

R6308

Sub. Code

301701

B.Voc. DEGREE EXAMINATION, NOVEMBER – 2021

Fashion Technology

NME : FUNDAMENTALS OF APPAREL DESIGNING

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What is shape?
2. Define Silhouette.
3. Write about the types of Decorative Design.
4. What are the basic requirements of a good structural design for clothing
5. Define Proportion or scale.
6. What is meant by Balancing of the silhouettes?
7. Write the five color approaching angles.
8. Give examples where subtractive primary colors are used.
9. Explain unusual figures.
10. Explain suitable dresses for long waist and slender figure.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Write the requirements of good structural design.

Or

- (b) Explain about the decorative design.

12. (a) Explain about the rhythm and its types.

Or

- (b) Write the application of design principles in garment designing.

13. (a) Explain about the properties of color.

Or

- (b) Explain the basic principle of color in designing.

14. (a) Give an out line about the broad and narrow shoulder.

Or

- (b) Discuss about the thin figure.

15. (a) Write about the points to be consider in children wardrobe planning.

Or

- (b) Illustrate about the guide lines used in wardrobe building.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Discuss about the elements of design.
 17. Discuss about the harmony and its types.
 18. Give out line about color theory
 19. Discuss about the different face figures.
 20. Write about the elements principles to be used in women's wardrobe planning.
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R6309

Sub. Code

302701

B.Voc. DEGREE EXAMINATION, NOVEMBER 2021

Software Development

NME: OFFICE AUTOMATION

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. List out the various parts of CPU.
2. Define operating system.
3. What is the use of having macros in MS-Word?
4. What is the short cut key to get help in MS-Word?
5. Write the formula to find the sum of all the numbers available in column B in MS Excel.
6. What do you mean by pivot chart?
7. What is database management?
8. How will you hide a column in MS Excel?
9. What are the shortcut keys to move to the next slide while playing the slideshow?
10. What is the shortcut key to close MS-Powerpoint?

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Write the characteristics of a Computer System.

Or

- (b) What are all the ways available to move a file from one location to another location?

12. (a) List out the steps to be followed to create and use bookmarks in MS Word.

Or

- (b) Explain how to create and use template in MS-Word.

13. (a) Write the procedure to be followed to create pivot chart.

Or

- (b) Explain the difference between AVERAGE and AVERAGEIF formulae with an example.

14. (a) Write brief note on scenarios of MS Excel.

Or

- (b) List out the steps for filtering a particular column of MS Excel.

15. (a) Explain how to create a word art and how to animate it.

Or

- (b) How will you bring a chart from MS Excel to MS Powerpoint using possible shortcut keys.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain the different generations of computers.
17. Explain the procedure for linking and embedding objects.
18. List out and explain various formatting options for a cell in MS Excel.
19. Explain the 'what-if' analysis with suitable examples.
20. Write the steps to be followed to create slideshow for your sports team with animations and sound effects.

R6310

Sub. Code

303702

M.Voc. DEGREE EXAMINATION, NOVEMBER – 2021

Fashion Technology

NME :FASHION AND APPAREL MERCHANDISING

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer All questions.

1. Define Fashion
2. What is Haute Couture?
3. Define Sourcing.
4. List the types of merchandiser.
5. Describe Ware House.
6. Enumerate on Retail Merchandising.
7. What is the meaning of Sampling?
8. Brief on Invoice.
9. Explain the term advertising.
10. List any four journals/ Magazines related to apparel and textiles.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Elaborate on Fashion cycle.

Or

- (b) Explain theories of Fashion.

12. (a) Discuss on the process flow in apparel industry.

Or

- (b) Write a note on the apparel sourcing clusters in India.

13. (a) What are the functions of merchandiser?

Or

- (b) Describe on concepts of Six Rights.

14. (a) Enumerate on types of samples.

Or

- (b) Brief on order sheet and its contents.

15. (a) Highlight on Trade shows and Fairs.

Or

- (b) Write a note on the functions of apparel export promotion council.

Part C

(3 × 10 = 30)

Answer any **Three** questions.

16. Explain the detail about Fashion Forecasting.

17. Discuss the organization structure of an apparel industry.

18. Enumerate on the types and essential requisites of merchandiser.
 19. Brief on contents in Document Formats.
 20. Classify advertising and discuss its merits and demerits.
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R6311

Sub. Code

304702

M.Voc. DEGREE EXAMINATION, NOVEMBER – 2021

Software Development

NME : PRINCIPLES OF DIGITAL MARKETING

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define the term interconnectivity.
2. List out the components that with form foundation for digital marketing strategy.
3. Define virtual dedicated hosting.
4. What are key performance indicators in web analytics?
5. What are E-mail marketing tools?
6. How will the forums and discussion sites helps in social media marketing?
7. What is performance marketing?
8. List out the essential steps for successful PR.
9. What are the vital building blocks for website?
10. Define social strategy in holistic marketing.

Part B

(5 × 5 = 25)

Answer **all the** questions, choosing either (a) or (b).

11. (a) Write short notes on digital marketing strategy.

Or

- (b) Discuss in brief on the steps to understand the digital consumers.

12. (a) Write the steps to hosting website's home on the Internet.

Or

- (b) Write short notes on testing and investing in online marketing.

13. (a) Summarize the vital components of E-mail marketing.

Or

- (b) What are the social media rules of engagement?

14. (a) List out the five essentials of traditional PR and reputation management.

Or

- (b) Write short notes on affiliate marketing.

15. (a) What are the privacy issues surrounding mobile marketing?

Or

- (b) Write short notes on Game advertising.

Part C

(3 × 10 = 30)

Answer any **three** of the following questions.

16. Explain in detail about the technology available behind digital marketing with suitable example.
 17. Describe in detail how to build an effective website and to write effective web content.
 18. Discuss in detail about social media dashboard and different forms of social media for successful business.
 19. Write down the steps for promoting business through online channels.
 20. Discuss in detail, how significant are the location based mobile applications and the privacy issues in mobile marketing.
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R6312

Sub. Code

311701

B.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Catering Science and Hotel Management

NME — BASIC CATERING SERVICES

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define Hors d' oeuvre.
2. What is "BRUSCHETTA"?
3. What is Fumet? and uses.
4. List out any two international soups.
5. What is paupiette?
6. Name seven types of breakfast.
7. What is crustacean?
8. Discuss about Abattoir and Butchery.
9. What are the ingredient used for making Pesto?
10. Define 'FARINACEOUS'.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the various French Hors d'oeuvre.

Or

- (b) How will you differentiate French salad dressing and American salad dressing?

12. (a) Explain the importance of stock in cooking food.

Or

- (b) Draw the classification of soups.

13. (a) Explain the fish and fish cuts.

Or

- (b) Draw the egg diagram with parts.

14. (a) Discuss about types of stocks and sauces.

Or

- (b) List out ten name of main course in French cuisine.

15. (a) What is Polenta? Explain.

Or

- (b) Explain about spaghetti squash.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Discuss about appetizers of salads.
 17. Explain various types of stocks used in cooking.
 18. Explain classification of fish, shellfish and cuts of fish.
 19. Elaborate the Preslaughter steps and functions.
 20. Name five Italian sauces and recipes.
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R6313

Sub. Code

411704

M.A. DEGREE EXAMINATION, NOVEMBER 2021

Tamil

NME : இதழியல் மற்றும் தகவல் தொடர்பியல்

(Journalism and Mass communication)

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

பகுதி அ

(10 × 2 = 20)

அனைத்து வினாக்களுக்கும் ஓரிரு தொடரில் விடையளிக்க.

1. பொதுப் பணிகளின் வகைகள் யாவை?
2. தமிழகத்தில் தொடக்க காலத்தில் வெளிவந்த இதழ்கள் எவை?
3. 'துணுக்குகள்' என்றால் என்ன?
4. 'கேலிச்சித்திரங்கள்' குறிப்பிடுவது எதனை?
5. இதழ்களில் எழுதுவது எப்படி?
6. 'தலையங்கம்' செய்தித்தாளில் இடம்பெறும் முக்கியத்துவத்தைக் குறிப்பிடுக.
7. வானொலியின் பணி யாது?
8. திரைப்படத்தின் தோற்றம் பற்றி எழுதுக.
9. இணையத்தின் பயன் எத்தகையது?
10. மக்கள் தகவல் தொடர்பு சாதனங்கள் யாவை?

பகுதி ஆ

(5 × 5 = 25)

அனைத்து வினாக்களுக்கும் ஒரு பக்க அளவில் விடை தருக.

11. (அ) விடுதலை இயக்க காலத் தமிழ் இதழ்களைக் குறிப்பிடுக.
(அல்லது)
(ஆ) அச்சுக்கலையின் தோற்றம் பற்றி எழுதுக.
12. (அ) செய்தியின் வகைகள் யாவை ?
(அல்லது)
(ஆ) கருத்துப் படங்கள் குறித்து எடுத்துரைக்க.
13. (அ) இதழியல் மொழிநடையை எடுத்துரைக்க.
(அல்லது)
(ஆ) 'செய்தித் தலைப்பு' எழுதுவது எப்படி ?
14. (அ) தொலைக்காட்சியின் பயன்கள் யாவை ?
(அல்லது)
(ஆ) திரைப்படத்தின் பணி எத்தகையது ?
15. (அ) கணினியின் செயல்பாடுகளை விளக்குக.
(அல்லது)
(ஆ) மின்னிதழ்கள் குறித்து எழுதுக.

பகுதி இ

(3 × 10 = 30)

ஏதேனும் மூன்று வினாக்களுக்கு கட்டுரை வடிவில் விடை தருக.

16. படங்களும், இதழ்களும் பற்றி எடுத்துரைக்க.
17. செய்திகளின் கட்டமைப்பினை விளக்குக.
18. தகவல் தொடர்பு வடிவங்கள் யாவை ?

19. மக்கள் தகவல் தொடர்பு சாதனங்களின் பணிகளை எடுத்து
எழுதுக.
20. தகவல் தொடர்பு சாதனங்களின் வளர்ச்சியை விவரிக்க.
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R6314

Sub. Code

411705

M.A. DEGREE EXAMINATION, NOVEMBER 2021

Tamil

NME : மொழிபெயர்ப்பியல் (Translation)

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

பகுதி அ

(10 × 2 = 20)

ஓரிரு தொடரில் அனைத்து வினாக்களுக்கும் விடையளி.

1. மொழிபெயர்ப்பு என்றால் என்ன?
2. மொழிபெயர்ப்பின் இயல்பு யாது?
3. மூலமொழி, பெறும் மொழி என்றால் என்ன?
4. மொழியாக்கம் என்றால் என்ன?
5. உவம வழக்கை மொழிபெயர்ப்பது குறித்துக் கூறுக.
6. சிறப்பு வழக்கை மொழிபெயர்ப்பதற்குச் சான்று காட்டுக.
7. மொழி பெயர்ப்பின் படி நிலைகள் யாவை?
8. ஆகுபெயரை எப்படி மொழிபெயர்ப்பது?
9. கலைச் சொல்லாக்கம் - குறிப்பு வரைக.
10. மொழிபெயர்ப்பில் நிகரன்கள் குறித்து எழுதுக.

அனைத்து வினாக்களுக்கும் ஒரு பக்க அளவில் விடையளி.

11. (அ) மொழிபெயர்ப்பின் இன்றியமையாமையை விளக்குக.

(அல்லது)

(ஆ) மொழிபெயர்ப்பியல் கோட்பாடுகளின் அடிப்படைகளைக் கூறுக.

12. (அ) சொற்பொழிவுகளை மொழிபெயர்ப்பது குறித்து எழுதுக.

(அல்லது)

(ஆ) மொழிபெயர்ப்பு - மொழியாக்கம் வேறுபாட்டினைச் சுட்டுக.

13. (அ) உரையாடல் வழக்குகளை மொழிபெயர்ப்பதில் உள்ள சிக்கல்கள் யாவை?

(அல்லது)

(ஆ) சமூக அமைப்பு சார்ந்த வழக்குகளை மொழிபெயர்ப்பதில் உள்ள இடர்பாடுகள் யாவை?

14. (அ) மொழிபெயர்ப்பில் காலத் தொடர்பு குறித்துச் சான்றுடன் விளக்குக.

(அல்லது)

(ஆ) தாய் வாக்கியம் என்பதை விளக்குக.

15. (அ) கருத்துப்படிமத்தை மொழிபெயர்ப்பது பற்றி விளக்குக.

(அல்லது)

(ஆ) மொழிபெயர்ப்புப் பணியின் முக்கியத்துவத்தை விளக்குக.

பகுதி இ

(3 × 10 = 30)

எவையேனும் மூன்று வினாக்களுக்கு கட்டுரை வடிவில் விடையளி.

16. மொழிபெயர்ப்பு வகைகளை விவரி.
 17. அறிவியல் மொழிபெயர்ப்பின் சிறப்பியல்புகளை விவரி.
 18. மொழி பெயர்ப்பில் மொழி வழக்குகளின் முக்கியத்துவத்தை விளக்குக.
 19. மொழிபெயர்ப்பில் செம்மையாக்கத்தின் முக்கியத்துவத்தை விவரி.
 20. மொழிபெயர்ப்பாளனின் தகுதிகளை விவரி.
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R6315

Sub. Code

414702

M.A. DEGREE EXAMINATION, NOVEMBER – 2021

Theatre and Film Studies

Non Major Electives – FILM APPRECIATION

(CBCS – 2020 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Non- actors
2. Criticism
3. Psycho
4. Sound effects
5. Scripting
6. Art direction
7. Shomingeki
8. Narrative
9. Satyajit Ray
10. Deductive approach

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Discuss the nature and need for film appreciation.

Or

- (b) Write the social and political aspects of cinema.

12. (a) Write about psychological Thrills.

Or

- (b) Describe the dramatic development of the film Psycho.

13. (a) Write about the film “Citizen Kane”.

Or

- (b) Discuss the any one epic film appreciation of David Lean.

14. (a) Discuss the study of the style in Kriztof Kieslowski films.

Or

- (b) Write in detail about Mobility of Camera.

15. (a) Write the appreciation of film Jai Bhim Comrade (2011).

Or

- (b) Describe the study of characters in Balumahendra’s Films.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Elaborate appreciation of non-realistic film with the analysis of Vittorio Desica's Bicycle Thieves(1948).
 17. Discuss the structure, lighting and editing style of Alfred Hitchcock's films.
 18. Explain the analysis of Orson Well's films.
 19. Elaborate the study of the style and craft of Yasujiroozu's films.
 20. Write the appreciation of any two National award-winning Indian films.
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R6316

Sub. Code

415702

M.A. DEGREE EXAMINATION, NOVEMBER – 2021

History

**NME : ART AND ARCHITECTURE OF TEMPLES IN
TAMILNADU**

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Vimana
2. Mandapa
3. Sithannavasal
4. Mandaga pattu
5. Narthamalai
6. Thirukkattalai
7. Serfoji memorial hall
8. Saraswathi mahal library
9. Ten forms of Vishnu
10. Chandra Sekara Murti

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the scope of secular architecture of Sangam period.

Or

- (b) Describe the literary sources for art and architecture of Sangam period.

12. (a) Point out the importance of Vettuvan kovil in Kalugumalai.

Or

- (b) Write a short note on significance of Kudimiyan Malai.

13. (a) Narrate the features of Brahadishvara temple, Tanjore.

Or

- (b) Briefly mention the Historical importance of Tharasuram.

14. (a) Point out the features of Tanjore paintings.

Or

- (b) Discuss the art and architecture of Tenkasi Pandyas.

15. (a) Write in detail about the meaning and significance of Iconography.

Or

- (b) List out the symbolism in Indian iconography.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Write an essay on archaeological survey of Sangam Murugha Temples.
 17. Describe the Pallava's art and architecture.
 18. Evaluate the Chalukiyana and Hoysala style of architecture and sculpture.
 19. Assess the art and architecture of Madurai Nayaks.
 20. Describe the Buddhist iconography.
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R6317

Sub. Code

452704

M.S.W. DEGREE EXAMINATION, NOVEMBER – 2021

Social Work

NME — NGO MANAGEMENT

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

All questions carry equal marks.

1. Define the term 'Voluntarism'.
2. Distinguish between voluntary organization and NGOs.
3. Write any three characteristics of NGO's in India.
4. What do you mean by Community based rehabilitation?
5. What is budgeting?
6. Expand PRA and SWOT.
7. Name the laws governing the registration of NGO.
8. What is social Auditing?
9. What do you mean by information management?
10. What is advocacy?

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Write a note on types and roles of NGO's in India.

Or

- (b) Differentiate between Society and Trust.

12. (a) What is feasibility study in project identification? Explain its uses.

Or

- (b) Explain the need and importance of Community Based Rehabilitation.

13. (a) List out the steps involved in preparing the budget.

Or

- (b) Explain the principles followed in raising the funds.

14. (a) Point out the objectives and techniques in project evaluation.

Or

- (b) Explain the various methods of PRA.

15. (a) Define the term operational Management? Explain its importance.

Or

- (b) Give a brief note on Groups in Organization.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Discuss the primary and Secondary Characteristics of NGOs.
 17. Prepare a project proposal of an NGO.
 18. Elaborate the different characteristics and techniques of fund raising.
 19. Explain the types of evaluation that are generally carried out by NGO's.
 20. Highlight the principles of management.
-

R6318

Sub. Code

453701

M.A. DEGREE EXAMINATION, NOVEMBER – 2021

Integrated Home Science

NME : PUBLIC HEALTH NUTRITION

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define Health.
2. Mention the scope of Public Nutrition.
3. What are the different clinical forms of PEM?
4. List four main consequences of iron deficiency anaemia.
5. Explain the concept of health care.
6. What do you mean by health economics?
7. Define Physical fitness
8. Enlist the man-made disasters
9. Define food and nutrition security.
10. List out the causes for diarrhoea.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) How can a multi sectoral approach help to solve nutritional problems?

Or

- (b) Define Public nutritionist. State the role of Public nutritionist.

12. (a) Explain the clinical features of Vitamin A Deficiency.

Or

- (b) Which are the three major micronutrient deficiencies affecting large segments of population? Explain in detail.

13. (a) Explain economic consequence of malnutrition.

Or

- (b) Briefly explain about the AIDS Control Programme.

14. (a) Bring out the nutritional recommendations for athletes.

Or

- (b) Discuss about the basic guidelines in disaster management.

15. (a) Give the Immunization schedule.

Or

- (b) Explain the strategies to prevent diarrhoeal diseases.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Nutrition influence the health status of an individual-Justify.
 17. What are the different clinical forms of PEM? Focus the causes and consequences of PEM among children.
 18. Highlight the Health Care Delivery System in India.
 19. Explain the Common Feeding problems of children with special needs.
 20. Discuss about the different factors determining the food security.
-

R6319

Sub. Code

455702

M.A DEGREE EXAMINATION, NOVEMBER – 2021

Economics

NME : STATISTICS FOR DECISION MAKING

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10× 2 = 20)

Answer **all** questions.

1. Define Geometric mean and discuss its merits and Demerits.
2. Define “Mean”
3. What do you mean by Quartile Deviation?
4. What do you understand by co-efficient variations?
5. Write short notes on Probability.
6. What is Poisson distribution?
7. Define “Correlation”.
8. What is Regression?
9. What do you mean by simple linear Regression Model?
10. Mention two types of Correlation.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) What is the relationship between arithmetic mean and geometric mean?

Or

- (b) Find the mean and median for the following data.

Marks obtained : 0-10 10-20 20-30 30-40 40-50 50-60

No. of students: 12 18 27 20 17 6

12. (a) Distinguish between Quartile Deviation and standard Deviation.

Or

- (b) What are the Significance of measuring Variations?

13. (a) What do you mean by Binomial Distribution? Discuss its merits and demerits

Or

- (b) Explain the Conditions for the validity of chi-square test.

14. (a) Distinguish between positive and negative Correlation.

Or

- (b) How do you interpret 'R' in regression?

15. (a) What is regression analysis? How does it differ from Correlation?

Or

- (b) Explain the Multiple Linear Regression Model.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Calculate mean, median, mode for the following data.

Marks : 10-20 20-30 30-40 40-50 50-60 60-70

Pupils : 12 18 24 17 15 12

17. Calculate Karl Pearson's Co-efficient of Skewness from the data given below:

Wages more than (in Rs) 5 15 25 35 45 55 65

Number of earners 100 80 75 60 55 22 0

18. Discuss the various measures of dispersion.
19. What do you mean by Poisson distribution? Discuss its merits and demerits.
20. Describe the simple Linear Regression Model.

R6320

Sub. Code

458703

M.A. DEGREE EXAMINATION, NOVEMBER – 2021

Gender Studies

NME — LIFE SKILL EDUCATION

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define Communication.
2. Write a short note on Empathy.
3. Who is Pratibha Devising Patil?
4. Define management.
5. What is meant by communication?
6. Write a short note on oral and written communication.
7. How does practice of meditation effect the brain power?
8. Define yoga.
9. What is meant by importance of structure?
10. Define writing skill.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Briefly discuss about methods to enhance the life skills.

Or

- (b) Elaborate on creative thinking with example and discuss the ways to promote creative skills.
12. (a) What is the importance of leadership qualities explain it.

Or

- (b) Differentiate the transactional and transformational leadership.
13. (a) Explain the principals of communication.

Or

- (b) List any five communication skills.
14. (a) Explain the fundamental principle personal development.

Or

- (b) Elaborate on the stress management technique.
15. (a) What is the role of advocacy in social change? Explain.

Or

- (b) Explain the advocacy to change the political agendas.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Elaborate the on the characteristics of women's studies and need for gender as an academic inclusion.
 17. Elaborate on the life skill application for gender development and gender equality through life skill education approach.
 18. What is emotional intelligence? And discuss about the self-awareness strategies, self management strategies and social awareness strategies.
 19. Elaborate on the needs and importance of professionalism in pursuing a successful career.
 20. Discuss about the different dimensions of advocacy and advocacy models.
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R6321

Sub. Code

461703

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Oceanography and CAS

NME — MARICULTURE

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

All questions carry equal marks.

Each answer should be in about 10 words.

1. *Crassostrea madrasensis*
2. Narcotization
3. *Isochrysis galbana*
4. Raceway
5. Carrageenan
6. WSSV
7. Induced maturation
8. *Perna indica*
9. GIH
10. Ranching system

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

All questions carry equal marks.

Each answer should be in about 500 words.

11. (a) Describe the present status of mariculture in India.

Or

- (b) Write the advantages of Poly culture.

12. (a) Write note on structure of ponds.

Or

- (b) Explain the design and construction of open sea farming.

13. (a) Write note on oyster culture.

Or

- (b) Explain the seed production in molluscan hatchery.

14. (a) Write note on seabass culture in India.

Or

- (b) Write note on mussel culture.

15. (a) Write the biological importance of seaweeds.

Or

- (b) Explain the floating and bottom monocline method of sea weed culture.

Part C

(3 × 10 = 30)

Answer any **three** questions.

All questions carry equal marks.

Each answer should be in about 1000 words.

16. Describe the various methods adopted to collect shell fish seed from wild.
 17. Describe the advantages and disadvantages of cage culture practice.
 18. Elaborate the hatchery setup for shell fish production.
 19. Explain important cultivable species of mariculture.
 20. Describe the economic importance of seaweed culture.
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R6322

Sub. Code

501702

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Biotechnology

NME: ENVIRONMENTAL BIOTECHNOLOGY

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

All questions carry equal marks

Each answer should be in about 10 words

1. Ecosystem
2. Atmosphere
3. Four Examples for noise pollution
4. Thermal pollution
5. Manure
6. Coagulant
7. Biosorption
8. Phytoremediation
9. Detoxification
10. Biosensor

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b)

All questions carry equal marks

Each answer should be in about 500 words

11. (a) Illustrate about environmental policies.

Or

- (b) List out the role of biotechnologist in environmental protection?

12. (a) What are the main causes of water pollution?

Or

- (b) Write a short note on nuclear hazards.

13. (a) Give a brief account on use of composted material?

Or

- (b) What are the recent approaches to biological waste water treatment?

14. (a) Give a brief account on concept of bioremediation

Or

- (b) What are the factors affects the Bioaccumulation?

15. (a) Define Venom and write a short notes on venom in sea fish

Or

- (b) List out the importance of conus toxin.

Part C

(3 × 10 = 30)

Answer any **three** questions.

Each answer should be in about 1000 words

16. Give a detailed account on scope and role of biotechnology in environmental protection.
 17. Illustrate about biotechnological methods for management of air and soil pollution.
 18. Write an essay on microbial leaching.
 19. Write a detailed description about in-situ and ex-situ of bioremediation biotechnology.
 20. Discuss in detail about the sequestration of CO₂ in the environment.
-

R6323

Sub. Code

508702

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Biomedical Science

NME : HOSPITAL MANAGEMENT AND BIOSAFETY

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. The hospital administrator has to manage resources like
 - (a) Men
 - (b) Materials, money
 - (c) Time
 - (d) All the options given
2. Hospital administrators determines the need for various
 - (a) training programs
 - (b) cultural programs
 - (c) our door camp
 - (d) none of the above
3. Hospital administrators proved for
 - (a) research
 - (b) education
 - (c) professional
 - (d) all the above
4. The biggest challenge faced by general and private Indian hospitals is
 - (a) workforce shortag
 - (b) lack of skills
 - (c) lack of facility
 - (d) none of the above

5. A planning team of hospital design includes
 - (a) civil engineers
 - (b) medical architect
 - (c) local body representative
 - (d) all the options
6. Hospital engineers concerned for
 - (a) installation of facility
 - (b) maintenance
 - (c) purchase
 - (d) all the above
7. Hospitals catering to specific type of illness called
 - (a) General hospital
 - (b) Speciality hospital
 - (c) Superspeciality hospital
 - (d) None of the above
8. The quality improvement committee generally works as an apex committee for a hospital preparing for
 - (a) accreditation
 - (b) quality improvement activity
 - (c) best practices
 - (d) all the above

9. Segregating medical wastes based on their type helps ensure that each waste is
- (a) discarded
 - (b) transported
 - (c) destroyed
 - (d) all the above
10. Medical wastes are
- (a) infectious items
 - (b) chemicals
 - (c) radioactive items
 - (d) all the above

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Explain the role and responsibilities of administrator.

Or

- (b) Discuss in brief about healthcare utility service management.

12. (a) How do you overcome health challenges?

Or

- (b) What are the modern techniques to be implemented to maintain hospital?

13. (a) Discuss in detail about Financial Health service management.

Or

- (b) Focus on the infrastructure facilities of inpatient and emergency services.

14. (a) Write the duties and responsibilities of quality assurance committee in hospital.

Or

- (b) Discuss briefly about organizational structure of a hospital.
15. (a) Write the importance biosafety in speciality hospital.

Or

- (b) Explain the importance of bioethics in healthcare system.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Elaborate the importance of medical record maintenance and computer application for smooth running of hospital.
17. What are the common problems you see in the hospitals, list out and discuss at least five problems in India give suggestions for how do you fix them?
18. Discuss the significance of sound financial plan for a Health care organization.
19. Elaborate in detail about advancement of hospital organization in India.
20. Why biomedical waste management is important? Discuss the safety measures of medical waste disposal in detail.

R6324

Sub. Code

509703

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Zoology

NME — FOOD PROCESSING TECHNOLOGY

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. NDRI.
2. Explain pasteurization.
3. Explain about thawing of poultry.
4. Brief note on radiation preservation of poultry meat.
5. Smoked fish.
6. Fish chilling.
7. Explain peeling.
8. Lipoxygenase.
9. FSSAI.
10. Botulism.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) What are the challenges in Indian dairy sector?

Or

- (b) Write about the adulteration in Indian dairy products.

12. (a) Explain about the hygienic practices followed in the poultry industry.

Or

- (b) Explain about poultry rearing system.

13. (a) Write about the good management practices in fish canning.

Or

- (b) Write about the economics of fish processing industry.

14. (a) How do you grade the vegetables before preservation?

Or

- (b) Write about the freezing of fruits.

15. (a) Explain about safe feed handling procedure.

Or

- (b) Write about the sensory evaluation of various food products.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Write an essay on pasteurization process.
 17. Describe about the different methods for processing and preservation of poultry meat.
 18. Write about the product cost analysis and marketing of seafood products.
 19. Write an essay on processing of fruits and vegetables.
 20. Write detailed notes on history of food regulation.
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R6325

Sub. Code

515702

M.A. DEGREE EXAMINATION, NOVEMBER – 2021

Journalism and Mass Communication

**NME – FUNDAMENTALS OF AUDIO AND VIDEO
PRODUCTION**

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Condenser Microphone.
2. Radio Feature.
3. Audio synchronizing.
4. Docudrama.
5. PRO Tools.
6. Dubbing.
7. Digital dithering.
8. DAW.
9. Framing.
10. Reverberation Time.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Elucidate what type of microphones used for live ambiance recording.

Or

- (b) What kind of aspects requirements for presenter in radio?

12. (a) What are different types of audio formats? And explain in detail.

Or

- (b) Discuss dos and don'ts in writing a radio script for a National Security Programme.

13. (a) Describe the various production crews and their duties for indoor shoot.

Or

- (b) What is a Production Sound Mixer? Understanding the Role of Production Sound Mixer on a Film Set.

14. (a) Discuss in detail the script format used in Documentaries and Live shows.

Or

- (b) Explain the types of composition and framing and its importance in film making.

15. (a) Explain the editing techniques used in Radio Documentaries.

Or

- (b) What are the aspects required for developing a character in Film?

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Delineate the importance of Bass and Treble controls in stereo amplifier.
17. Examine the impact of sound effects in storytelling in films.
18. Prepare an outline for radio script on any one of the following topics:
 - (a) COVID-19 Vaccination drive
 - (b) Rights of life.
19. Elucidate the key elements that make up sound in a film and its importance.
20. Explain the importance of pre-production production and post production aspects in short film making.

R6326

Sub. Code

525702

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Botany

NME — MUSHROOM CULTIVATION

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. List out any four names of edible mushroom.
2. Milk white mushroom.
3. Spawn and spawn run.
4. Write the composition of PDA medium.
5. Name any two bacterial diseases of mushroom and its control measures.
6. Briefly explain how temperature will affects mushroom growth.
7. Are mushrooms a super food?
8. Comment on mushrooms are good source of vitamins.
9. Mushroom pickles.
10. Mushroom Samosa.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Give an account on the cultivation of *Agaricus bisporus*.

Or

- (b) Write short notes on the scope of edible mushroom.

12. (a) Give an account on the raw material of spawn for mushroom cultivation.

Or

- (b) Discuss in detail about storage and transportation of spawn.

13. (a) Write short notes on spawn preparation and cultivation.

Or

- (b) Discuss in detail about the factors affecting mushroom cultivation.

14. (a) Briefly explain about storages of mushroom.

Or

- (b) Write short notes minerals and carbohydrates present in mushroom.

15. (a) Explain in detail about mushroom marketing in India.

Or

- (b) Add a note on mushroom curry preparation.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Write an essay on the types of edible mushroom available in India.
 17. Give an account on the steps involved in spawn production technology.
 18. Explain in detail about the cultivation of paddy straw mushroom.
 19. Give a detailed account on packing and preservation techniques in mushroom.
 20. Describe in detail about food preparation from mushroom.
-

R6327

Sub. Code

530704

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Microbiology

NME — MICROBIAL TECHNOLOGY

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

All questions carry equal marks.

1. COD
2. *Clostridium perfringens*
3. Validation of sterilization by Biological indicator
4. HACCP plan
5. Endotoxin
6. Biological hazards in food industry
7. FSSAI
8. Applications of light pulse technology
9. Define microarray
10. Barcode.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) How will you determine bacteriophages in the water?

Or

- (b) Illustrate with schematics on the stages of mineral water production.
12. (a) Explain the role of preservatives in the pharmaceutical products.

Or

- (b) Describe the microbial risk assessment through HACCP plan.
13. (a) Give an explanation on Pyrogen test of parenterals.

Or

- (b) Differentiate between the antibiotic susceptibility testing through well and disc diffusion assay.
14. (a) Give clear explanation on the design and principle of light pulse technology.

Or

- (b) Discuss on the risk assessment in food industry.
15. (a) Describe on Flow cytometry.

Or

- (b) Explain about the LAL test.

Part C

(3 × 10 = 30)

Answer any **three** questions.

Each questions carry equal marks.

16. Explain the principle and process of physico-chemical properties of water analysis.
 17. Give a detailed explanation on the antibiotic susceptibility tests.
 18. Illustrate on the principle and applications of endotoxin activity.
 19. Explain on the quality control methods in fruits and vegetable processing.
 20. Elaborate on DNA based and microarray methods in quality assessment.
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R6328

Sub. Code

533702

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Nanoscience and Technology

**NME — NANOTECHNOLOGY AND ADVANCED DRUG
DELIVERY SYSTEM**

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Distinguish Quantum wire and Quantum dots.
2. Write the advantages of the bottom-up approach.
3. What is meant by viral nanocarriers?
4. Give example for antibody-based nanocarriers.
5. Define pegylation.
6. What is meant by bioconjugation?
7. State fluorophores.
8. State advantages of BioMEMS.
9. Distinguish passive and active targeting.
10. State advantages of neutron capture therapy.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Discuss the synthesis of nanomaterials by a top-down approach.

Or

- (b) Write short notes on the properties and technological advantages of nanomaterials.
12. (a) Write short notes on dendrimers and their applications.

Or

- (b) Explain silica nanoparticles preparation and its advantages.
13. (a) Explain in detail about drug targeting.

Or

- (b) Write short notes about controlled drug release.
14. (a) Write short notes about Ultrasonography drug delivery.

Or

- (b) Write short notes about protein-based biosensors.
15. (a) Write short notes on high molecular weight Boron delivery agents.

Or

- (b) Explain the use of nanotechnology in cancer therapy.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain characterization of nanomaterials by spectroscopic techniques in detail.
 17. Explain the size, surface, magnetic and optical properties of nanocarriers in detail.
 18. Explain in detail drug encapsulation strategies.
 19. Explain in detail biosensors materials and their fabrication.
 20. Write short notes on nano-neurology, nano-cardiology, nano-orthopedics, and nano-ophthalmology.
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R6329

Sub. Code

536702

M.Sc.Chemistry DEGREE EXAMINATION, NOVEMBER – 2021

NME — BASICS IN ENVIRONMENTAL SCIENCE

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define ecology
2. Ozone is located at what height from the earth's surface?
3. List any two pollutant from automobiles.
4. What are greenhouse gasses?
5. What are four zones in sedimentation tank?
6. What is activated sludge?
7. What are the factors that determine corrosion potential?
8. Mention any two corrosive Alkalis.
9. List any two enzymes that are used in paper industry.
10. What is photo degradation?

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) What are the different types domestic and agricultural waste that we generate?

Or

- (b) What is acid rain? What are the effects of acid rain?

12. (a) What are the health effects of thermal and noise pollution?

Or

- (b) What is radioactive pollution? How does that affect humans?

13. (a) What are the advantages of biological treatment methods?

Or

- (b) What are the plants that can be used in biological treatment of water? How do the plants remove pollutants from water?

14. (a) How will you use non-traditional greener alternatives for sustainable development?

Or

- (b) List out the hazards and safety measures for cement industry.

15. (a) Is essential oil sustainable? Justify.

Or

- (b) What are the advantages of green chemistry in drug development?

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. What are hazardous materials? How do hazardous materials affect environment?
 17. Discuss in details air pollution and its impact on the human environment.
 18. Write an essay on industries that cause water pollution in India.
 19. Write an essay on sustainable development goals.
 20. How do greener concepts help to deliver sustainable development?
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R6330

Sub. Code

538702

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Chemistry (Spl. in Nanoscience & Tech.)

**NME – PHYSICS AND CHEMISTRY OF
NANOMATERIALS**

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Distinguish colloidal and bulk gold.
2. Write different modes of classification of nanomaterials.
3. What is meant by the confinement effect?
4. What is meant by Ballistic conduction?
5. How will you distinguish nanotubes from nanorods?
6. Distinguish quasi-one-dimensional structure from one-dimensional structure using specific nanomaterials.
7. Define quantum dots.
8. What is meant by nanobots?
9. Distinguish MEMS and NEMS.
10. Explain in your own words why surface-to-volume ratios are important in determining the properties of a substance.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Discuss size-dependent properties of nanomaterials in detail.

Or

- (b) Explain in detail the magnetic properties of nanostructured materials.

12. (a) Discuss the formation of the energy gap with a suitable example.

Or

- (b) Explain preliminary aspects of lithography in detail.

13. (a) Explain in detail the synthesis of carbon nanotubes.

Or

- (b) Write short notes about metal-polymer structures.

14. (a) Write short notes about Quantum well.

Or

- (b) Describe in detail the photoelectrochemical cell.

15. (a) What makes gold nanoparticles attractive in catalysis? What are their applications?

Or

- (b) Explain how nanomaterials are used in making sensor devices.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain electron-related chemical properties of nanomaterials in detail.
 17. Explain simulation properties of molecular clusters in detail.
 18. Explain in detail about preparation, characteristics, and applications of fullerenes.
 19. Explain in detail molecular and nanoelectronics.
 20. Explain in detail the fundamentals of MEMS.
-

R6331

Sub. Code

540702

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Energy Science

**NME : RENEWABLE ENERGY AND ENERGY STORAGE
SYSTEMS**

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** the questions.

1. List out the energy resources.
2. Define energy scenario.
3. How does battery works?
4. What do you meant by redox reaction?
5. How does solar cell works?
6. What is transesterification process in biodiesel production?
7. Define 'Rankine cycle'.
8. What are the disadvantages of geothermal power plant?
9. What are the methods for hydrogen storage?
10. Define fuel cell with neat sketch.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Write a note on renewable energy scenario in India.

Or

- (b) Discuss about the various environmental effects of non-renewable energy resources.

12. (a) Explain compressed energy storage system and its application.

Or

- (b) How supercapacitor works? State the advantages of supercapacitor over batteries.

13. (a) Write a note on

- (i) Capacitive loading
- (ii) Resistive loading
- (iii) Inductive loading.

Or

- (b) How the light energy from sun is converted into electrical energy? Explain with sketch.

14. (a) Discuss the various types of geothermal power plants.

Or

- (b) Explain geothermal energy sources in India.

15. (a) List and explain the various methods of hydrogen production technologies.

Or

- (b) Discuss about safety issues of hydrogen energy in detail.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. What are the environmental factors should consider while installing power plants? Explain.
17. Explain about various kinds of thermal energy storage system in detail.
18. Discuss the functions of various components in wind energy conversion system with sketch.
19. Explain about Write a note on
- (a) Dry steam power plant
 - (b) Flash steam power plant
 - (c) Binary cycle power plant
20. Explain the working of hydrogen - oxygen fuel cell with suitable sketch.

R6332

Sub. Code

541704

M.C.A. DEGREE EXAMINATION, NOVEMBER – 2021

Computer Application

NME – OFFICE AUTOMATION

(CBCS – 2020 onwards)

Time : 3 Hours

Maximum : 75 Marks

Section A

(10 × 2 = 20)

Answer **all** the questions.

1. Write the purpose of using Hard Disk?
2. Give the use of Recycle Bin.
3. Write about MS-Word.
4. How to create a table in MS-Word?
5. What do you mean by Cell in MS-Excel?
6. What is Cell Formatting?
7. How to delete a Slide in MS-Power Point?
8. How to insert a movie to a Slide?
9. Define Database?
10. Write about Sorting.

Section B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Discuss about the MS-Windows Structure.

Or

- (b) Brief about the copying, moving file and folders from one drive to another.

12. (a) Discuss about finding and replacing a word in MS-Word.

Or

- (b) How to create a table in MS-Word.

13. (a) Explain about entering information in a Worksheet.

Or

- (b) What is the benefit of using formula in Excel Sheet?

14. (a) How do you design a Power Point Slide?

Or

- (b) Discuss the different views of slides in detail.

15. (a) What is Table? How do you create a table using table Wizard?

Or

- (b) What is Query? Explain the importance of query in manipulating the database?

Section C

(3 × 10 = 30)

Answer any **three** questions.

16. Write about MS-Windows Accessories in detail.
 17. Define and Explain Mail Merge in MS-Word.
 18. Define the term function in MS-Excel and explain any five functions in MS-Excel.
 19. Explain the steps for creating a Slide show in MS-Power Point.
 20. Write about the Report creation in MS-Access.
-

R6333

Sub. Code

542702

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Materials Science

NME - NANOBIOSENSORS

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define the components in biosensors.
2. What are the types of nanobiosensors?
3. How many gold atoms put side by side shall make one nanometer (nm)? (If radius $r = 1.44 \text{ \AA}$).
4. Why Noble metals are mostly used in biological applications?
5. List out the major classification of transducers.
6. State the principle of Chemi-luminescence.
7. Write note on the working principle of amperometric biosensor.
8. How continuous glucose monitor works?
9. What is precision farming?
10. Define Nanosensors.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain how important the sensitivity and selectivity in biosensors.

Or

- (b) What are nano biomolecule hybrids and explain with an example.

12. (a) Discuss the biosynthesis of metal oxide nanoparticles.

Or

- (b) How bacteria can be used in the synthesis of nanoparticles. Explain in detail.

13. (a) List out the types of transducers and explain the conductive transducers.

Or

- (b) Explain the self-assembly process and how it is used in sensors.

14. (a) What are optical biosensors? Explain its applications.

Or

- (b) Define Colorimetric sensors and explain its uses.

15. (a) Explain the role of Nanotechnology in Food processing and packaging.

Or

- (b) Describe the role of nanotechnology in insecticides.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. What is biosensor? How does the nano particle support the design of nanobiosensor?
 17. Explain the role of gold nanorods in biocompatibility of Traditional Medical Implants.
 18. What is immobilization technique and explain the surface immobilization in detail?
 19. State the principle and working of fluorescence and phosphorescence with a neat sketch.
 20. Explain in detail the potential use of nano fertilizers in agriculture.
-

R6334

Sub. Code

547702

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Fisheries Science

NME : INTEGRATED FISH FARMING SYSTEMS

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Composite fish culture
2. Monoculture
3. Chinese carps
4. Aquaponics
5. Fish cum poultry farming
6. Mono-sex aquaculture
7. Ruminants in integrate farming
8. Poultry droppings
9. Black soil
10. *Azolla*

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Briefly explain running water systems.

Or

- (b) Write note on polyculture in freshwater aquaculture.

12. (a) Write a note on present status of integrated farming systems in India.

Or

- (b) Describe aquaponic systems with flow diagram.

13. (a) Describe the importance of Integrated Fish farming.

Or

- (b) Write short note on different types of animals used in Integrated aquaculture.

14. (a) Briefly explain the culture of fish and poultry based culture with flow diagram.

Or

- (b) Note on Production cost analysis of Fish and poultry in Integrated system.

15. (a) Write a note on culture of fish species in Waste water treatment pond.

Or

- (b) Describe Production cost analysis of Fish and other industry.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Write an essay on paddy cum fish culture practices in India and its disadvantages.
 17. Describe the economic importance of integrated farming systems.
 18. Write an essay on fish and other animals based integrated systems farming.
 19. Detailed essay on poultry cum fish integrated farming with flow diagram.
 20. Write an essay on waste water based integrated fin and shell fish culture.
-

R6335

Sub. Code

549701

M.A. DEGREE EXAMINATION, NOVEMBER – 2021

Public Administration

NME : INTRODUCTION TO PUBLIC ADMINISTRATION

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions in about 30 words each.

1. New Public administration
2. Management
3. Informal organisation
4. Authority
5. Delegated legislation
6. Chief Executive
7. Commission
8. Public enterprises
9. Regulatory mechanism
10. Accountability

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b) not exceeding 300 words each.

11. (a) Bring out the scope and significance of public administration.

Or

- (b) Enumerate the features of private administration.

12. (a) Define Hierarchy and its features.

Or

(b) What are the advantages of centralization of powers in administration?

13. (a) Give an account on need for effective communication skills for executive.

Or

(b) Explain the factors motivating the officials working in administration.

14. (a) Identify the traits of transforming leadership.

Or

(b) Discuss the need for public corporations in India.

15. (a) Enumerate the nature of parliamentary control over public administration in India.

Or

(b) Put forth your arguments in favour of citizens role in administration.

Part C

(3 × 10 = 30)

Answer any **three** questions not exceeding 1500 words each.

16. Trace out the emergence and significance of the emergence of new public administration.

17. Examine the merits and demerits of delegation of authority.

18. Identify the powers and functions of Chief Executive.

19. Discuss the objectives and achievements of the establishment of independent regulatory commission in India.
 20. Enumerate the issues in peoples participation in Indian administration.
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R6336

Sub. Code

551703

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Computer Science

NME – GREEN COMPUTING

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** the questions.

1. What do you mean by Green Computing?
2. Define: Carbon rating.
3. What are the steps come under Green audit?
4. What is energy rating?
5. List the uses of green metrics.
6. Expand: SPEC.
7. What is GEA?
8. What do you mean by Environment intelligence?
9. Why case study is used?
10. Give two examples for green data centers in India.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain about Green IT fundamentals.

Or

- (b) Write a note on carbon root point.

12. (a) Describe in short: Green information system models.

Or

- (b) Explain about Green Enterprise architecture.

13. (a) What is Green auditing? Explain.

Or

- (b) Write a short note on Green IT roadmap.

14. (a) Why energy rating is important for data center? Explain.

Or

- (b) Describe: Go green incentives.

15. (a) What is the need for Case study? Explain.

Or

- (b) Write a note on green data centers in PG&E Company.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Elucidate: Green IT strategies.

17. Brief about Green supply chain.

18. Describe in detail: Reduce/Reuse and Re-cycle.
 19. Discuss: Green IT design goals.
 20. Brief about polices, practices and metrics.
-

R6337

Sub. Code

551704

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Computer Science

NME — C AND C++ PROGRAMMING

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** the questions.

1. What is meant by Keywords in C?
2. Define function of looping statement.
3. Differentiate call by value and call by reference.
4. Specify how to perform pass parameters to main() function.
5. What is structure?
6. State functions I/O operations on file.
7. Point out about message passing.
8. Mention Data Encapsulation.
9. What is Inline function?
10. What is meant by destructors in C++?

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) List all conditional control statements used in C. Explain any two with syntax and example.

Or

- (b) Describe an array access and a pointer de-reference in the C with examples.

12. (a) Explain the formatted input and output functions with examples.

Or

- (b) Write a program in C to print the numbers from 2 to 9 and their squares.

13. (a) Describe array of pointers with example? Compare how pointers and arrays are related with example.

Or

- (b) Write a program to read data from keyboard, write it to a file called INPUT, and read the same data from the INPUT file and display it on the screen.

14. (a) Elucidate the applications of Object Oriented languages.

Or

- (b) Illustrate control structures in C++.

15. (a) Discuss the significance of function overloading and operator overloading in C++.

Or

- (b) Explain the concept of Virtual and Pure Virtual Functions with the help of examples.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. (a) Write the general structure of C. Explain with an example. (5)
- (b) Explain the difference between 'X' and "X" when used as constants in C. Describe the memory representation of both values. (5)
17. Write a C recursive function for multiplying two integers where a function call is passed with two integers' *m* and *n*.
18. Explain in detail the file handling concept in C with examples.
19. Write short notes on dynamic binding and protected members.
20. Illustrate inheritance in C++ and its types with suitable examples.

R6338

Sub. Code

622703

**M.B.A. (CS) DEGREE EXAMINATION,
NOVEMBER – 2021**

**NME — ETHICS, GOVERNANCE AND SUSTAINABILITY
(CBCS – 2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

Part A

(5 × 3 = 15)

Answer **all** questions.

1. Give the meaning of ethics and state its importance.
2. Define corporate governance.
3. What is shareholders democracy?
4. What do you understand by sustainability reporting?
5. What is CSR? Give few examples from India.

Part B

(5 × 10 = 50)

Answer **all** questions, choosing either (a) or (b).

6. (a) What are the major attributes of ethics?

Or

- (b) What are the factors influencing business ethics?

7. (a) State the nature and significance of corporate governance.

Or

- (b) What are the requirements to strengthen corporate governance?

8. (a) Analyse the current issues on composition of Board of Directors.

Or

- (b) What are the powers and responsibilities of Board of Directors?

9. (a) State the principles of sustainability of corporate governance.

Or

- (b) Discuss the features and principles of good corporate governance.

10. (a) Examine the recent trends in CSR after enactment of Companies Act, 2013.

Or

- (b) Explain the process of auditing the social reporting.

Part C

(1 × 10 = 10)

Case Study – Compulsory Question

11. Assume that you are working as the manager in an automobile manufacturing company from past few years. One day you noticed that the financial manager is window dressing the financial statements and is tampering the books of accounts. You want to disclose this foul playing to the seniors. But you realized that even your superiors are involved in this filthy playing.

Questions

- (a) As the loyal employee of the company what should you do in such a scenario?
- (b) Discuss the spirit of whistle blowing along with different kinds of whistle blowing.

R6339

Sub. Code

632703

M.B.A. DEGREE EXAMINATION, NOVEMBER – 2021

Banking and Insurance

NME: PRINCIPLES OF INSURANCE

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(5 × 1 = 5)

(Objective type)

Answer **all** questions.

1. Insurance helps to
 - (a) Prevent adverse situations from occurring
 - (b) Reduce the financial consequences of adverse situations
 - (c) Negate all consequences of adverse situations
 - (d) Make assets continuously productive
2. When was life insurance sector nationalized?
 - (a) 1959 (b) 1958
 - (c) 1957 (d) 1956
3. Which committee suggested the re-opening up of the insurance sector to private players?
 - (a) Rangarajan Committee
 - (b) R.N. Malhotra Committee
 - (c) Narasimhan Committee
 - (d) V S Vyas Committee

4. _____ ensures that an insured does not profit by insuring with multiple insurers
- (a) Subrogation (b) Utmost Good faith
(c) Contribution (d) Indemnity
5. Insurance Pricing is also known as;
- (a) Price making
(b) Rate making
(c) Cost making
(d) Budget making

Part B

(5 × 4 = 20)

Answer **all** questions, choosing either (a) or (b).

6. (a) What is Insurance? How it has evolved in India?
- Or
- (b) How the business units are getting benefited from Insurance?
7. (a) What is miscellaneous insurance?
- Or
- (b) Explain Marine Insurance.
8. (a) State the functions of IRDA.
- Or
- (b) What are the duties of IRDA?
9. (a) Explain insurable Interest.
- Or
- (b) Explain Indemnity.

10. (a) How is technology changing the Insurance Industry?

Or

- (b) What is Insurance Pricing?

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

11. (a) What are the functions of insurance?

Or

- (b) What are the benefits Insurance gives to the individual and society at large?

12. (a) Explain term insurance and permanent insurance.

Or

- (b) Explain any four types of General Insurance.

13. (a) State some reforms and developments in the Indian Insurance Industry.

Or

- (b) Briefly explain the structure of Indian Insurance Industry.

14. (a) Explain economic principles of Insurance.

Or

- (b) Explain with respect to principles of Insurance:

- (i) Utmost good faith
- (ii) Contribution
- (iii) Proximate cause
- (iv) Subrogation

15. (a) What is Insurance Marketing? Why it is important?

Or

(b) Explain AIDA in relation to insurance selling.

Part D

(1 × 10 = 10)

(COMPULSORY)

Case study.

16. Millennials represent nearly a third of India's population, forming a major part of the country's workforce, both urban and rural. In keeping with their mobile usage habits, the largest insurance carrier of India set out to boost its digital footprint across various devices and channels. The carrier wanted to create a digital storefront for all aspects of selling and servicing insurance policies.

The carrier had a significant holdover of legacy technology, particularly their in-house policy system and processes. A monolithic heavy-weight server was responsible for fielding all service requests originating from various customer, agent and staff touch points. This inevitably slowed down the requests.

The earlier customer portal of the insurer was not intuitive and its look-and-feel lacked the appeal. It had limited features, for example, it did not provide customers the option to make interest payments on against policy-related loans. They were forced to visit a physical branch for this and few other transactions

(a) What suggestions you will recommend to the company for better and efficient working?

(b) How your suggestions can benefit the company to capture large customer base?

R6340

Sub. Code

641704

M.B.A. DEGREE EXAMINATION, NOVEMBER – 2021

NME : MANAGEMENT OF SMALL BUSINESS

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(5 × 3 = 15)

Answer **all** questions.

1. What is called medium scale industry?
2. List out the environmental factors influence small scale enterprises.
3. State the need for business plan.
4. Write a note on small business promotion programme.
5. List out the advantages of growth strategies for small enterprises.

Part B

(5 × 10 = 50)

Answer **all** questions, choosing either (a) or (b).

6. (a) Briefly explain the scope and importance of small scale enterprises.

Or

- (b) Describe the role of large and medium scale industries in India.

7. (a) Elaborate the various functions of development agencies for small enterprise.

Or

- (b) What are the important funding agencies for small enterprise?

8. (a) Explain the need for market assessment for small scale enterprise.

Or

- (b) State the importance of ownership structure and organizational framework in establishing small scale enterprises.

9. (a) How does financial management issues in small scale enterprise is significant?

Or

- (b) Explain the role of organisational relation in small scale enterprise.

10. (a) What are growth strategies? Explain.

Or

- (b) Elaborate the need for management performance assessment and control.

Part C

(1 × 10 = 10)

Compulsory

11. "Market analysis is conducted to help entrepreneurs decide whether the market is large enough to justify taking the risk of starting the business" Support your answer.
-

R6341

Sub. Code

643702

M.B.A. DEGREE EXAMINATION, NOVEMBER – 2021

Logistics Management

**NME : INTRODUCTION TO SUPPLY CHAIN
MANAGEMENT**

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(5 × 3 = 15)

Answer **all** questions.

1. What are the components of supply chain?
2. What is E-Procurement?
3. What is global supply chain strategy?
4. Define intermodal transportation.
5. What are the costs associated with supply chain?

Part B

(5 × 10 = 50)

Answer **all** questions, choosing either (a) or (b).

6. (a) Examine how a company achieves strategic fit between its supply chain strategy and its competitive Strategy.

Or

- (b) Evaluate the drivers of supply chain performance in Indian industry perspective.

7. (a) “Integrating supply chain partners is very difficult without the use of information technology” -Defend.

Or

- (b) Explain major components of sourcing decisions in supply chains.

8. (a) Summarize the global supply chain best practices to support and drive business success.

Or

- (b) Supply chain integration is a close alignment and coordination within a supply chain – Examine.

9. (a) “To evaluate the efficiency and sustainability of the logistics systems, developing logistics performance indicators is essential”- Discuss.

Or

- (b) Outline the importance of global sourcing in inventory management and its prime advantages.

10. (a) Describe the framework of Agile supply chain and its potential benefits.

Or

- (b) Analyse the benefits and problems with the use of outsourcing as a part of a supply chain strategy.

Part C

(1 × 10 = 10)

Compulsory: Case Study

11. Starbucks is pretty much a household name. But like many of the most successful worldwide brands, the coffee shop giant has been through its periods of supply chain pain. In fact, during 2007 and 2008, Starbucks leadership began to have serious doubts about the company’s ability to supply its 16,700 outlet. As in most commercial sectors at that time, sales were falling. At the same time though, supply chain costs rose by more than \$75 million.

When the supply chain executive team began investigating the rising costs and supply chain performance issues, they found that service was indeed falling short of expectations. Findings included the following problems.

- Fewer than 50% of outlet deliveries were arriving on time
- A number of poor outsourcing decisions had led to excessive 3PL expenses
- The supply chain had, (like those of many global organizations) evolved, rather than grown by design, and had hence become unnecessarily complex.

Starbucks' leadership had three main objectives in mind to achieve improved performance and supply chain cost reduction. These were to:

- Reorganize the supply chain
- Reduce cost to serve
- Lay the groundwork for future capability in the supply chain

In order to meet these objectives, Starbucks divided all its supply chain functions into three key groups, known as plan” “make” and deliver”. It also opened a new production facility, bringing the total number of U.S. plants to four, Next, the company set about terminating partnerships with all but its most ineffective 3PLs. The

remaining partners were then managed via a weekly scorecard system, which was aligned with renewed service level agreements. By the time Starbucks' supply chain transformation program was completed, the company had made savings of more than \$500 million over the course of 2009 and 2010, of which a large proportion came out of the supply chain, according to Peter Gibbons, then Executive Vice President of Global Supply Chain Operations.

Questions:

- (a) State the facts and analyse the case.
- (b) Explain how effective supply chain management helped Starbucks to improve their performance.

R6342

Sub. Code

645702

M.B.A. DEGREE EXAMINATION, NOVEMBER – 2021

Tourism Management

NME — HOSPITALITY MANAGEMENT

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(5 × 3 = 15)

Answer **all** questions.

1. Differentiate between commercial hotel and resort hotel.
2. List out the functions of the food and beverage department.
3. Write about the different types of meal plans.
4. Give examples for guest services in hospitality industry.
5. What is Yield Management and write its challenges?

Part B

(5 × 10 = 50)

Answer **all** questions, choosing either (a) or (b).

6. (a) Write the concepts of Atithi Devo Bhava.

Or

- (b) How will you classify hotels as per:

- (i) Location
- (ii) Facilities and Services

7. (a) Draw the organisation chart of a food and beverage department of a large hotel. Write the duties and responsibilities of a restaurant captain.

Or

- (b) List out the duties and responsibilities of a Sous Chef.
8. (a) What major methods of payment are used by guests? What procedures do front desk agents use for accepting a foreign currency?

Or

- (b) Write the job description of a Guest Relation Executive.
9. (a) What are the four major types of complaints? Which is most common? Describe general approaches to handling complaints.

Or

- (b) What are the typical key control systems? How is key control affected by electronic locking systems?
10. (a) Write the formula for calculating:
- (i) Average Daily Rate
 - (ii) RevPAR
 - (iii) Occupancy ratio
 - (iv) Average Room Rate Per Guest

Or

- (b) Discuss the various elements of yield management.

Case Study – Compulsory Question

11. Ishikawa Tours

Ishikawa Tours of Japan has booked 45 twin rooms, plus one single room for the tour guide, on a room-only basis. This is the first time that our hotel has accommodated this tour group, and the hotel wants everything to go well with them. The hotel has 200 rooms, all with ensuite bathrooms, tea-making and coffee-making facilities, mini-bars, and in-house ‘pay’ movies. The hotel also has a 70-seater restaurant and a 100-seater coffee shop where breakfast is usually served. The hotel also has a series of function rooms capable of seating 20-500 persons.

The group will make its own way to the hotel by coach, and is expected to arrive at approximately 13:00. The group rates of the hotel apply to the twin rooms, and the tour guide is given a room free of charge. The tour is scheduled to leave at 07:00 in the morning, and will be having breakfast on departure.

The tourists will be staying for three nights. They will want an Asian-style buffet breakfast each morning, and a tour dinner on the third night. Ishikawa tours will be paying for all accommodation, and the breakfasts, and the dinner on the final night – all on a master account. However, all other expenses are the guest’s own responsibility.

Case Study Questions:

- (a) List the steps that need to be taken by the front office manager to ensure that the Ishikawa tour group is handled efficiently and courteously. What needs to be done prior to arrival, on arrival, and on departure? (5)
- (b) State the other departments (in the room division, and in the hotel in general), that need to be informed, and why? (5)

R6343

Sub. Code

646702

M.B.A. DEGREE EXAMINATION, NOVEMBER – 2021

Disaster Management

NME : CLIMATE CHANGE AND SOCIETY

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

All questions carry equal marks.

1. What is climate change?
2. Define environmental hazardous.
3. List any two environmental conflicts.
4. Write a note on mitigation.
5. List any two climate change problems in agriculture.
6. How does the agricultural sector continually adapt to climate change?
7. Give the meaning of water resource management.
8. Define global warming.
9. What is coastal regulation zone?
10. What is an impact of sea level rise?

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

All questions carry equal marks.

11. (a) “Climate change matters to everyone on the society”—Argue.

Or

- (b) Discuss the vulnerability assessment in climate change.

12. (a) Explain the effect of climate change on human health.

Or

- (b) What are the economic impact of Covid-19 lockdown in India?

13. (a) Illustrate the role of government for agriculture adaptation.

Or

- (b) What are the options in agricultural adaptation?

14. (a) “Will climate change complicate water resource management of some disaster risks”-Discuss.

Or

- (b) Examine the salient features of national water policy.

15. (a) Outline the components of integrated coastal zone management.

Or

- (b) Point out the major problems of coastal area in India.

Part C

(3 × 10 = 30)

Answer any **three** questions.

All questions carry equal marks.

16. Elucidate the causes for man-made disaster. How to reduce them?
17. Critically examine the major policies for adaptation in India.
18. Appraise the agriculture adaptation strategies to climate change impact in India.
19. “A new paradigm shift is required for justifying new water resources investment and projects.”— Discuss.
20. Discuss the impact of climate change on ecosystem and biodiversity in India.

R6344

Sub. Code

652702

**M.B.A. (IB) DEGREE EXAMINATION,
NOVEMBER – 2021**

International Business

NME : BASICS OF EXPORT

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(5 × 2 = 10)

Answer **all** questions.

1. Define the term export.
2. State the importance of labelling
3. What is meant by pricing strategy?
4. Why is it called a bill of lading?
5. What do you mean by foreign trade policy?

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

6. (a) What are the benefits arising from export?
Or
(b) Identify the types and sources of export information.
7. (a) Write a registration formalities of setting up a new export firm in India.
Or
(b) What criteria should be considered while selection of export products?

8. (a) What are the factors that affecting export distribution channel?

Or

- (b) Explain the various modes of Export Shipment and Transport.

9. (a) What is a letter of credit? Explain the various types of letter of credit.

Or

- (b) List out the documents do you need to export.

10. (a) Write about the role of ECGC in export credit.

Or

- (b) Deliberate the role and functions of export promotion councils.

Part C (3 × 10 = 30)

Answer any **three** questions.

11. Explain the need and the process of export management in India.
12. Discuss the product mix concept for the export product.
13. List out the different types of transport mode for product distribution.
14. What kind of bank guarantees documents are required for export? When is bank guarantee cancelled with customs?
15. Discuss the benefits and highlights of EHTP scheme.

Part D

(1 × 10 = 10)

Case study (Compulsory)

16. Discuss your views on how Indian companies can compete and capture the global market in a tough global export market. List some of the export marketing strategies that need to do it.
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R6345

Sub. Code

701702

M.A. DEGREE EXAMINATION, NOVEMBER – 2021

English

NME: ENGLISH FOR COMPETITIVE EXAMINATIONS

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Explain Common noun and Proper noun.
2. How do you identify an adverbial phrase?
3. What is the function of a preposition in a sentence?
4. What is concord in English?
5. What is the function of present continuous tense?
6. Why is the superlative degree used?
7. What is known as dependent clause?
8. What is called an Adjective clause?
9. Define passive vocabulary?
10. Correct the following sentences:
 - (a) The sceneries here are beautiful
 - (b) I prefer coffee than tea.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Point out the part of speech for the underlined word in the following sentences.
- (i) A square peg in a round hole
 - (ii) The evening was a round of pleasures
 - (iii) He came round to their belief
 - (iv) The earth revolves round the sun.
 - (v) We shall round the cape in safety.

Or

- (b) Pick out the Adjective Phrases in the following sentences.
- (i) He was a lad of great promise.
 - (ii) A man in great difficulties came to me for help.
 - (iii) Only a man with plenty of money buys a car of such beauty and power.
 - (iv) Gardens with cool shady tress surround the village.
 - (v) Wild beasts in small cages are a sorry sight.
12. (a) Fill up the blanks with appropriate prepositions.
- (i) The river flows _____ the bridge.
 - (ii) The car dashed _____ the tree.
 - (iii) This is a matter _____ little importance.
 - (iv) I bought it _____ fifteen rupees.
 - (v) We suffered _____ your neglect.

Or

- (b) Correct the following sentences necessary:
- (i) The captain with his crew were drowned.
 - (ii) A large sum of money were stolen.
 - (iii) The leader as well as his brothers belong to the same tribe.
 - (iv) Either he or his brother have made this mistake.
 - (v) Many a boy are doing their work.

13. (a) Fill in the blanks with the appropriate verbs given in brackets.
- (i) My father was sleeping, when I _____ (enter) house.
 - (ii) He _____ (arrive) before she reached the park.
 - (iii) We _____ (travel) to Bangalore tonight.
 - (iv) My mother _____ (cook) now.
 - (v) You _____ (study) in the XII std. next year.

Or

- (b) Convert the following sentence a into passive voice.
- (i) The ticket examiner is checking the tickets of the passengers.
 - (ii) He is disturbing me again and again.
 - (iii) I am helping him.
 - (iv) The President inspected the guard of honour.
 - (v) The villagers are cutting down the trees.

14. (a) Combine each set of sentences into one Simple sentence by using prepositions with Nouns or Gerunds:

- (i) He was rude. I took no notice of it.
- (ii) He amused us very much. He sang a funny song.
- (iii) He attended to his duties. He earned promotion.
- (iv) It rained hard. The streets were flooded.
- (v) The judge gave his decision. The court listened silently.

Or

(b) Rewrite as directed:

- (i) The room is dark. (Change into Negative without changing the meaning)
- (ii) He confessed his crime. (Convert into a complex sentence)
- (iii) The ship will leave as soon as the mails arrive. (Convert into a Simple sentence)
- (iv) The news is too good to be true. (Rewrite with 'so' as to get rid of adverb 'too')
- (v) It is a horrible night. (Transform into Exclamatory sentence)

15. (a) Write sentences of your own using the following:

- (i) Consistent with
- (ii) Heel of Achilles
- (iii) Mend or end
- (iv) Nail in one's coffin
- (v) Mock at

Or

(b) Correct the following sentences:

- (i) He has been treated as if he was a criminal.
- (ii) I will telephone you as soon as I will reach London.
- (iii) Both of the letters didn't arrive.
- (iv) The woman sitting next to me on the plane was a British.
- (v) I will be at your house by an hour.

Part C

(3 × 10 = 30)

Answer any **three** questions.

- 16. Attempt an essay on the various types of conjunctions with adequate examples.
- 17. Highlight the function of prepositions with examples.

18. Discuss the principles governing the degrees of comparison with suitable examples.
 19. Elaborate the various types of Adverb clauses with suitable illustrations.
 20. Discuss the ways to improve your vocabulary.
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R6346

Sub. Code

711702

B.Ed. DEGREE EXAMINATION, NOVEMBER – 2021

Education

NME : GENDER, SCHOOL AND SOCIETY

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What do you mean by gender roles?
பாலின பங்கு பற்றி நீவிர் அறிவது யாது?
2. Mention the causes of gender discrimination.
பாலின பாகுபாட்டிற்கான காரணங்களை குறிப்பிடுக.
3. What is feminism?
பெண்ணியம் என்றால் என்ன?
4. Define “gender sensitization”.
‘பாலின உணர்திறன்’ வரையறு.
5. Mention the role of peer in gender education.
பாலின கல்வியில் ஒப்பர் குழுவின் பங்கினை குறிப்பிடுக.
6. What are the gender issues in schools?
பள்ளிகளில் காணப்படும் பாலினப் பிரச்சனைகள் யாது?
7. What is gender dynamism?
பாலின இயக்கம் என்றால் என்ன?

8. What are the causes of gender discrimination in labour?
தொழிற்சூறையில் பாலின பாகுபாட்டிற்கான காரணங்கள் யாவை?
9. Mention certain women development programme in India.
இந்தியாவில் காணப்படும் பெண்கள் மேம்பாட்டுத் திட்டம் சிலவற்றை குறிப்பிடுக.
10. List out the important legal provisions provided for women in India.
இந்தியாவில் பெண்களுக்கு வழங்கப்பட்ட முக்கிய சட்ட விதிகளை பட்டியலிடுக.

Part B

(5 × 5 = 25)

Answer any **five** questions.

11. Discuss about the difference between sex and gender.
பால் மற்றும் பாலினத்திற்கும் உள்ள வேறுபாட்டை விவாதி.
12. Explain the impact of patriarchal system on women's status.
மகளிர் உயர்வில் ஆணாதிக்க அமைப்பின் தாக்கத்தை விளக்கு.
13. Write a short note on influence of gender factor in course choice.
பாடத்தேர்வில் பாலின காரணிகளின் தாக்கம் குறித்து சிறு குறிப்பு எழுதுக.
14. Discuss the role of school in gender socialization.
பாலின சமூகமயமாக்கலில் பள்ளியின் பங்கு பற்றி விவாதி.
15. Suggest some measures to avoid sexual harassment at work place.
பணியிடத்தில் பாலியல் துன்புறத்தல்களைத் தவிர்க்க சில நடவடிக்கைகளை பரிந்துரை.

16. Explain about gender roles in Livelihood.
வாழ்வாதாரத்தில் பாலின பங்குகள் பற்றி விளக்குக.
17. Analyse the changing gender role in modern India.
நவீன இந்தியாவில் மாறிவரும் பாலின பங்கை பகுப்பாய்வு செய்க.
18. Elaborate the impact of media on women.
பெண்களின் மீது ஊடகங்களின் தாக்கத்தை விரிவாக கூறு.

Part C (2 × 15 = 30)

Answer **all** questions, choosing either (a) or (b).

19. (a) Describe the role of schools, teachers and curriculum in gender equality.
பாலின சமத்துவத்தில் , பள்ளி ஆசிரியர்கள் மற்றும் கலைத் திட்டத்தின் பங்கை விவரி.
Or
- (b) Elaborate the major problems faced by women in the society.
சமூகத்தில் பெண்களுக்கு ஏற்படும் முக்கிய பிரச்சனைகளை விவரி.
20. (a) Briefly describe the salient features of women's reservation bill.
பெண்கள் இட ஒதுக்கீடு மசோதாவின் முக்கிய அம்சங்களை விவரி.
Or
- (b) Explain the different methods to mash streaming gender in livelihood activities.
வாழ்வாதார நடவடிக்கைகளில் பாலினத்தை பிரதானமாக்குவதற்கான வெவ்வேறு முறைகளை விளக்குக.

R6347

Sub. Code

720801

B.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Physical Education

NME : FIRST AID AND REHABILITATION

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. Obesity means
 - (a) Normal body weight
 - (b) Excess body Fat
 - (c) Hefty body
 - (d) Normal fat
2. The diseases are not caused by infectious agents.
 - (a) Non-communicable diseases
 - (b) Communicable diseases
 - (c) Diseases
 - (d) Infections
3. “Health teaching and counselling” is called as _____
 - (a) Health instruction
 - (b) Health supervision
 - (c) Health Education
 - (d) Health awareness

4. The condition and practices that help to maintain health and prevent the spread of disease is called as
- (a) Health
 - (b) Health Education
 - (c) Hygiene
 - (d) Environmental studies
5. Malaria is caused by a parasite called
- (a) Plasmodium
 - (b) Variola
 - (c) Paramyxovirus
 - (d) Salmonella
6. The process of providing or obtaining the food necessary for health and growth
- (a) Malnutrition
 - (b) Nutrition
 - (c) Diet
 - (d) Balanced diet
7. _____ are injuries where a ligament is stretched or torn within a joint.
- (a) Sprains
 - (b) Strains
 - (c) Dislocation
 - (d) Fracture
8. The help is given to a sick or injured person until full medical treatment is available
- (a) Treatment
 - (b) First Aid
 - (c) Rehabilitation
 - (d) Service

9. Conditions or practices conducive to maintaining health and preventing disease, especially through cleanliness.
- (a) Health
 - (b) Health Education
 - (c) Hygiene
 - (d) Environmental studies
10. Not eating enough food or not eating enough healthy food
- (a) Malnutrition
 - (b) Nutrition
 - (c) Diet
 - (d) Balanced diet

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Briefly write about the aims and objectives of Health Education.

Or

- (b) Write about Nutrition and Malnutrition.

12. (a) Briefly discuss the origin and development of the modern Olympics.

Or

- (b) Write the importance of Health Education in Schools.

13. (a) Write about unintentional injuries.

Or

- (b) Short note on obesity.

14. (a) Write the causes and symptoms of Fracture.

Or

(b) Write the causes, symptoms and remedies of Sprain.

15. (a) Give the details about diet and balanced diet.

Or

(b) Write about vitamins and deficiency diseases.

Part C

(5 × 8 = 40)

Answer any **five** questions.

16. Discuss the aims and objectives and scope of Physical Education.

17. Define Physical Fitness and explain the components of Physical Fitness.

18. Explain the symptoms and prevention of communicable diseases.

19. What is the meaning of First Aid? Elaborate on the uses and principles of First Aid.

20. Define Nutrition and explain the classification of food.

21. Explain the need and importance of Safety Education.

22. Explain the importance of Personal hygiene and Health instructions.

R6348

Sub. Code

724701

B.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Yoga

NME : YOGIC SCIENCES

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. Cleansing system used to purify body is shat _____
(a) Darshana (b) Kriyas
(c) Sampath (d) Ripus
2. Kumbhaka is _____ of breath.
(a) Inhalation (b) Exhalation
(c) Retention (d) None
3. Fish posture is _____ Asana.
(a) Padma (b) Vatayana
(c) Matsya (d) Sethubandha
4. Queen of Asanas is _____ Asana.
(a) Shava (b) Sarvanga
(c) Shalabha (d) Siddha

5. Withdrawal of senses is _____
- (a) Yama (b) Niyama
(c) Pranayama (d) Prathyahara
6. _____ Mudra is similar to Janu Shirasasana.
- (a) Sambhavi (b) Shanmuki
(c) Maha (d) Kechari
7. Kapalabhati involves _____ inhalation.
- (a) Passive (b) Active
(c) Left nostrils (d) Both nostrils
8. Ushtrasana final position simulates _____.
- (a) Horse (b) Lion
(c) Camel (d) Tiger
9. There are _____ names given to Sun god.
- (a) 12 (b) 10
(c) 15 (d) 16
10. Asana is the _____ limb of Ashtanga yoga.
- (a) 2 (b) 3
(c) 4 (d) 5

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain principles of loosening exercises.
- Or
- (b) Explain practice of Surya Namaskar.

12. (a) List out the difference between Asanas and physical exercise.

Or

- (b) Explain sitting asanas with five examples.

13. (a) Explain role of Pranayama in yogic curriculum.

Or

- (b) Explain about any five Pranayama techniques in detail.

14. (a) Explain the guidelines and benefits of the practices of Shat Kriyas.

Or

- (b) Explain the bandhas with three examples.

15. (a) Explain types of Mudras with two examples in each type.

Or

- (b) Explain about the Saguna and Nirguna forms of meditation and their benefits.

Part C

(5 × 8 = 40)

Answer any **five** questions.

16. Explain Surya Namaskar and give their benefits in detail.
17. Explain the essentials and benefits of standing asanas with five examples in detail.
18. Explain in detail about balancing asanas examples with suitable examples.

19. Write in detail about the guidelines, caution, preparation and obstacles in the practice of Pranayama with three examples.
 20. Explain the role of Pranayama on physiological functions of various human systems.
 21. Explain the effect of Kriyas and bandhas on physiological and psychological functions of human systems.
 22. Explain in detail about the yoga therapy for Migraine headache.
-

R6349

Sub. Code

741702

M.Ed. DEGREE EXAMINATION, NOVEMBER – 2021

Education

NME - ENVIRONMENTAL EDUCATION

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define environmental education.
2. State the need for environmental education.
3. List out the role of NCERT in environmental education.
4. What are the skills integrating in environmental education curriculum?
5. What is environmental crisis?
6. Mention the e-resources in environmental education.
7. Illustrate the hydrological disaster.
8. What is green chemistry?
9. Why is environmental conservation required?
10. What is environmental degradation?

Part B

(5 × 5 = 25)

Answer any **five** questions.

11. Explain the origin of environmental education.
12. Describe the need and significance of environmental education curriculum.
13. Discuss the development of environmental education curriculum in India.
14. How to curriculum planning and development environmental education at secondary level.
15. Explain the main features of the environmental crisis.
16. Explain the impact of natural disaster.
17. Interpret the historical perspectives on environmental education.
18. Describe the Asian people quality of life.

Part C

(3 × 10 = 30)

Answer **all** the questions, choosing either (a) or (b).

19. (a) Discuss the pre-requisition for a successful environmental education in higher secondary school level.

Or

- (b) Explain the role, objectives and principles of environmental education.

20. (a) Explain the issues and causes of environmental crisis.

Or

(b) Discuss the sensitivity of students for the natural environment and cultural heritage.

21. (a) Explain the impact of man – made disaster on environment.

Or

(b) Describe the environment protection Act 1986.

R6350

Sub. Code

743702

M.Ed. DEGREE EXAMINATION, NOVEMBER – 2021

Special Education (Visual Impairment)

**NME : UNDERSTANDING CHILDREN WITH
DISABILITIES**

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions not exceeding 100 words each.

1. Define ASD.
2. What is inclusive education?
3. Define Mainstreaming.
4. Write the overview of RPWDA
5. What do you mean by high support learners?
6. What is assistive technology?
7. Define Abacus.
8. Expand the term UNCRPD
9. What is an adapted teaching-learning material?
10. What is functional assessment?

Part B

(5 × 5 = 25)

Answer any **five** of the following in about 250 words each.

11. Explain accommodation and its need for children with disabilities.
12. Explain the neurological chronic disorders.
13. Explain outdoor activities for the children with disabilities.
14. Give an account on ASD and LD.
15. Explain Taylor frame and its uses.
16. Explain grievance redressal mechanisms.
17. Write a brief note on multiple disabilities.
18. Explain the cause and preventive measures of disabilities.

Part C

(3 × 10 = 30)

Answer **all** questions in about 750 words each.

Choosing either (a) or (b).

19. (a) Discuss about the different chapters in RPWDA (2016).

Or

- (b) Explain any five assistive technologies and its uses.

20. (a) Write short notes on
- (i) Plus Curriculum,
 - (ii) Adaptations.

Or

- (b) Describe the co-curricular activities that facilitates learning of children with visual disabilities.
21. (a) Explain the barriers to inclusion of persons with disabilities.

Or

- (b) Explain optical and non-optical devices.
-

R6351

Sub. Code

811702

M.P.Ed. DEGREE EXAMINATION, NOVEMBER – 2021

Physical Education

NME : HEALTH AND PHYSICAL EDUCATION

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer any **ten** questions.

All questions carry equal marks.

1. Define Physical Education.
2. State the meaning of Health Education.
3. Write the meaning of Physical fitness.
4. List down any two components of physical fitness.
5. What is intentional injury?
6. Mention any two causes of obesity.
7. Write any two uses of first aid.
8. What is fracture?
9. State the meaning of nutrition.
10. What is balance diet?
11. What is malnutrition?
12. State the constituents of food.

Part B

(5 × 5 = 25)

Answer any **five** questions.

All questions carry equal marks.

13. Explain the scope and importance of Physical Education.
14. Write short notes on Health instruction and Health services.
15. Discuss the life style disorders.
16. Narrate the first aid principles.
17. Write short note on vitamins.
18. Briefly explain the origin and development of ancient Olympics.
19. Write short notes on personal hygiene.
20. Narrate the causes and remedies for muscular sprain.

Part C

(3 × 10 = 30)

Answer any **three** questions.

All questions carry equal marks.

21. Elaborate the aims, objectives and importance of Health Education.
22. Write an essay on Safety Education.
23. Narrate the causes, symptoms and prevention of back pain.
24. Explain the causes, symptoms and first aid related to fracture.
25. Write an essay on food and nutrition.

R6352

Sub. Code

813702

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Yoga

NME — SCIENCE OF YOGA

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define Suriyanamaskar.
2. What is Chandranamaskar?
3. What is mudras?
4. What is karma yoga?
5. What is kriyas?
6. What is hathayoga?
7. What you mean by integration?
8. What is nadi shodhana pranayama?
9. Mention any two benefits of bandhas.
10. When does 'international Yoga day' celebrated?

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Write down about cultural asanas and its benefits.
Or
(b) Explain yogic practices on consciousness.
12. (a) What are the benefits to pranayama according to Patanjali?
Or
(b) Role of yoga on positive health.
13. (a) Write down types of pranayama.
Or
(b) Write down the techniques used in practice of pranayama.
14. (a) Guideline to practice mudras – Explain.
Or
(b) Explain practice methods of kriyas.
15. (a) Explain the concept of meditation.
Or
(b) Explain the benefits of Suryanamaskar.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. List down kriyas and its benefits with suitable illustrations.
17. What is positive aspect of Yoga Marga?
18. Explain difference between physical exercises and asanas exercises.
19. What are the benefits of mudras?
20. Explain eight limbs of yoga.

R6353

Sub. Code

932702

M.L.I.Sc. DEGREE EXAMINATION, NOVEMBER – 2021

Library and Information Science

NME : OPEN KNOWLEDGE SYSTEM

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

All questions carry equal marks.

1. What are open access resources?
2. Define Open Knowledge System.
3. What is OA Mandate?
4. What is SHERPA/RoMEO?
5. What is OATD?
6. What is OA Publishing?
7. Write any two open Access databases.
8. Define Impact factor.
9. What is interoperability?
10. What does OAI/PMH stands for?

Part B

(5 × 5 = 25)

Answer **all** questions, by choosing either (a) or (b).

11. (a) Write the history of open knowledge movement.

Or

- (b) What are the characteristics of open source software?

12. (a) Explain the types of open access policies.

Or

- (b) Write the importance of open access mandates.

13. (a) Write the importance of OA gateways.

Or

- (b) What is Green path of OA? Enumerate any one type in brief.

14. (a) What are the features of google scholar.

Or

- (b) Identify five key citation-based indicators for journals?

15. (a) Explain the types of interoperability.

Or

- (b) What are the advantages of SRU/SRW interoperability standards?

Part C

(3 × 10 = 30)

Answer any **three** questions.

All questions carry equal marks.

16. What is Open Access initiatives? Explain in brief any one of the OA initiatives in India.
 17. Explain in brief the open access policies and mandates in India.
 18. Give an introduction to DOAJ and DOAB.
 19. Discuss about open access content management system.
 20. Discuss about different open access interoperabilities.
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