- (a) Supplier (b) Receiver
  - (c) Both (a) and (b) (d) Agent

**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) State the objectives of Taxation. (CO1, K3)

Or

- (b) What is subsuming of tax? (CO1, K3)

12. (a) What are the types of GST? (CO2, K2)

Or

- (b) Define the terms 'Goods' and Place of Business under GST. (CO2, K2)

13. (a) Who are the taxpayers exempt from GST? (CO3, K2)

Or

- (b) What are the provision relating to Exempt supply under GST? (CO3, K2)

14. (a) Write the significance of Input tax and e-waybill. (CO4, K2)

Or

- (b) Report the significance of Zero-rated Supply. (CO4, K2)

15. (a) Comment on Provisional assessment under GST. (CO5, K1)

Or

- (b) State the provisions relating to the assessment Unregistered Person under GST. (CO5, K1)

**Part C**

(5 × 8 = 40)

Answer **all** questions not more than 1,000 words each.

16. (a) Bring out the salient features of CGST and IGST.  
(CO1, K3)

Or

- (b) Explain the advantages of GST from the Citizens, Industry and Government perspective. (CO1, K3)
17. (a) Interpret the provisions on levy and collection of GST under IGST. (CO2, K2)

Or

- (b) Describe the powers and functions of the GST council. (CO2, K2)
18. (a) Explain types of Supply under GST. (CO3, K2)

Or

- (b) Discuss the eligibility and conditions for taking Input Tax Credit. (CO3, K2)
19. (a) Explain the various types of Returns under GST.  
(CO4, K2)

Or

- (b) Elucidate the provisions of GST on 'Tax invoice,' 'Credit Note' and 'Debit note'. (CO4, K2)
20. (a) Explain the types of assessment processes under GST. (CO5, K1)

Or

- (b) Enumerate the various modes of collection of tax under GST. (CO5, K1)



**R3099**

**Sub. Code**

**632NM1**

**M.B.A. DEGREE EXAMINATION, APRIL – 2025**

**Banking and Insurance**

**NME: PRACTICAL BANKING**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** questions by choosing the correct option.

1. What was the Ultimate goal of demonetization? (CO1, K2)  
(a) To make India a cashless economy  
(b) To increase Govt. revenue  
(c) To reduce corruption and black money  
(d) To stabilize the economy
2. What is the maximum amount that can be deposited in a payment banks? (CO1, K2)  
(a) 50,000 (b) 1,00,000  
(c) 2,00,000 (d) 5,00,000
3. A wrong entry in a pass book favorable to a customer constitutes a settlement of account provide \_\_\_\_\_. (CO2, K3)  
(a) The customer acts upon its immediately  
(b) The customer acts upon in it good faith and with negligence  
(c) The customer has altered his position by reusing upon it  
(d) (b) and (c) together but not (a)

4. The rate of interest is payable on various deposits is determined by the (CO2, K3)
- (a) Head office of each bank
  - (b) Central Bank
  - (c) RBI
  - (d) Indian banks association
5. What is a loan against FDR? (CO3, K5)
- (a) Loan against fixed deposit
  - (b) Loan against recurring deposit
  - (c) Loan against savings account
  - (d) Loan against current account
6. Which of the following is a benefit of micro credit support for new entrepreneurs? (CO3, K5)
- (a) Increased cash flow
  - (b) Improved credit score
  - (c) Business expansion
  - (d) All of these
7. What is the maximum amount for NEFT transactions? (CO4, K2)
- (a) 1,00,000
  - (b) 2,00,000
  - (c) 5,00,000
  - (d) No limit
8. Which of the following is a benefit of POST? (CO4, K2)
- (a) Faster transactions
  - (b) Secure transactions
  - (c) Convenient transactions
  - (d) All of these

9. What is the Main driver of the shift towards paperless banking? (CO5, K5)
- (a) Environmental concerns
  - (b) Cost savings
  - (c) Increased security
  - (d) Govt. regulations
10. Any complaint should be lodged with ombudsman when \_\_\_\_\_. (CO5, K5)
- (a) There is any deficiency in banking services
  - (b) No reply is received from the bank within two months of receipt of complaint
  - (c) The complaint is rejected and a period of one year has not been lapsed from the date of rejection
  - (d) (b) and (c) together

**Part B** (5 × 5 = 25)

Answer **all** questions, not more than 500 words each.

11. (a) Compare the private sector banks with public sector banks. (CO1, K2)
- Or
- (b) Outline the difficulties faced by RRBS. (CO1, K2)
12. (a) Identify the features of current deposit. (CO2, K3)
- Or
- (b) Discover the procedure for closing of a bank account. (CO2, K3)
13. (a) Distinguish between cash credit and term loans. (CO3, K5)
- Or
- (b) Assess the importance of Micro credit. (CO3, K5)
14. (a) Outline the benefits of RTGS. (CO4, K2)
- Or
- (b) Express your views relating to Fin tech banking. (CO4, K2)

15. (a) Explain the objects of banking ombudsman scheme.  
(CO5, K5)

Or

- (b) Evaluate the significance of branchless banking.  
(CO5, K5)

**Part C** (5 × 8 = 40)

Answer **all** questions, not more than 1000 words each.

16. (a) Explain the role of RBI with respect to issue of currency notes.  
(CO1, K2)

Or

- (b) Classify the different types of banks in India.  
(CO1, K2)

17. (a) Discuss the formalities which a banker has to observe before opening a new account. (CO2, K3)

Or

- (b) Identify the important features of debit card.  
(CO2, K3)

18. (a) Explain the procedure to apply for educational loan.  
(CO3, K5)

Or

- (b) Assess the significant role of NABARD in agricultural credit.  
(CO3, K5)

19. (a) Summarise the merits and demerits of mobile banking.  
(CO4, K2)

Or

- (b) Outline the impact of UPI in Indian economy.  
(CO4, K2)

20. (a) Justify the importance of paperless banking in present scenario.  
(CO5, K5)

Or

- (b) How does CSR affects banks? (CO5, K5)

<b>R3100</b>
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<b>Sub. Code</b>
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<b>641NM1</b>
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**M.B.A. (General) DEGREE EXAMINATION,  
APRIL – 2025**

**Management**

**NME : PSYCHOLOGY FOR MANAGING SELF AND  
OTHERS**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the objective questions by choosing the correct.

1. Psychology is the scientific study of: (CO1, K2)
  - (a) Philosophy
  - (b) Human behavior and mental processes
  - (c) Ethics
  - (d) Economics
2. Which method involves collecting data from a large group of people at one time? (CO1, K2)
  - (a) Case study                      (b) Observation
  - (c) Survey                          (d) Experiment
3. According to TA, the “Adult” ego state is characterized by: (CO2, K3)
  - (a) Impulsive and emotional
  - (b) Rational and logical
  - (c) Nurturing and caring
  - (d) Demanding and critical

4. Which type of “stroke” refers to nonverbal communication? (CO2, K3)
- (a) Positive verbal
  - (b) Negative verbal
  - (c) Positive nonverbal
  - (d) Negative nonverbal
5. Assertiveness involves: (CO3, K1)
- (a) Avoiding conflict at all costs
  - (b) Expressing your needs directly and respectfully
  - (c) Being overly aggressive and dominating
  - (d) Passively accepting the needs of others
6. The importance of assertiveness in organizational life includes: (CO3, K1)
- (a) Avoiding responsibility for your work
  - (b) Effectively expressing concerns and ideas
  - (c) Allowing others to take advantage of you
  - (d) Putting your needs above the needs of others
7. Behavior modification refers to: (CO4, K6)
- (a) Unconsciously changing behavior patterns
  - (b) Applying techniques to deliberately change behavior
  - (c) Blaming individuals for negative behaviors
  - (d) Accepting all behaviors without intervention
8. Positive reinforcement involves: (CO4, K6)
- (a) Punishing desired behaviors
  - (b) Introducing a desirable consequence following a behavior
  - (c) Removing a desirable consequence following a behavior
  - (d) Ignoring a behavior entirely

9. Managerial counselling emphasizes: (CO5, K5)
- (a) Addressing employee concerns and providing support within the workplace setting
  - (b) Providing therapy for diagnosed mental health conditions
  - (c) Disciplinary action and handling employee performance issues
  - (d) Personal advice and life coaching
10. Which is NOT a type of managerial counselling? (CO5, K2)
- (a) Career counselling
  - (b) Grief counselling
  - (c) Performance counselling
  - (d) Relationship counselling

**Part B** (5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Discuss the main differences between a clinical psychologist and an industrial organizational psychologist. (CO1, K2)
- Or
- (b) Explain the ethical considerations involved in conducting psychological research studies. (CO1, K2)
- Or
12. (a) Explain the three ego states (Parent, Adult, Child) in Transactional Analysis and provide examples of how they manifest in behavior. (CO2, K3)
- Or
- (b) Discuss the concept of life scripts in TA and how they can impact individual choices and behaviors. (CO2, K3)

13. (a) Describe the different types of non-assertive, assertive and aggressive communication styles. Provide examples of each. (CO3, K1)

Or

- (b) Discuss the benefits of developing assertiveness skills in both personal and professional life. (CO3, K1)

Or

14. (a) Explain the key differences between positive reinforcement and negative reinforcement. Provide examples of how each can be used to modify behavior. (CO4, K6)

Or

- (b) Discuss the limitations and ethical considerations of using punishment as a behavior modification technique. (CO4, K6)

15. (a) Describe the key differences between managerial counselling and psychotherapy. (CO5, K5)

Or

- (b) Explain the role of active listening in effective managerial counselling. (CO5, K5)

**Part C** (5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Compare and contrast two different research methods used in psychology, such as experiments and surveys. Discuss the strengths and weaknesses of each method and their suitability for investigating specific research questions in organizational psychology. (CO1, K2)

Or



- (b) Discuss the impact of nature versus nurture on human behavior. Explain how both biological and environmental factors contribute to shaping our thoughts, emotions, and actions. (CO1, K2)
17. (a) Describe a hypothetical situation involving a conflict between two colleagues within a team. Using the principles of Transactional Analysis, analyze the potential ego states at play in the interaction, analyze the transactional patterns, and suggest strategies for resolving the conflict effectively. (CO2, K3)

Or

- (b) Evaluate the strengths and limitations of Transactional Analysis (TA) as a tool for improving self-awareness and communication. Discuss the potential benefits and drawbacks of utilizing TA in various organizational settings. (CO2, K3)
18. (a) Describe a situation where you might need to assert yourself in a professional setting. Develop a specific plan outlining how you would approach the situation using assertive communication techniques. (CO3, K1)

Or

- (b) Research and report on the growing trend of mindfulness and its potential benefits for developing assertiveness skills and navigating challenging communication situations the workplace. (CO3, K1)
19. (a) Evaluate the ethical considerations involved in using various behavior modification techniques. Discuss the potential limitations and potential for misuse of these techniques, and propose strategies for ensuring their ethical and responsible application in different settings. (CO4, K6)

Or

- (b) Imagine you are working with a child experiencing a specific undesirable behavior. Apply your understanding of operant conditioning principles to design a behavior modification plan that utilizes positive reinforcement strategies to encourage desired behaviors and discourage negative ones.

(CO4, K6)

20. (a) Describe a hypothetical scenario where an employee approaches you, their manager, seeking guidance and support due to work-related challenges impacting their performance. Explain how you would utilize active listening skills and appropriate communication strategies to provide effective managerial counselling in this situation, while recognizing the limitations of your role and the potential need for additional resources or referrals.

(CO5, K2)

Or

- (b) Research and report on different types of employee assistance programs (EAPs) offered by organizations. Discuss the benefits of EAPs for employees facing work-related challenges and their potential contribution to employee well-being and overall organizational effectiveness. (CO5, K2)

<b>R3101</b>
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<b>Sub. Code</b>
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<b>645NM1</b>
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**M.B.A. DEGREE EXAMINATION, APRIL – 2025**

**Tourism Management**

**NME — BASICS OF TOURISM**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct option.

1. Railways were introduced in the \_\_\_\_\_ century.  
(CO1, K1)  
(a) 17<sup>th</sup>                      (b) 18<sup>th</sup>  
(c) 19<sup>th</sup>                      (d) 20<sup>th</sup>
2. The opening of the Suez Canal in \_\_\_\_\_ greatly facilitated travel from Europe to Asia.  
(CO1, K1)  
(a) 1669                      (b) 1769  
(c) 1869                      (d) 1969
3. Which of the following countries is not included in the top 10 tourist destinations of the world?  
(CO2, K1)  
(a) China                      (b) Italy  
(c) Austria                      (d) India

4. Traveling for the purpose of bodily health and well being is an example of (CO2, K1)
  - (a) Physical motivator
  - (b) Cultural motivator
  - (c) Interpersonal motivator
  - (d) Status and prestige
5. Which of the following is not a religious tourist destination? (CO3, K1)
  - (a) Vatican
  - (b) Mecca
  - (c) Machu Pichu
  - (d) Lourdes
6. Documents issued by tour operators in exchange for which travellers receive pre-paid accomodation sightseeing, meals etc. are called (CO2, K1)
  - (a) Coupons
  - (b) Charter
  - (c) Folder
  - (d) Itinerary
7. The Derbyshire Baptist preacher who started a travel agency business was (CO1, K1)
  - (a) George Pullman
  - (b) Thomson Wood
  - (c) Thomas Cook
  - (d) Capt. Middleton
8. Identify the odd one out (CO3, K2)
  - (a) IATA
  - (b) TAAI
  - (c) ASTA
  - (d) ABTA
9. Identify the odd one out (CO3, K2)
  - (a) WTO
  - (b) PATA
  - (c) SST
  - (d) ICAO
10. Which of the following is an established travel trade fair? (CO4, K2)
  - (a) ITB
  - (b) UNESCO
  - (c) UNDP
  - (d) UNEP

**Part B**

(5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) What are the main forms of tourism? (CO1, K1)

Or

- (b) What are travel motivators? Explain with examples.  
(CO1, K1)

12. (a) Highlight the structure of the tourism industry and list out direct, indirect and support structures.  
(CO2, K2)

Or

- (b) Discuss Butler's Tourism Area Life Cycle (TALC) model.  
(CO2, K3)

13. (a) Analyse the challenges posed by seasonality in the tourism sector.  
(CO3, K5)

Or

- (b) Describe Doxey's Irridex Index Model. (CO3, K4)

14. (a) Highlight the role and functions of FHRAI.  
(CO2, K2)

Or

- (b) Write a note on the Ministry of tourism. (CO2, K2)

15. (a) Critically analyse accomodation facilities in famous tourist destinations of India.  
(CO4, K5)

Or

- (b) Examine the positive impact of tourism development on the economy and society of a region.  
(CO4, K4)

**Part C**

(5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) What are the current trends in domestic and global tourism? (CO3, K1)

Or

- (b) What do you feel is the standard of the basic components of tourism in India? (CO3, K1)

17. (a) Evaluate the impact of tourism on a region or country. (CO2, K6)

Or

- (b) Analyse how tourism planning in India has resulted in its development and promotion. (CO3, K5)

18. (a) Evaluate the role of International organisations in the development of tourism. (CO4, K6)

Or

- (b) Discuss the efforts of various national tourism organisation in promoting Indian tourism. (CO4, K4)

19. (a) Highlight the scope of MICE tourism in India. (CO5, K2)

Or

- (b) Discuss case studies in International tourism. (CO5, K4)

20. (a) Evaluate the ideals of Responsible tourism. (CO5, K6)

Or

- (b) Analyse the scope for Alternate tourism. (CO5, K5)

<b>R3102</b>
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<b>Sub. Code</b>
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<b>646NM1</b>
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**M.B.A. DEGREE EXAMINATION, APRIL – 2025.**

**Disaster Management**

**NME : INTRODUCTION TO DISASTER MANAGEMENT**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct option.

1. Which phase is NOT part of the disaster management cycle? (CO1, K2)  
(a) Mitigation                      (b) Response  
(c) Reconstruction              (d) Recovery
2. What is the main objective of financial agreements for disaster management? (CO1, K2)  
(a) To reduce the costs of industrial activities  
(b) To ensure funding for disaster preparedness, response, and recovery  
(c) To promote international trade  
(d) To expand urban infrastructure
3. What is the primary consequence of ozone depletion? (CO2, K2)  
(a) Enhanced greenhouse effect  
(b) Increased volcanic activity  
(c) Higher UV radiation levels  
(d) More intense El Niño events

4. Which hydrological disaster involves sudden heavy rainfall leading to rapid water accumulation? (CO2, K2)  
(a) Drought (b) Earthquake  
(c) Flash Flood (d) Avalanche
5. What is a primary consequence of a biological disaster? (CO3, K2)  
(a) Economic destabilization  
(b) Chemical contamination  
(c) Radiological exposure  
(d) Spread of infectious diseases
6. What is a common cause of water pollution? (CO3, K2)  
(a) Industrial runoff (b) Agricultural runoff  
(c) Soil erosion (d) Coastal erosion
7. Which of the following factors does NOT directly affect the scale of disaster damage? (CO4, K2)  
(a) Social Status (b) Habitation Pattern  
(c) Type of Disaster (d) Accessibility
8. The success of mitigation measures is most directly influenced by: (CO4, K2)  
(a) Geographic Location  
(b) Economic Resources  
(c) Preparation and Communication  
(d) Technological Advancements
9. Capability in disaster management refers to: (CO5, K2)  
(a) The ability to respond effectively to disasters  
(b) The likelihood of disasters occurring  
(c) The level of physical damage caused by disasters  
(d) The speed of recovery from disasters
10. Which organization typically plays a major role in disaster rehabilitation efforts? (CO5, K2)  
(a) WHO (b) Red Cross  
(c) IMF (d) NASA



**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Explain the relationship between hazard, risk, and vulnerability in disaster management. (CO1, K3)

Or

- (b) Discuss the role of financial agreements in supporting disaster management activities. (CO1, K3)

12. (a) Explain the difference between a flood and a flash flood. (CO2, K3)

Or

- (b) Assess the impact of storm surges on coastal communities. (CO2, K4)

13. (a) Assess the impact of radiological disasters on public health. (CO3, K4)

Or

- (b) Evaluate the impact of deforestation on biodiversity. (CO3, K4)

14. (a) Discuss how habitation patterns can influence the scale of damage in a disaster. (CO4, K3)

Or

- (b) Explain the impact of technological advancements on disaster prediction and preparation. (CO4, K4)

15. (a) Explain the significance of preparedness in the overall disaster management framework. (CO5, K4)

Or

- (b) Discuss the challenges faced by rehabilitation organizations in post-disaster scenarios. (CO5, K4)

**Part C**

(5 × 8 = 40)

Answer **all** questions not more than 1,000 words each.

16. (a) Explain the effectiveness of the disaster management cycle in addressing various types of disasters. (CO1, K5)
- Or
- (b) Illustrate the effectiveness of the national disaster management framework in India. Discuss its strengths and weaknesses. (CO1, K5)
17. (a) Discuss the importance of public awareness and education in disaster risk reduction. (CO2, K4)
- Or
- (b) Discuss the challenges and opportunities in implementing policies for ozone layer protection. (CO2, K4)
18. (a) Critically evaluate the global strategies for preventing and managing nuclear disasters. (CO3, K5)
- Or
- (b) Evaluate the effectiveness of reforestation programs in mitigating deforestation impacts. (CO3, K4)
19. (a) Explain the role of social and economic factors in determining the impact of disasters on different communities. (CO4, K5)
- Or
- (b) Discuss the impact of climate change on disaster mitigation measures and the necessary adaptations. (CO4, K5)
20. (a) Discuss in detail about the impact of early warning systems on reducing the severity disasters. (CO5, K4)
- Or
- (b) Evaluate the challenges and opportunities in implementing disaster risk reduction policies at the regional level. (CO5, K5)

<b>R3103</b>
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<b>Sub. Code</b>
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<b>652NM1</b>
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**M.B.A. DEGREE EXAMINATION, APRIL 2025.**

**International Business**

**NME – GLOBAL ENTREPRENEURSHIP**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct answer.

1. Innovation is defined as: (CO1, K2)
  - (a) the commercialization of a new product or process.
  - (b) the invention of a new product or process.
  - (c) a new product or process idea.
  - (d) the implementation of a new production method.
2. According to Horovitz (1997), a true entrepreneur is someone who: (CO1, K2)
  - (a) Knows the right people, can form effective teams, move quickly and deliver on plans
  - (b) Is a good team player, has an analytical mind, and is highly intelligent
  - (c) Enjoy social situations, is highly educated and from a wealthy background
  - (d) Is a natural introvert, usually has few professional connections, and is of limited academic ability

3. PEST analysis is: (CO2, K2)
- (a) a broad framework to help managers understand the environment in which their business operates.
  - (b) a checklist to ask how political, economic, strategic or technological developments can influence an industry and a company.
  - (c) a checklist for forecasting political, economic, strategic or technological factors.
  - (d) a framework for strategic analysis of internal and external environment.
4. Fiscal policy refers to the policy of government regarding taxation, public expenditure and \_\_\_\_\_. (CO2, K2)
- (a) Public debt
  - (b) Budgets
  - (c) Policies
  - (d) Deposits
5. The important guidelines for monetizing of the product are outlined below: (CO3, K3)
- (a) Emphasizing customer experience
  - (b) Long-term thinking process
  - (c) Creative in approach
  - (d) All of the above
6. Special Economic Zone (SEZ) concept was first introduced in \_\_\_\_\_. (CO3, K3)
- (a) China
  - (b) Japan
  - (c) India
  - (d) South Korea

7. Which of the following attitudes is not generally associated with successful entrepreneurship? (CO4, K2)
- (a) Competition and co-operation
  - (b) Desire to influence others
  - (c) Innovation and product improvement
  - (d) Status quo in business
8. A floating exchange rate \_\_\_\_\_. (CO4, K2)
- (a) is determined by the national governments involved
  - (b) remains extremely stable over long periods of time
  - (c) remains extremely unstable over long periods of time
  - (d) is allowed to vary according to market forces
9. Why is it important to have an environmental business objective? (CO5, K3)
- (a) To address government targets
  - (b) To reduce staff turnover
  - (c) To keep customer base
  - (d) To be competitive
10. Competitive advantage can be best described as \_\_\_\_\_. (CO5, K3)
- (a) Increased efficiency
  - (b) What sets an organisation apart?
  - (c) A strength and the organisations
  - (d) Intangible resources

**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Explain with examples, the salient characteristics of successful entrepreneurs. (CO1, K2)

Or

- (b) Summarise the various drivers of innovation. (CO1, K2)

12. (a) Explain the elements of economic environment. (CO2, K2)

Or

- (b) Discuss the role of culture in influencing the business environment. (CO2, K2)

13. (a) Discover the need for the development of the new product. (CO3, K3)

Or

- (b) Identify the various stages of market exploration. (CO3, K2)

14. (a) Outline the features of Smithsonian agreement. (CO4, K2)

Or

- (b) Compare the intervention and sterilization adopted by monetary authorities. (CO4, K2)

15. (a) Compare and contrast the project report and project proposal. (CO5, K5)

Or

- (b) Assess the entrepreneurial process of launching a new venture. (CO5, K5)

**Part C** (5 × 8 = 40)

Answer **all** questions not more than 1,000 words each.

16. (a) Explain why entrepreneurship is so vital for a developing country like India. (CO1, K2)

Or

- (b) Briefly explain the ways and means to improve creativity in an organization. (CO1, K2)

17. (a) Classify the psychological forces influencing the entrepreneurship. (CO2, K2)

Or

- (b) Evaluate the legal factor affecting their business. (CO2, K2)

18. (a) Develop and analyze alternative business models for new entrepreneurial ventures. (CO3, K3)

Or

- (b) Construct the new venture creation process. (CO3, K3)

19. (a) Explain the evolution of International Monetary System. (CO4, K2)

Or

- (b) Compare the fixed exchange rate system and floating exchange rate system by describing their features. (CO4, K2)

20. (a) Evaluate the clearances and documents needed for establishing a business of your choice. (CO5, K5)

Or

- (b) Explain the components of project proposal by considering your dream business project. (CO5, K5)
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**R3104**

**Sub. Code**

**701NM1**

**M.A. DEGREE EXAMINATION, APRIL – 2025**

**English**

**NME – EFFECTIVE COMMUNICATION AND SOFT SKILLS**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct option.

1. Which of the following is not a exam of verbal communication? (CO1, K1)  
(a) telephone (b) words  
(c) writing (d) interview
2. The picture without dialogues is an example of which type of communication? (CO1, K1)  
(a) face to face (b) verbal  
(c) inter personal (d) non-verbal
3. Which of the following is a barrier to effective communication? (CO2, K2)  
(a) information richness  
(b) clarity of message  
(c) active listening  
(d) cultural differences
4. \_\_\_\_\_ refers to pitch, loudness, intonation, and tempo (CO2, K2)  
(a) touches (b) prosody  
(c) gesture (d) haptics

5. Dialogic listening is also known as \_\_\_\_\_.  
(CO3, K2)
- (a) therapeutic (b) appreciative  
(c) relational (d) evaluative
6. Most of us use \_\_\_\_\_ and \_\_\_\_\_ in addition to work, when we speak.  
(CO3, K3)
- (a) words and gestures  
(b) gestures and body language  
(c) body language and posture  
(d) posture and eye gazing
7. \_\_\_\_\_ pertains to “what to say” aspect of the group discussion.  
(CO4, K1)
- (a) group behavior  
(b) appearance  
(c) manners  
(d) knowledge of the content
8. Showing direction to a group requires the following quality  
(CO4, K1)
- (a) leadership  
(b) good appearance  
(c) open body language  
(d) communication skills
9. As a means of communication e-mail have features of the immediacy of both \_\_\_\_\_ and \_\_\_\_\_.  
(CO5, K3)
- (a) reading, receiving  
(b) writing, sending  
(c) calling, receiving  
(d) receiving, sending
10. \_\_\_\_\_ is sent to specific group of people Whereas \_\_\_\_\_ may be meant for general public. (CO5, K1)
- (a) notice, memo (b) memo, circular  
(c) notice, circular (d) circular, notice

**Part B**

(5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Propose the principles of Effective Communication.  
(CO1, K1)

Or

- (b) Discuss the flow of communication and its benefits.  
(CO1, K3)

12. (a) Explain the expression of agreement and disagreement.  
(CO2, K4)

Or

- (b) Give an advice to your friend regarding government exams and jobs.  
(CO2, K2)

13. (a) What is the use of Audio Visual Aids? (CO3, K1)

Or

- (b) How to make an Impressive Presentation?(CO3, K4)

14. (a) How to avoid interference and redness of language?  
(CO4, K4)

Or

- (b) Explain Leadership qualities. (CO4, K5)

15. (a) Illustrate the advantage and disadvantage of E-mail.  
(CO5, K5)

Or

- (b) Types and uses of Memo and Circular. (CO5, K4)

**Part C**

(5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Discuss the barriers of effective communication and  
prose how to get rid of them. (CO1, K3)

Or

- (b) Discuss the levels and types of communication.  
(CO1, K4)

17. (a) Define Dos and Don'ts of telephone conversation  
with example. (CO2, K6)

Or

- (b) Show the conversation skill to a friend,  
congratulating him on his getting a good job in the  
foreign country. (CO2, K2)

18. (a) Prepare an introduction, body and conclusion on the  
given topic (CO3, K2)

- Water Scarcity and conservation.

Or

- (b) Describe the structure, language and delivery of the  
presentation. (CO3, K3)

19. (a) Compare and analyze the given topic (CO4, K2)

- (i) Parents and Grand Parents
- (ii) Learning to read (vs.) Learning to write.

Or

- (b) Define peer group and explain five benefits of peer  
group co-operation. (CO4, K3)

20. (a) Write a letter to the editor of the local newspaper  
complaining about irregular water supply on the  
one hand and wastage of water and the other.  
(CO5, K4)

Or

- (b) Explain how to write a resume step by step by and  
mention their types. (CO5, K5)

**R3105**

**Sub. Code**

**720NM2**

**B.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Physical Education**

**NME: FIRST AID AND REHABILITATION**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions  
by choosing the correct option.

1. Which of the following is a cause of malnutrition?  
(CO1, K2)
  - (a) Lack of balanced diet
  - (b) Excessive exercise
  - (c) Overhydration
  - (d) Excess sleep
2. Aim of physical education is (CO1, K1)
  - (a) To improve mathematical skills
  - (b) To develop physical fitness and motor skills
  - (c) To prevent social interactions
  - (d) To limit physical activity
3. Recreational activities are essential because they:  
(CO2, K2)
  - (a) Help in physical and mental relaxation
  - (b) Increase academic pressure
  - (c) Lead to social isolation
  - (d) Are only meant for children

4. Health education in schools focuses on: (CO2, K2)  
(a) Physical fitness, nutrition and safety  
(b) Reducing exam pressure  
(c) Replacing sports with academic subjects  
(d) Avoiding discussions about health
5. Which of the following is a lifestyle disorder? (CO3, K1)  
(a) Malaria (b) Tuberculosis  
(c) Diabetes (d) Common cold
6. Which of the following is a communicable disease? (CO3, K2)  
(a) Obesity (b) Hypertension  
(c) Tuberculosis (d) Diabetes
7. A fracture is a: (CO4, K2)  
(a) Tear in the skin  
(b) Break in the bone  
(c) Sprain in the muscle  
(d) Bruise on the body
8. Which nutrient is essential for muscle growth and repair? (CO4, K1)  
(a) Carbohydrates (b) Proteins  
(c) Fats (d) Vitamins
9. A deficiency of Vitamin D leads to: (CO5, K2)  
(a) Scurvy (b) Rickets  
(c) Night blindness (d) Beriberi
10. What is the main cause of obesity? (CO5, K2)  
(a) Lack of physical activity  
(b) Drinking excess water  
(c) Sleeping too much  
(d) Eating only vegetables

**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Define health education and explain its significance.  
(CO1, K3)

Or

- (b) List the objectives of health education. (CO1, K3)

12. (a) What are the causes and prevention of malnutrition?  
(CO2, K3)

Or

- (b) Describe the importance of personal hygiene.  
(CO2, K3)

13. (a) Define physical education and explain its aims.  
(CO3, K2)

Or

- (b) Discuss the scope and importance of physical education.  
(CO3, K2)

14. (a) What are the benefits of physical fitness? (CO4, K4)

Or

- (b) List and explain the components of physical fitness.  
(CO4, K4)

15. (a) Explain the role of health education in schools.  
(CO5, K4)

Or

- (b) What are the safety measures in schools and playfields?  
(CO5, K4)

**Part C**

(5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Discuss the importance of health education in preventing lifestyle disorders. (CO1, K4)

Or

- (b) Explain the role of schools in promoting health and safety education. (CO1, K4)

17. (a) Explain the development of ancient and modern Olympics. (CO2, K3)

Or

- (b) Discuss the benefits of recreational activities in maintaining a healthy lifestyle. (CO2, K3)

18. (a) Discuss the importance of food and nutrition in maintaining health. (CO3, K3)

Or

- (b) Explain the classification of food and its constituents. (CO3, K3)

19. (a) Define communicable diseases and explain their prevention methods. (CO4, K3)

Or

- (b) Discuss the causes and treatment of muscular sprains and fractures. (CO4, K4)

20. (a) Describe the causes, symptoms, and prevention of diabetes and obesity. (CO5, K3)

Or

- (b) Explain the significance of first aid and its principles. (CO5, K3)



**R3106**

**Sub. Code**

**724NM2**

**B.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Yoga**

**NME : APPLIED YOGA**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct option.

1. Which of the following is NOT a function of Pranayama?  
(CO1, K1)
  - (a) Improves lung capacity
  - (b) Reduces stress and anxiety
  - (c) Strengthens core muscles
  - (d) Enhances oxygen supply
2. Which Kosha represents the state of pure consciousness and bliss?  
(CO1, K2)
  - (a) Annamaya Kosha
  - (b) Pranamaya Kosha
  - (c) Vijnanamaya Kosha
  - (d) Anandamaya Kosha
3. Which yoga practice is particularly beneficial for managing diabetes?  
(CO2, K2)
  - (a) Bhujangasana      (b) Trikonasana
  - (c) Surya Namaskar    (d) All of the above

4. What is a major cause of hypertension that yoga helps to control? (CO1, K2)
- (a) Excessive water intake
  - (b) High-stress levels
  - (c) Overconsumption of carbohydrates
  - (d) Weak bone density
5. Which aspect of yoga is primarily associated with detoxifying the body? (CO3, K1)
- (a) Asana
  - (b) Shat Kriyas
  - (c) Mudras
  - (d) Dharana
6. What is the primary goal of Dharana in yoga? (CO3, K2)
- (a) Strengthening muscles
  - (b) Enhancing digestion
  - (c) Concentration and mental focus
  - (d) Detoxifying the body
7. Which type of food is considered the most beneficial in a yogic diet? (CO4, K1)
- (a) Rajasic
  - (b) Tamasic
  - (c) Sattvic
  - (d) Processed
8. According to Ayurveda, which dosha is associated with the elements of fire and water? (CO4, K3)
- (a) Vata
  - (b) Pitta
  - (c) Kapha
  - (d) Prana
9. What is a common symptom of techno-stress? (CO5, K2)
- (a) Increased flexibility
  - (b) Digital eye strain
  - (c) Lower heart rate
  - (d) Improved sleep

10. Which yoga practice is Particularly helpful in reducing stress caused by excessive screen time? (CO5, K2)
- (a) Trataka (gazing meditation)
  - (b) Surya Namaskar
  - (c) Chakrasana
  - (d) Navasana

**Part B** (5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Explain the Psycho-physiological benefits of Pranayama. (CO1, K3)

Or

- (b) What are the functional values of Panchakoshas in yoga? (CO1, K3)

12. (a) List the common symptoms and causes of migraine. (CO2, K3)

Or

- (b) How does yoga help in managing diabetes? (CO2, K3)

13. (a) Define stress according to yoga and describe its symptoms. (CO3, K4)

Or

- (b) How does practicing Dhyana (Meditation) help in personality development? (CO3, K3)

14. (a) Differentiate between Rajasic, Tamasic and Sattvic food. (CO4, K4)

Or

- (b) What is the significance of Mitahara in yogic diet? (CO4, K3)

15. (a) Explain the major causes and symptoms of techno-stress. (CO5, K3)

Or

- (b) How can yoga help in reducing the effects of excessive screen time on mental health? (CO5, K3)

**Part C**

(5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Analyze the role of Chakras in maintaining physical and mental well-being. (CO1, K5)

Or

- (b) Evaluate the impact of Bandha and Mudra on the nervous system. (CO1, K5)

17. (a) Discuss the causes, symptoms, and yogic management of thyroid disorders. (CO2, K4)

Or

- (b) Assess the effectiveness of yoga in managing obesity and metabolic disorders. (CO2, K5)

18. (a) Compare and contrast different stress management techniques in yoga. (CO3, K4)

Or

- (b) How does Ishwara Pranidhana contribute to emotional stability and spiritual growth? (CO3, K4)

19. (a) Design a weekly diet plan based on the yogic principles of Ahara for a healthy lifestyle. (CO4, K4)

Or

- (b) Critically examine the importance of diet according to body constitution (Vata, Pitta, Kapha). (CO4, K4)

20. (a) Propose a structured yoga routine to manage techno-stress in corporate professionals. (CO5 K5)

Or

- (b) Justify the application of yoga for skill enhancement in modern workplaces. (CO5, K5)

<b>R3107</b>
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<b>Sub. Code</b>
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<b>741NM1</b>
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**M.Ed. DEGREE EXAMINATION, APRIL – 2025.**

**EDUCATION**

**NME : PSYCHOLOGY OF LEARNING AND HUMAN  
DEVELOPMENT**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. Educational psychology is a science of (CO1, K2)
  - (a) Educational Planning
  - (b) Educational Principles
  - (c) Human behavior
  - (d) None of the these
2. How many types of Psychology are there? (CO1, K2)
  - (a) 1 (b) 2
  - (c) 3 (d) 4
3. Stages of Psycho social development: Basic trust versus mistrust (CO2, K3)
  - (a) Birth to 1 Year
  - (b) 1 to 3 Years
  - (c) 3 to 6 Years
  - (d) 6 to 11 Years

4. Cognitive Development deal with the development of \_\_\_\_\_.  
(CO2, K2).
- (a) Emotions
  - (b) Body parts
  - (c) Brain Development
  - (d) None of the above
5. The simplest Kind of Learning is called \_\_\_\_\_ (CO3, K2)
- (a) Modeling
  - (b) Conditioning
  - (c) Observational Learning
  - (d) Concept Learning
6. When something previously Learned benefits Performance on Learning in a new situation is said to be \_\_\_\_\_ (CO3, K3)
- (a) Positive transfer of Learning
  - (b) Negative transfer of Learning
  - (c) Zero transfer of Learning
  - (d) None of the above
7. The range of IQ in the people with moderate mental retardation is \_\_\_\_\_ (CO4, K3)
- (a) 10 to 19
  - (b) 20 to 34
  - (c) 35 to 54
  - (d) 55 to 74
8. Which one of these is first phase of creative thinking? (CO4, K2)
- (a) Incubation
  - (b) Illumination
  - (c) preparation
  - (d) None of the above

9. Who propagated two factor theory of personality?  
(CO5, K2)
- (a) All part                      (b) Carrell  
(c) Spearman                    (d) Eysenck
10. Psychoanalysis was developed to treat which mental disorder?  
(CO5, K3)
- (a) Hypochondriasis    (b) Depression  
(c) Neurosis                (d) Hysteria

**Part B** (5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Explain the Methods of Psychology.            (CO1, K3)
- Or
- (b) Describe the scope of Educational Psychology  
(CO1, K2)
12. (a) Differentiate between growth and Development.  
(CO2, K4)
- Or
- (b) Why Adolescence Period is a critical period?  
Explain. (CO2, K4)
13. (a) Explain about individual differences in Learning.  
(CO3, K3)
- Or
- (b) Briefly discuss about Trial and Error theory.  
(CO3, K4)
14. (a) Discuss the various types of Motivation.    (CO4, K3)
- Or
- (b) Differentiate Convergent thinking and Divergent thinking.  
(CO4, K4)

15. (a) Explain theories of Personality. (CO5, K2)

Or

- (b) Write the characteristics of good Mental health personal. (CO5, K4)

**Part C** (5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Write a detailed account on Branches of Psychology. (CO1, K3)

Or

- (b) Discuss about significance of Educational Psychology to the teacher. (CO1, K4)

17. (a) Explain General Principles of growth and development. (CO2, K2)

Or

- (b) Explain Cognitive development. (CO2, K3)

18. (a) Discuss the Pavlov's theory and its implications in Educational setting. (CO3, K4)

Or

- (b) Briefly discuss Gangne's theory. (CO3, K3)

19. (a) Explain Theories of intelligence. (CO4, K2)

Or

- (b) Explain Creativity and Intelligence. (CO4, K3)

20. (a) Briefly explain major determinants of Personality. (CO5, K3)

Or

- (b) Explain Projective and Non projective Techniques in Assessment of personality. (CO5, K4)



<b>R3108</b>
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<b>Sub. Code</b>
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<b>743NM1</b>
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**M.Ed. (Special Education) DEGREE EXAMINATION,  
APRIL – 2025**

**Visual Impairment**

**NME – INTRODUCTION TO DISABILITIES**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. According to the RPwD Act, which of the following is NOT considered a type of disability? (CO1, K1)
  - (a) Hearing impairment
  - (b) Visual impairment
  - (c) Mental illness
  - (d) Temporary physical injury
2. It is a physical, mental, sensory, or social impairment that can limit a person's ability to participate in society. (CO1, K2)
  - (a) Disability
  - (b) Impairment
  - (c) Handicapped
  - (d) Under privileged

3. Which of the following is NOT typically a characteristic of sensory disabilities? (CO2, K3)
- (a) Difficulty in seeing or hearing
  - (b) Difficulty in walking or running
  - (c) Limited ability to communicate verbally
  - (d) Dependence on assistive devices like hearing aids or glasses
4. Age-related hearing loss is referred as \_\_\_\_\_. (CO2, K1)
- (a) Presbycusis
  - (b) Meningitis
  - (c) Cerumen impaction
  - (d) Auditory nerve hearing loss
5. Down syndrome is a genetic condition that occurs when a person has an extra copy of chromosome in \_\_\_\_\_. (CO3, K3)
- (a) 20                                      (b) 21
  - (c) 22                                      (d) 23
6. Reinforcing only the desired behavior while ignoring or redirecting undesirable behaviors is called as \_\_\_\_\_. (CO3, K3)
- (a) Shaping
  - (b) Modeling
  - (c) Positive reinforcement
  - (d) Differential reinforcement

7. Which of the following is not the type of physical disability? (CO4, K1)
- (a) Spina bifida
  - (b) Multiple sclerosis
  - (c) Autism Spectrum Disorder
  - (d) Cerebral palsy
8. It is the most common type of Cerebral Palsy. (CO4, K3)
- (a) Spastic
  - (b) Dyskinetic
  - (c) Ataxic
  - (d) Mixed
9. It is one of major cause for multiple disability. (CO5, K2)
- (a) Encephalitis
  - (b) TORCH infections
  - (c) Poliovirus
  - (d) Chlamydia trachomatis
10. A multiple disability can potentially affect a person's ability to \_\_\_\_\_. (CO5, K1)
- (a) Communicate
  - (b) Move and learn
  - (c) Perform daily activities
  - (d) All the above

**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Brief the concept and definition of Disabilities. (CO1, K1)

Or

- (b) Write a short note on Thalassemia. (CO1, K1)

12. (a) As a Special Educator, how will you identify students with visual problems in inclusive class room? (CO2, K3)

Or

- (b) List down the characteristics of children with hearing difficulties. (CO2, K2)
13. (a) Enumerate the significance of Early Intervention for young children with intellectual disabilities. (CO3, K2)

Or

- (b) Mention any five preventive methods for intellectual disability. (CO3, K2)
14. (a) State any five characteristics of physical disability. (CO4, K2)

Or

- (b) Mention the role of teachers in making adaptations in the educational programmes for students with physical disability. (CO4, K2)
15. (a) Give the definition and possible combinations of multiple disability. (CO5, K1)

Or

- (b) Enumerate the implications of multiple disability in the day to day activities. (CO5, K2)

**Part C**

(5 × 8 = 40)

Answer **all** questions not more than 1000 words each.

16. (a) Compare and contrast the three terms - Impairment, disability and Handicap with suitable examples. (CO1, K5)

Or

- (b) Enumerate the types of disabilities as per RPwD Act. (CO1, K2)
17. (a) Discuss the intervention and educational programmes available for children with hearing impairment. (CO2, K3)

Or

- (b) Analyse the causes and preventive measures for visual impairment. (CO2, K4)
18. (a) Explain the characteristics and causes of intellectual disability. (CO3, K2)

Or

- (b) Analyse the need for IEP for children with intellectual disability. (CO3, K4)
19. (a) Discuss the types and characteristics of physical disability. (CO4, K2)

Or

- (b) Explain the therapeutic intervention strategies for individuals with physical disability. (CO4, K2)

20. (a) Summarise the causes and preventive methods of persons having Neurological impairments.(CO5, K6)

Or

- (b) Discuss the need for appropriate intervention and educational programmes for the successful rehabilitation of students with multiple disability.  
(CO5, K2)
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<b>R3109</b>
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<b>Sub. Code</b>
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<b>813NM1</b>
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**M.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Yoga**

**NME : HEALTH EDUCATION AND FIRST AID**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective type questions  
by choosing the correct option.

1. What is the primary aim of health education? (CO1, K2)
  - (a) To cure diseases
  - (b) To provide health knowledge and promote healthy behaviours
  - (c) To regulate healthcare institutions
  - (d) To enforce medical treatments
2. What is the primary objective of school health services?  
(CO1, K2)
  - (a) Providing first aid only
  - (b) Ensuring the overall health and well-being of students
  - (c) Conducting sports activities
  - (d) Monitoring food supply in schools

3. Which of the following is a major cause of malnutrition in India? (CO2, K2)
- (a) Overeating
  - (b) Lack of physical activity
  - (c) Poor dietary habits and food scarcity
  - (d) High protein intake
4. Which communicable disease is caused by a virus? (CO2, K1)
- (a) Dysentery
  - (b) Typhoid
  - (c) AIDS
  - (d) Malaria
5. What is the primary benefit of a balanced diet? (CO3, K2)
- (a) Promotes weight gain
  - (b) Maintains overall health and prevents diseases
  - (c) Reduces the need for exercise
  - (d) Increases sugar levels in the body
6. What is a major health risk associated with tobacco consumption? (CO3, K2)
- (a) Improved digestion
  - (b) Strengthened immune system
  - (c) Lung cancer and respiratory diseases
  - (d) Reduced stress permanently



7. Which type of fracture is characterized by a bone breaking through the skin? (CO4, K2)
- (a) Simple fracture
  - (b) Compound fracture
  - (c) Greenstick fracture
  - (d) Hairline fracture
8. What should you do first when assisting a drowning victim? (CO4, K2)
- (a) Start CPR immediately in the water
  - (b) Ensure your own safety before attempting rescue
  - (c) Wait for professional rescuers before taking action
  - (d) Give the victim food and water
9. What is the most important step in fire safety during a building fire? (CO5, K2)
- (a) Run as fast as possible
  - (b) Use an elevator to escape quickly
  - (c) Stay low to avoid smoke inhalation and exit safely
  - (d) Wait inside until firefighters arrive
10. Which of the following is a primary cause of earthquakes? (CO5, K2)
- (a) Volcanic eruptions
  - (b) Tectonic plate movements
  - (c) Heavy rainfall
  - (d) Air pollution

**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) What are the guiding principles of health education? (CO1, K3)

Or

- (b) Define health supervision and its importance. (CO1, K3)

12. (a) List any three measures to prevent food adulteration. (CO2, K3)

Or

- (b) What is the importance of environmental sanitation in schools? (CO2, K3)

13. (a) Define dental hygiene and explain its importance. (CO3, K3)

Or

- (b) What are the key principles of lifestyle management for maintaining good health? (CO3, K3)

14. (a) What are the basic rules of first aid? (CO4, K3)

Or

- (b) Explain the importance of bandaging and splinting in first aid. (CO4, K3)

15. (a) What are the immediate steps to take during an earthquake? (CO5, K3)

Or

- (b) Explain the importance of rehabilitation in disaster recovery. (CO5, K3)

**Part C** (5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Explain the concept of health education and discuss its role in personal hygiene. (CO1, K4)

Or

- (b) Describe the dimensions of health and explain how they contribute to overall well-being. (CO1, K4)

17. (a) Explain the role of health education in schools and its impact on preventing communicable diseases. (CO2, K4)

Or

- (b) Discuss the signs, symptoms, and prevention methods for any two communicable diseases prevalent in India. (CO2, K4)

18. (a) Discuss the effects of alcohol and tobacco on health. How can individuals prevent their harmful impacts? (CO3, K4)

Or

- (b) Explain the role of a balanced diet in managing obesity and hypertension. (CO3, K4)

19. (a) Describe the concept of emergency care and discuss the steps to manage accidents and fractures effectively. (CO4, K4)

Or

- (b) Explain the first aid procedures for common emergencies like burns, insect bites and haemorrhages. (CO4, K4)
20. (a) Discuss the role of SDRF in emergency situations like floods and earthquakes. How do they provide immediate and long-term care? (CO5, K5)

Or

- (b) Explain the impact of natural disasters such as fires, explosions, and famines on public health and the strategies used for rehabilitation. (CO5, K4)
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<b>R3110</b>
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<b>Sub. Code</b>
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<b>932NM1</b>
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**M.L.I.Sc. DEGREE EXAMINATION, APRIL – 2025**

**Library and Information Science**

**NME : OPEN KNOWLEDGE SYSTEM**

**(CBCS – 2022 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. How should libraries be categorized? (CO1, K2)
  - (a) Public, Academic, Special, and National
  - (b) Public, Academic, and Personal
  - (c) Local, National, and International
  - (d) Public, National, and Specific
2. NDLI denotes. (CO1, K2)
  - (a) National Digital Library of India
  - (b) National Development Library of India
  - (c) National Depository of Library Resources in India
  - (d) National Digital Library Resources in India
3. The person who provides reference service is called. (CO1, K2)
  - (a) Chief librarian (b) Grade One librarian
  - (c) Deputy librarian (d) Reference librarian
4. What is “INFORPORT”? (CO2, K2)
  - (a) Subject Gateway of Indian Electronic Resources
  - (b) Information portal of Stanford University Library
  - (c) OCLC’s federated search engine
  - (d) Information portal of MIT Library

5. Shodhganga is a national level repository of. (CO2, K2)
- (a) e-journals (b) e-books  
(c) e-theses (d) e-newsletter
6. Zotero is a . (CO3, K1)
- (a) Budgeting Software  
(b) Data analysis Software  
(c) Reference Management Software  
(d) Citation Software
7. Impact factor is the. (CO4, K2)
- (a) Measurement of authorship  
(b) Measurement of impact  
(c) Measurement of citations  
(d) Measurement of journal
8. h-index indicates the quality of. (CO4, K2)
- (a) Publisher (b) Author  
(c) Journal (d) Country
9. Which Boolean operator narrows a search in a database? (CO5, K2)
- (a) And (b) Or  
(c) Not (d) Truncation
10. Which remote access enables users to search across multiple electronic resources simultaneously? (CO5, K2)
- (a) Federated research  
(b) Open URL link  
(c) Proxy server  
(d) IP Authentication

**Part B**

(5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) What do you understand source of formation?  
Explain characters of primary sources. (CO1, K2)

Or

- (b) Distinguished paid and open access resources with few examples. (CO1, K2)
12. (a) What do you understand non–documentary sources explain with examples? (CO2, K2)

Or

- (b) Discuss the advantages of open courseware. (CO2, K2)
13. (a) What is a Style Manual? (CO3, K1)

Or

- (b) Write the bibliography details of book and journal article. (CO3, K1)
14. (a) What is citation analysis? Discuss its importance. (CO4, K2)

Or

- (b) Expand the following. (CO4, K2)
- (i) SCIE (ii) SSCI (iii) AHCI
15. (a) Write a sort note on Search Engine. (CO5, K2)

Or

- (b) List out few plagiarisms' detection tool. (CO4, K2)

**Part C**

(5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Discuss the web-based services provided by university library. (CO1, K2)

Or

- (b) Discuss the role of librarian in university library. (CO1, K2)

17. (a) Discuss various categories of Information sources. (CO2, K2)

Or

- (b) Discuss in detail: Print resources in library. (CO2, K2)

18. (a) Why reference management tools are important for research? (CO3, K1)

Or

- (b) What do you mean “Bibliography” and References? (CO3, K1)

19. (a) Discuss the salient features of Scopus database. (CO4, K2)

Or

- (b) Discuss various types of plagiarism and how to avoid it. (CO4, K2)

20. (a) Discuss various types of information searching techniques with examples. (CO5, K2)

Or

- (b) Discuss role of search engines in information retrieval. (CO5, K2)