

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

PG DEGREE EXAMINATION DECEMBER 2023  
(Third Semester)

TRANS DISCIPLINARY COURSE  
(Common to PG Programmes)

HERBAL THERAPEUTICS

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Indian medicine and homeopathy was established in  
(i) 1995 (ii) 1994  
(iii) 1996 (iv) 1997
- 2 \_\_\_\_\_ tribal are present in Kerala.  
(i) Irulas (ii) Tripuri tribes  
(iii) Kanis (iv) Thodas
- 3 What type of products are shampoos?  
(i) a viscous liquid (ii) hair care product  
(iii) cleaning hair (iv) all of these
- 4 The uses of turmeric is  
(i) disorders of the bone (ii) digestive system  
(iii) upper respiratory tract (iv) both (ii) and (iii)
- 5 What is the use of triphala churna?  
(i) analgesic (ii) antibacterial  
(iii) hypoglycemic (iv) all of these

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a) Assume the scope and importance of herbal plants.  
OR  
b) Is Ayurveda and Siddha same? - Discuss.
- 7 a) How are tribes divided in India according to the geographical locality? - Explain.  
OR  
b) Discuss the medicinal plants used in tribals in Tamil Nadu.
- 8 a) How can I promote my herbal business? - Explain.  
OR  
b) Analyse the list of herb is mostly used in oral care. Mention it importance.
- 9 a) Evaluate the medicinal values of Kalonji.  
OR  
b) Illustrate the regulatory status of herbal drugs in India.
- 10 a) Is Unani better than allopathy? – Explain.  
OR  
b) Determine the significance of herbal cosmetics.

Cont

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a) Classify the medicinal plants.  
OR  
b) Elucidate the Indian system of medicine.
- 12 a) How many tribes are there in Tamil Nadu? - Analyze.  
OR  
b) Is Irula and Thodas a caste or tribe? - Discuss.
- 13 a) Enumerate the uses of gum and resins.  
OR  
b) Appraise the uses of Thirikadugam powder.
- 14 a) Determine the benefits of ginger lemon and turmeric.  
OR  
b) Is homeopathy good or bad for you? - Discuss.
- 15 a) Asses the medicinal uses of oils and dyes.  
OR  
b) Determine the scope and future prospects of herbal drug industry.

Z-Z-Z

END



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**TRANS DISCIPLINARY COURSE  
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**E-CONTENT DEVELOPMENT**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks

(5 x 1 = 5)

1. Which is a type of E-Content in the following?  
 (i) Assembled (ii) Accessed  
 (iii) Accurate (iv) Communicative
2. Which one is not an advantage of E-Content Usage?  
 (i) Cost effectiveness (ii) User friendly  
 (iii) No need of technical Knowledge (iv) Minimization of distance
3. A mobile app and website from where you can download all E-books of NCERT for free is  
 (i) e - Pusthak (ii) Udaan  
 (iii) Swayam (iv) E-Pathshala
4. An example of online encyclopedia is  
 (i) Wikipedia (ii) Mathrubhumi.com  
 (iii) University site (iv) None of these
5. A media presentation over internet  
 (i) Webcasting (ii) Video Conference  
 (iii) Live Television Broadcast (iv) offline Presentation

**SECTION - B (15 Marks)**

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks

(5 x 3 = 15)

- 6 a. Discuss Analysis phase.  
 OR  
 b. Describe organizing documents.
- 7 a. Describe an editing element in short.  
 OR  
 b. Explain about stickers.
- 8 a. Explain Development phase.  
 OR  
 b. Describe Drawing Line Chart in short.
- 9 a. Explain editing videos.  
 OR  
 b. Describe polling.

Cont...

- 10 a. Discuss Patent for E-Content Development.  
OR  
b. Explain Plagiarism issues.

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a. Elucidate using and customizing templates.  
OR  
b. Analyze Saving and Organizing Documents.
- 12 a. Enumerate and describe the key advantages of personalizing the editor's interface for document creation.  
OR  
b. Determine the graphics and stickers.
- 13 a. Discuss about Creating Animations.  
OR  
b. Determine Finding fonts and using text.
- 14 a. Analyze the collaborating on designs.  
OR  
b. Create Websites and surveys.
- 15 a. Compare Do's and Don'ts while developing e-content.  
OR  
b. Determine steps to obtain License to develop e-content.

Z-Z-Z

END



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TRANS DISCIPLINARY COURSE  
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TOOL DEVELOPMENT

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

- 1 The systematic use of tests to quantify psychophysical behaviour, abilities, and problems and to make predictions about psychological performance is known as
  - (i) Psychophysiology
  - (ii) Psychological analysis
  - (iii) Psychobiological testing
  - (iv) Psychological assessment
- 2 Of the following sampling methods, which is a probability method?
  - (i) Judgment
  - (ii) Quota
  - (iii) Simple random
  - (iv) Convenience
- 3 This is a technical term do we use to refer to whether a test measures what it purports to measure?
  - (i) Reliability
  - (ii) Norms
  - (iii) Validity
  - (iv) Items
- 4 The full form of the acronym SEM is
  - (i) Structural Equation Method
  - (ii) Structural Equivalent Modelling
  - (iii) Structural Equal Modelling
  - (iv) Structural Equation Modeling
- 5 We interpret a subject's performance on a test in terms of how other people have performed on the test. Other people's performance forms the \_\_\_\_\_ of the test.
  - (i) Reliability
  - (ii) Norms
  - (iii) Validity
  - (iv) Items

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a Determine the importance of psychological assessment.  
OR  
b Elaborate the steps in the measurement process.
- 7 a Discuss the concept of content analysis.  
OR  
b Compare the different methods of sampling.
- 8 a Discuss the principles to be followed in Item generation.  
OR  
b Justify progression of item difficulty in test construction.
- 9 a Sketch the importance of factor analysis in tool development.  
OR  
b Determine the reasons to use exploratory factor analysis.
- 10 a Illustrate the steps in norm development.  
OR  
b Evaluate the types of bias in psychometric analysis.

Cont...

**SECTION -C (30 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** Marks

(5 x 6 = 30)

- 11 a Analyze the properties of scales of measurement.  
OR  
b Compare and contrast assessment, testing and measurement.
- 12 a Evaluate the different methods of data collection.  
OR  
b Assess the important methods to select and manipulate variables.
- 13 a Examine the different types of reliability.  
OR  
b Evaluate the different forms of validity that are commonly applied.
- 14 a State the principles involved in confirmatory factor analysis.  
OR  
b Elucidate the concepts of Structural Equation Modeling.
- 15 a Discuss the application of norms in testing and assessment.  
OR  
b Appraise the best practices in reporting factor analysis.

Z-Z-Z

END



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PG DEGREE EXAMINATION DECEMBER 2023  
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TRANS DISCIPLINARY COURSE  
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NUTRITION FOR HEALTH AND WELLNESS

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

1. Exercise is a component of ..... Wellness.  
(i) Spiritual (ii) interpersonal  
(iii) intellectual (iv) physical
2. Feeling at peace with yourself after meditating is an example of which wellness dimension?  
(i) Occupational (ii) spiritual (iii) emotional (iv) mental
3. The principal protein in rice is  
(i) Oryzenin (ii) glyadenin (iii) zein (iv) glutenin
4. Element that acts as an antioxidant and has synergistic effect with vitamin E.  
(i) Copper (ii) calcium (iii) Selenium (iv) iron
5. The release of \_\_\_\_\_ decreases the effectiveness of the immune system in responding to prolonged stress.  
(i) Corticoids (ii) endorphin (iii) dopamine (iv) serotonin

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

6. a List out any five importance of nutrition.  
OR  
b Define health.
7. a Give the functional classification of macronutrients.  
OR  
b Name some deficiency disorders of micronutrients.
8. a Write the components of healthy plate.  
OR  
b Bring out the essential notifications needed in food label.
9. a Name any three benefits of fitness of health.  
OR  
b Suggest any two activity that aid in maintaining health of an individual.
10. a Stress has direct influence on health and nutrition. Justify simply.  
OR  
b What are the stress markers that indicate poor health status in human?

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

11. a As a nutritionist what kind of Healthy changes would you suggest for a healthy life of a home maker?  
OR  
b Describe how trends of undernutrition and overnutrition influences wellness of an individual.
12. a Classify carbohydrates. Explain the role of polysaccharides aid in gut health.  
OR  
b Enumerate the role of iron on health.
13. a Summarize the millennium development goals of Indians.  
OR  
b Comment on the nutrition information need to be interpreted for the judicious choice of food from outlets.
14. a Detail the components of physical activity.  
OR  
b Explain the nutritional requirement during exercise.
15. a Highlight the factors involved in stress development of an individual.  
OR  
b Narrate the methods adopted in coping of stress.

Z-Z-Z

END



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FOOD CHEMISTRY & QUALITY CONTROL

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1) Choose the chemical name for fibre  
(i) Starch                      (ii) Cellulose                      (iii) Fructose                      (iv) Sucrose
- 2) Identify the enzymatic browning reaction  
(i) Browning of Sugar (Caramelization)      (ii) Browning of Rice during roasting  
(iii) Browning of lemon                      (iv) Browning of Apple
- 3) Which is used in the food industry to speed up the reactions?  
(i) Catalyst                      (ii) Additives                      (iii) Enzymes                      (iv) Intensifiers
- 4) Mention the temperature at which taste sensation starts increasing  
(i) Above 30°C                      (ii) Below 20°C  
(iii) Above 40°C                      (iv) Below 10°C
- 5) Name the common adulterant of turmeric.  
(i) Hydrazine yellow                      (ii) Metanil Yellow  
(iii) Dye Yellow lake                      (iv) Yellow 5

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6) a) Discuss on types of water.  
(OR)  
b) Explain the role of pectin in food industry.
- 7) a) Narrate a note on haemoglobin.  
(OR)  
b) Explain the properties of fats.
- 8) a) List the major categories of food additives with example.  
(OR)  
b) Explain rheology of dough.
- 9) a) Prepare an evaluation card for triangle test.  
(OR)  
b) Describe the sensory characteristics that can be evaluated.
- 10) a) Discuss the role of FSSAI.  
(OR)  
b) State the role and function of consumer protection act.

Cont...

**SECTION -C (30 Marks)**Answer **ALL** questions**ALL** questions carry **EQUAL** Marks

(5 x 6 = 30)

- 11) a) Determine the effect of moist and dry heat on starch.  
(OR)  
b) Elaborate on animal protein.
- 12) a) Bring out the changes in pigments during cooking.  
(OR)  
b) Enumerate on rancidity and its reversion.
- 13) a) Summarize natural food colorants and their uses.  
(OR)  
b) Explain the role of enzymes in food industry.
- 14) a) Sketch down the chemistry and physiology of taste.  
(OR)  
b) Discuss on rating methods of sensory evaluation.
- 15) a) Explain any five common adulterants in food and the test to identify it.  
(OR)  
b) Summarize the role of BIS and AGMARK in food safety.

Z-Z-Z

END



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TRANS DISCIPLINARY COURSE  
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**DRUGS AND CHEMOTHERAPY**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

1. What the body does to a drug is called?  
(i) Pharmacodynamics (ii) Pharmacotherapeutics  
(iii) Pharmacognosy (iv) Pharmacokinetics
2. What do you mean by bio-transformation?  
(i) Renders the drug more lipid soluble  
(ii) Is necessary for all drugs for their elimination  
(iii) Takes place only in the liver  
(iv) Can be altered by drugs
3. Which drug is used to lower the body temperature?  
(i) Antipyretics (ii) Antiseptic  
(iii) Analgesics (iv) Disinfectant
4. Where barbiturates are primarily used as medicine?  
(i) Hypnotic (ii) Sedative  
(iii) Antiepileptic (iv) Preanaesthetic medicant
5. What is the first-line drug for patients with type 2 diabetes and obesity?  
(i) Acarbose (ii) Sulfonylureas  
(iii) Metformin (iv) Insulin

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

6. (a) Illustrate the terms; (i) Pharmacology (ii) Pharmacognosy.  
(OR)  
(b) Show the nature sources of drugs.
7. (a) Explain the general principle of drug action.  
(OR)  
(b) Determine the chemistry of drug receptor binding.
8. (a) Explain the antimalarial drugs. Classify it.  
(OR)  
(b) State any three uses of sulpha pyridine and sulpha diazine.
9. (a) Discuss the antipyretic drugs.  
(OR)  
(b) Explain the Synthesis of barbiturates.
10. (a) Illustrate hypoglycemic drugs.  
(OR)  
(b) Explain the antineoplastic drugs.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 6 = 30)

11. (a) Enumerate the pharmacokinetics.  
(OR)  
(b) Classify the drugs based on their chemical structure.
12. (a) Assess the mechanism of drug action.  
(OR)  
(b) Interpret the biotransformation. Justify the phase I & II biotransformation.
13. (a) Predict about the antitubercular drugs. Classify it. Design the synthesis for isoniazid and pyrazinamide.  
(OR)  
(b) Assess the Antihypertensive agents.
14. (a) Evaluate the analgesic drugs.  
(OR)  
(b) Assess the CNS – depressant drugs.
15. (a) Enumerate the recent developments in modern cancer chemotherapy.  
(OR)  
(b) Appraise the diabetes.

Z-Z-Z

END



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**TRANS DISCIPLINARY COURSE**  
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**PHYSICS FOR MATHEMATICAL SCIENCES**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Which law is applicable for take-off rocket?  
 (i) Newtons first law (ii) Newtons second law  
 (iii) Newtons third law (iv) None of these
- 2 Which of the following criteria is used to choose a coordinate system?  
 (i) Distance (ii) Intensity  
 (iii) Magnitude (iv) Geometry
- 3 What is the constant in ideal gas equation?  
 (i) Universal gas constant (ii) Pressure constant  
 (iii) Temperature constant (iv) Boltzmann constant
- 4 Absorptivity of a body will be equal to its emissivity  
 (i) at all temperatures (ii) at one particular temperature  
 (iii) at critical temperature (iv) None of the above
- 5 According to Bohr's atom model the radius of orbit is directly proportional to  
 (i)  $n^2$  (ii)  $1/n$   
 (iii)  $1/n^2$  (iv)  $n$

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a) Analyze the principles of Newton's first law with necessary example.  
 OR  
 b) Discuss the principle of Newton's third law with necessary example.
- 7 a) Illustrate the concept of conservation of momentum.  
 OR  
 b) Examine the concept of Spherical polar coordinates.
- 8 a) Elucidate the concept of Kinetic molecular model of ideal gas.  
 OR  
 b) Analyze the concept of vander waals equation.
- 9 a) Derive the expression of Plank's law.  
 OR  
 b) Elucidate the concept of black body radiation.
- 10 a) Illustrate the use of matrix in symmetric operation.  
 OR  
 b) Discuss in detail about the Lorentz transformation.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a) Evaluate the muzzle velocity of bullet of newton's third law.  
OR  
b) Determine the expression for the force by Newton's second law of motion.
- 12 a) Analyze the concept dynamic of circular motion.  
OR  
b) Elucidate the concept of impulse and moment theory.
- 13 a) Derive the ideal gas equation.  
OR  
b) Enumerate the concept of heat capacity of gases.
- 14 a) Examine the black body spectrum with neat sketch.  
OR  
b) Formulate the numerical solution to Schrodinger's wave equation.
- 15 a) Analyze the atomic structure of Hydrogen molecule.  
OR  
b) Elucidate the concept of Bohr atom model.

Z-Z-Z

END



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TRANS DISCIPLINARY COURSE  
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STATISTICAL TECHNIQUES

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

1. Two types of research data include
  - (i) Recognised and unrecognised data
  - (ii) Structured and unstructured data
  - (iii) Qualitative and quantitative data
  - (iv) Organised and processed data
2. The mean and variance for Poisson distribution is
  - (i) both are equal
  - (ii) both are not equal
  - (iii) mean greater than variance
  - (iv) mean less than variance
3. A quantity obtained by applying a certain rule or formula is known as
  - (i) sample
  - (ii) test statistic
  - (iii) estimate
  - (iv) estimator
4. The degrees of freedom for chi-square test statistic when testing for independence in a contingency table with five rows and five columns
  - (i) 8
  - (ii) 25
  - (iii) 10
  - (iv) 16
5. Student's t-distribution has (n-1) d.f. when all the n observations in the sample are
  - (i) dependent
  - (ii) independent
  - (iii) increasing
  - (iv) decreasing

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Define Statistics and point out its importance in the field of business and commerce.  
OR  
b What is a Statistical enquiry?
- 7 a Define Normal distribution.  
OR  
b Ten coins are thrown simultaneously. Find the probability of getting at least seven heads.
- 8 a Define a consistency and unbiasedness estimators.  
OR  
b Explain the term (i) point estimation and (ii) interval estimation.
- 9 a Explain critical region and level of significance.  
OR  
b Explain the various steps to follow in testing of a statistical hypothesis.
- 10 a Explain the application of t-distribution.  
OR  
b Explain the Construction of t-test for single mean.

Cont...



**SECTION -C (30 Marks)**Answer **ALL** questions**ALL** questions carry **EQUAL** Marks (5 x 6 = 30)

- 11 a Explain a random sample. How do you select a random sample from a finite population?  
OR  
b Explain the various methods of sampling.
- 12 a In a book of 520 pages, 390 typo-graphical errors occur. Find the probability that a random sample of 5 pages will contain no error.  
OR  
b Let  $X$  is a normal variate with mean 30 and S.D 5. Find the probabilities that  
(i)  $26 \leq X \leq 40$  and (ii)  $X \geq 45$

- 13 a A tree consists of hundreds of apples. 46 apples are randomly chosen. The mean and standard deviation of this instance is found to be 86 and 6.2 respectively. Determine the confidence interval at 95%.  
OR  
b. 400 labourers were selected at random from a certain district. Their mean income was 140.5 rupees per month, with standard deviation 25.2 rupees. Find the 95% confidence limits within which the income of the labour community of district is expected to lie.
- 14 a In a large city A, 20 per cent of a random sample of 900 school children had defective eye-sight. In other city B, 15 per cent of random sample of 1600 children had the same defect. Is this difference between the two proportions significant? Also obtain 95% confidence limits.

- OR  
b A sample analysis of examination results of 200 school students was made. It was found that 46 students had failed, 68 secured a third division, 62 secured a second division and the rest were placed in first division. Are these figures commensurate with the general examination result which is in the ratio of 4:3:2:1 for various categories respectively?
- 15 a A random sample of 10 boys had the following I.Q's: 70, 120, 110, 101, 88, 83, 95, 98, 107, 100. Do these data support the assumption of a population mean I.Q. of 100? Find a reasonable range in which most of the mean I.A. values of samples of 10 boys lie.

OR

- b Ten persons were appointed in an electrical position in an office. Their performance was noted by giving a test and the marks recorded out of 50. They were given 6 months training and again they were given a test and marks were recorded out of 50.

Employees	A	B	C	D	E	F	G	H	I	J
Before training	25	20	35	15	42	28	26	44	35	48
After training	26	20	34	13	43	40	29	41	36	46

Test at 5% level whether it can be concluded that employees have benefited by the training.

Z-Z-Z

END



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UNDERSTANDING HUMAN BEHAVIOUR

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks (5 x 1 = 5)

- 1 What is a potential disadvantage of the cross-sectional research design in psychology?
  - (i) Limited generalizability across ages
  - (ii) Difficulty establishing cause-effect
  - (iii) Increased participant attrition
  - (iv) Longer research duration and cost
- 2 What is an illusion?
  - (i) An accurate perception
  - (ii) A deliberate sensory distortion
  - (iii) A misleading perception
  - (iv) A vivid waking dream
- 3 What is learning in psychology?
  - (i) Unchangeable behaviors
  - (ii) Loss of acquired knowledge
  - (iii) Acquiring new knowledge through experience
  - (iv) Innate behaviors
- 4 What is "facial feedback" in psychology?
  - (i) Feedback on expressions
  - (ii) Non-verbal communication technique
  - (iii) Influence of facial expressions on emotions
  - (iv) Security recognition
- 5 In Sigmund Freud's psychoanalytic theory, what is an "erogenous zone"?
  - (i) Personality trait region
  - (ii) Emotional development stage
  - (iii) Cognitive development stage
  - (iv) Pleasure-sensitive body area

**SECTION - B (15 Marks)**

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks (5 x 3 = 15)

- 6 a How does reasoning contribute to decision-making and problem-solving, and how can it be improved in daily life?

OR

b What factors influence the quality of survey data, and how can they affect research outcomes?
- 7 a What is telepathy, and can you offer examples of its potential occurrence?

OR

b What is emotional intelligence, and how does it influence personal and professional life?

Cont...



- 8 a What is operant conditioning, and can you illustrate its practical impact on everyday behaviour?  
OR  
b What causes forgetting and how does it impact memory?
- 9 a Discuss the contribution made by Canon-Bard's theory of emotions.  
OR  
b Is time and stress management related? Justify.
- 10 a Write the characteristics of ego defense mechanisms.  
OR  
b Justify why projective tests of personality are called so?

**SECTION -C (30 Marks)**Answer **ALL** questions**ALL** questions carry **EQUAL** Marks

(5 x 6 = 30)

- 11 a Provide an example of your concept formation process and its outcome.  
OR  
b Describe a previous interview experience for research or work. Explain your approach and how you handled challenges.
- 12 a What's your take on psychokinesis' scientific validity and its impact on psychology? Explain with evidence or reasoning.  
OR  
b Evaluate the role of structured processes and spontaneous inspiration in creativity with examples.
- 13 a Discuss the impact of observational learning in daily life, and provide an example of its effective application in acquiring new skills or behaviours.  
OR  
b Describe your ideal 'memory palace' and how you would use it for memorization.
- 14 a Share examples of managing frustration in problem-solving and evaluate the outcomes.  
OR  
b Evaluate the effectiveness of any one stress management strategy and its impact on different sources of stress.
- 15 a Describe a situation where you used MBTI for insight into personality.  
OR  
b What is your evaluation of the effectiveness and limitations of semi-projective tests in assessing psychological traits and behaviours?

Z-Z-Z

END



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**TRANS DISCIPLINARY COURSE**  
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**DEVELOPMENT COMMUNICATION**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks

(5 x 1 = 5)

1. Identify the concept that refers to the process of positive change and improvement in the social, economic, and environmental aspects of a society.
 

(i) Dysfunctions of development	(ii) Dominant paradigm
(iii) Development	(iv) Communication perspective
2. What communication approach is associated with the Economic Growth Model of development?
 

(i) Integrated development	(ii) Intermediate technology
(iii) Self-reliance	(iv) Cultural factors model
3. Choose the communication model that emphasizes the significant influence of mass media on shaping public opinion.
 

(i) Evolutionary model	(ii) Powerful effects model
(iii) Psychological variable model	(iv) Popular participation model
4. When did the Gandhi Mehia model play a significant role in India's development history?
 

(i) During the Five Year Plans	(ii) During the Etawah experiment
(iii) During the SITE project	(iv) During the Nilokheri experiment
5. State one key approach to development communication that emphasizes community involvement and participation.
 

(i) Mass media in modernization	(ii) Powerful effects model
(iii) Self-reliance	(iv) Integrated development

**SECTION - B (15 Marks)**

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks

(5 x 3 = 15)

6. (a) Analyze the key dynamics of development, citing examples.  
OR  
(b) Evaluate the role of the Economic Growth Model in shaping development policies.
7. (a) Discuss the communication approaches associated with the Dominant Paradigm of Development.  
OR  
(b) Explain the significance of the Kheda Communications Project in rural development.
8. (a) Compare and contrast the Evolutionary Model and the Cultural Factors Model in the context of development.  
OR  
(b) Justify the relevance of Popular Participation in alternative paradigms of development.
9. (a) Illustrate the impact of New Communication Technologies on self-development.  
OR  
(b) Determine the significance of Development Support Communication in addressing basic needs.

Cont...



10. (a) Prepare a comprehensive plan for a sensitization campaign on a specific development communication issue.  
OR  
(b) Solve a case study analyzing the dysfunctions of development in a real-world context.

**SECTION -C (30 Marks)**Answer **ALL** questions**ALL** questions carry **EQUAL** Marks

(5 x 6 = 30)

11. (a) Discuss the concept of development, highlighting its various dimensions and the evolving understanding of development in contemporary times. How does communication play a pivotal role in this process? Provide examples.  
OR  
(b) Examine the significance of development indicators in assessing the progress and well-being of a society. Discuss the dysfunctions that can arise in the development process and explain how communication can address these issues.
12. (a) Analyze the dominant paradigms of development, including the Evolutionary Model, Psychological Variable Model, Cultural Factors Model, and Economic Growth Model. How do these paradigms shape communication strategies in the context of development?  
OR  
(b) Explore the Powerful Effects Model of mass media and the Diffusion of Innovations theory. How do these models influence modernization efforts and the dissemination of development-related information? Provide relevant examples.
13. (a) Conduct a historical analysis of India's development initiatives, focusing on the Gandhi Mehia model, Etawah experiment, Nilokheri experiment, and Five Year Plans. What were the key strategies and outcomes of these projects, and how did communication contribute to their success or challenges?  
OR  
(b) Evaluate the effectiveness of experimental projects such as Rural Television, SITE, Kheda Communications Project, and Radio Rural Forum in advancing development objectives. Discuss the role of communication in these initiatives and their impact on rural communities.
14. (a) Critically assess alternative paradigms of development, including the Basic Needs Program, Integrated Development, Intermediate Technology, Self-Development, Self-Reliance, and Popular Participation. How do these paradigms align with development communication principles and practices?  
OR  
(b) Explore the role of new communication technologies and traditional media in supporting development efforts. How do these tools contribute to self-reliance and community empowerment? Provide examples of successful interventions.
15. (a) Reflect on the significance of field visits to Press Clubs, Newspaper Printing Units, Advertising Clubs, and other communication hubs in understanding the practical aspects of development communication. How do these visits contribute to sensitization and documentation efforts?  
OR  
(b) Discuss the role of street play campaigns in addressing development communication issues. How can participatory approaches, such as street plays, effectively convey messages and engage communities in the development process? Provide examples of successful campaigns.



PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

PG DEGREE EXAMINATION DECEMBER 2023  
(Third Semester)

TRANS DISCIPLINARY COURSE  
(Common to PG Programmes)

WEB DESIGN USING HTML & JAVA SCRIPT

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 The Default port number used by HTTP is \_\_\_\_\_  
(i) 89 (ii) 21  
(iii) 80 (iv) 23
- 2 <a> and </a> are the tags used for \_\_\_\_\_  
(i) adding image (ii) adding links to webpage  
(iii) aligning text (iv) adding voice
- 3 What is the use of iframe in HTML?  
(i) to display a webpage within a web page  
(ii) to display a webpage with animation effect  
(iii) To display a webpage without browser  
(iv) All the above
- 4 What is the output of the following?  
<script>  
var a = 10 + 20 + "5";  
document.getElementById("demo").innerHTML = a;  
</script>  
(i) 35 (ii) 305  
(iii) valueerror (iv) type error
- 5 In Javascript, DOM stands for?  
(i) Document Oriented Model (ii) Document Object Method  
(iii) Document Object Model (iv) Document Optimized Model

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Explain the Client Server model.  
OR  
b Analyze the significance of various email protocols and its functions.
- 7 a Explain about ordered & unordered list.  
OR  
b Illustrate Table tag with its attributes.
- 8 a Explain frameset with suitable example.  
OR  
b Develop a code in html to get your personal information using forms.
- 9 a Explain the various datatypes used in JavaScript.  
OR  
b Discuss the advantages and disadvantages of embedding the JavaScript.

Cont...



- 10 a How to create date object in JavaScript? Explain any four methods of JavaScript date object.

OR

- b Explain alert(), confirm() and prompt() method of window object.

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Interpret the various layers along with its protocols.

OR

- b Enumerate the steps to retrieve a webpage from a server by a client.

- 12 a Consider the following while writing the HTML code

- Background of page is green
- Title of the page is "gaming"
- Text of whole document is Times new roman
- Heading of the page is maroon and arial bold
- Image used is "image1.jpg"
- border of table is red and of size 2
- background colour of table is white
- Image used in the table is "war.jpg" and "call.jpg"
- Horizontal line colour is red
- Bottom link is "game.html"

OR

- b Illustrate with suitable example about the use of table data and table header attributes.

- 13 a Develop the HTML code to create the frames given below.


OR

- b Create a HTML forms to get the username as input, if entered display the response as "Welcome username" after submitting if not entered anything give a response as should not leave as blank.

- 14 a Develop a JavaScript to create forms and to validate any five html form objects for Online user registration process.

OR

- b Elucidate the various datatypes and operators in JavaScript.

- 15 a Create a form for student information. Write a JavaScript code to find total, average, result and grade.

OR

- b Analyze any six array objects in Javascript.

Z-Z-Z

END



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PG DEGREE EXAMINATION DECEMBER 2023  
(Third Semester)

TRANS DISCIPLINARY COURSE  
(Common to PG Programmes)

ELEMENTS OF ENVIRONMENTAL POLLUTION

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 What is the atmospheric layer closest to the ground?  
(i) Mesosphere (ii) Troposphere  
(iii) Thermosphere (iv) Stratosphere
- 2 Acid rain is formed due to \_\_\_\_\_.  
(i) Acetic acid (ii) Cellulose  
(iii) Oxalic acid (iv) Sulphuric acid
- 3 The main chemical responsible for Eutrophication is  
(i) Potassium (ii) Phosphate  
(iii) Sodium (iv) Carbon
- 4 Humus is a substance present in  
(i) A Horizon of soil (ii) B Horizon of soil  
(iii) C Horizon of soil (iv) E Horizon of soil
- 5 Biogas consists mainly of  
(i) Ammonia (ii) Hydrogen sulphide  
(iii) methane and carbon dioxide (iv) Ethane and carbon dioxide

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a What are limiting factors in an ecosystem?  
OR  
b Define point source pollution with an example.
- 7 a How fertilizers act as pollutants?  
OR  
b Differentiate primary and secondary air pollutants.
- 8 a Differentiate between BOD and COD.  
OR  
b Explain why eutrophication occurs in coastal waters.
- 9 a Briefly discuss the concept of phytoremediation.  
OR  
b What are the causes for soil acidification in India?

Cont...

- 10 a List out the sources and effects of microplastics.  
OR  
b How composting is done?

**SECTION -C (30 Marks)**

Answer ALL questions  
ALL questions carry EQUAL Marks (5 x 6 = 30)

- 11 a Explain the concept of SDGs and any three goals related to sustainable environment.  
OR  
b Illustrate with examples the interaction between biotic and abiotic components of a terrestrial ecosystem.
- 12 a How air pollution affects human health?  
OR  
b Why vehicular pollution is regarded notorious in India?
- 13 a Determine the schematic method to treat organic load in the wastewater.  
OR  
b Prescribe the BIS and WHO standards for drinking water.
- 14 a Elucidate the bioremediation techniques for wastewater treatment.  
OR  
b Formulate the treatment methods for oil refinery wastes.
- 15 a Analyze the composition of biomedical wastes and the treatment strategies.  
OR  
b Construct and explain the pyrolysis processes.

Z-Z-Z

END



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PG DEGREE EXAMINATION DECEMBER 2023  
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TRANS DISCIPLINARY COURSE  
(Common to PG Programmes)

MICROBIAL WORLD

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Gram positive bacteria are usually more susceptible to  
(i) Streptomycin (ii) Tetracycline  
(iii) Penicillin (iv) Ampicillin
- 2 Substrate used by microbes to produce SCP includes  
(i) Methane gas (ii) Industrial wastes  
(iii) Agricultural wastes (iv) All the above
- 3 Which of the following gastroenteritis viruses can spread by air?  
(i) Sapovirus (ii) Rotavirus  
(iii) Norovirus (iv) Astrovirus
- 4 The term gnotobiotic refers to  
(i) Germ contaminated animals (ii) Germ free animals  
(iii) Animal with normal flora (iv) Bacteria living in oral cavity
- 5 Which of the following is not a product of cellulose degradation?  
(i) Glucose (ii) CO<sub>2</sub>  
(iii) Water (iv) nitrogen gas

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Discuss the cell wall composition of Gram positive bacteria.  
OR  
b Explain the virus symmetry.
- 7 a Comment on Spirulina as SCP.  
OR  
b Draw the flow chart explaining the process wine production.
- 8 a How to enumerate microbes from air?  
OR  
b List out water borne pathogens. Add a note on its control measures.
- 9 a What is commensalism? Explain normal flora of skin.  
OR  
b Give a brief on Candidosis and its control measures.
- 10 a Comment on effect of microbial consortia for cellulose degradation.  
OR  
b Explain the economic importance of fungi.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Write a essay on general characters of fungi.  
OR  
b Illustrate the working principle and function of bright field microscope.
- 12 a Give an account on microbial spoilage of fruits and vegetables.  
OR  
b Describe the industrial production and purification of vitamin B<sub>12</sub>.
- 13 a Explain municipal solid waste treatment.  
OR  
b Discuss Rhizobium as N<sub>2</sub> fixing bio-fertilizer.
- 14 a Give a brief account on host-microbes interaction.  
OR  
b List out respiratory infections, causative agents and their control measures.
- 15 a Write an essay on economic importance of algae.  
OR  
b Discuss bioremediation. Add a note on its advantages over pollution control.

Z-Z-Z

END



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**PG DEGREE EXAMINATION DECEMBER 2023**  
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**TRANS DISCIPLINARY COURSE**  
(Common to PG Programmes)

**DIAGNOSTICS AND PLANT THERAPEUTICS**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks

(5 x 1 = 5)

- 1 Which of the following anticoagulant is commonly used for collecting blood samples for hematology tests?  
 (i) Sodium citrate (ii) Sodium chloride  
 (iii) Potassium sulfate (iv) Calcium carbonate
- 2 Which substance is typically tested in urine to check for diabetes mellitus?  
 (i) Urea (ii) Acetone  
 (iii) Albumin (iv) Bilirubin
- 3 Which secondary plant product is commonly found in the bark of trees and is used in the treatment of fever and pain?  
 (i) Tannins (ii) Alkaloids  
 (iii) Flavonoids (iv) Terpenoids
- 4 Which plant is known for its potential to lower blood sugar level?  
 (i) Lavender (ii) Cinnamon  
 (iii) Eucalyptus (iv) Chamomile
- 5 Which natural antioxidant compound is commonly found in green tea and is known for its health benefits?  
 (i) Resveratrol (ii) Quercetin  
 (iii) Catechins (iv) Curcumin

**SECTION - B (15 Marks)**

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks

(5 x 3 = 15)

- 6 a Discuss the ethical considerations when handling patient data in a clinical laboratory.  
 OR  
 b Why is proper specimen preservation is crucial in a clinical lab? How can it be achieved effectively?
- 7 a What is the primary function of urea in urine? How does it relate to kidney function?  
 OR  
 b What does the enzyme AST indicate when measured in blood, and which organ is primarily associated with it?
- 8 a Explain the principle behind High-Performance Thin-Layer Chromatography (HPTLC) and its significance in plant drug analysis.  
 OR  
 b Discuss the importance of screening techniques in the identification of potential medicinal properties in plant extracts.

Cont...



- 9 a How does green tea (*Camellia sinensis*) exhibit potential anti-cancer effects, and which active compounds are responsible?  
OR  
b Explain how fenugreek (*Trigonella foenum-graecum*) and cinnamon (*Cinnamomum verum*) exert their hypoglycemic effects, including their active components and mechanisms of action.
- 10 a List and briefly explain three key parameters addressed by WHO guidelines for quality standardization of herbal products.  
OR  
b Describe the primary method of preparing an herbal decoction, and provide an example of a situation where it might be used.

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Describe the process of specimen collection, preservation, storage, and transport in a clinical laboratory.  
OR  
b Discuss on two common biological hazards that laboratory personnel may encounter.
- 12 a Determine the role of bilirubin in the body and its significance in assessing liver function. How do elevated bilirubin levels relate to liver diseases?  
OR  
b A patient's liver function tests reveal elevated levels of Aspartate Transaminase (AST) and Alanine Transaminase (ALT). Explain the potential implications of these findings on liver health. What conditions or factors could contribute to elevated AST and ALT levels?
- 13 a Explain the principle and applications of Gas Chromatography-Mass Spectrometry (GC-MS) in the analysis of volatile compounds in plant materials. Provide an example of a volatile compound.  
OR  
b Elaborate the concept of bioassay-guided fractionation in the isolation of active components from plant extracts. Provide a step-by-step overview and its relevance in the pharmaceutical industry.
- 14 a Describe the hepatoprotective mechanisms of any two medicinal plants and its potential applications in liver health.  
OR  
b Provide the names of three medicinal plants recognized for their potential anti-cancer properties and briefly describe a key mechanism through which they exert their anti-cancer effects.
- 15 a Construct on the concept of synergy in herbal formulations and how it can enhance the effectiveness of herbal remedies.  
OR  
b Describe the process of making herbal oil extracts and provide an example of an herb commonly used for this purpose.

Z-Z-Z

END



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TRANS DISCIPLINARY COURSE  
(Common to PG Programmes)  
**FASHION & VISUAL MERCHANDISING**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Short term forecasting is usually done for \_\_\_\_ and is made based on routine trends.  
(i) A week (ii) One week to five weeks  
(iii) One or two years (iv) Five years
- 2 Choose the elements of fashion design which create shapes and spaces in any design that forms all the other elements.  
(i) Line (ii) Form (iii) Dots (iv) Value
- 3 Which of the following refers to a purchase decision that does not involve any conscious planning?  
(i) Limited decision making (ii) Repeat purchase  
(iii) Impulse buying (iv) Impersonal decision
- 4 Presentation of a store and its merchandise in such a manner that will attract the attention of the potential customer is known as  
(i) Attractive merchandising (ii) Imaginary merchandising  
(iii) Effective merchandising (iv) Visual merchandising
- 5 Which type of lighting provides illumination for designated display areas?  
(i) Primary lighting (ii) Secondary lighting  
(iii) Atmosphere lighting (iv) All the above

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Analyze how forecasting is helpful in creating fashion brand.  
OR  
b Discuss the colour theory.
- 7 a Illustrate the types of design for fashion.  
OR  
b Explain the application of emphasis and harmony in fashion clothing.
- 8 a Illustrate the styling for thin and hourglass figures.  
OR  
b State the psychological aspects used in fashion designing.
- 9 a Recommend a suitable display settings for a multi-branded clothing store.  
OR  
b Discuss some of the things you can consider when setting up a window display.
- 10 a Analyze the purpose of incandescent lighting and halogen lighting in a fashion store.  
OR  
b Compare promotional and informational signage.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Summarize the elements of fashion trend forecasting.  
OR  
b Elucidate the application of fashion and colour in clothing.
- 12 a Discuss the techniques used for optimizing space in a fashion store.  
OR  
b Explain the application of line in visual merchandising with suitable sketches.
- 13 a Enumerate the stages involved in fashion life cycle for the promotion of a product.  
OR  
b Identify the design preferences of the customer based on the latest trends.
- 14 a Analyze the display design basics in detail.  
OR  
b Summarize the scope of visual merchandising.
- 15 a Infer the ultimate purpose of lightings in a fashion store and give its types.  
OR  
b Explain the following  
i) Marquees ii) Planters.

Z-Z-Z

END



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PG DEGREE EXAMINATION DECEMBER 2023  
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TRANS DISCIPLINARY COURSE  
(Common to PG Programmes)  
**DEVOPS METHODOLOGY AND TOOLS**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Who is the father of DevOps?  
(i) Patrick Debois (ii) Gene Kim  
(iii) David Farley (iv) Bridget Kravchenko
- 2 What is Maven?  
(i) A Java library (ii) A Java framework  
(iii) A build tool (iv) An IDE
- 3 Jenkins is a ----- tool.  
(i) bug tracking (ii) continuous integration & delivery  
(iii) project management (iv) software development platform
- 4 Pipeline in Jenkins refers to  
(i) A set of plugins that provide additional functionality to Jenkins  
(ii) A series of automated steps that build, test and deploy software  
(iii) A graphical user interface for managing Jenkins  
(iv) A feature that allows user to create and manage Jenkins jobs
- 5 Kubernetes Pod means  
(i) A group of containers (ii) A unit of deployment in kubernetes  
(iii) A network segment (iv) A virtual machine

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a. Produce the principals of Devops.  
OR  
b. Illustrate the ways to use SSH for GIT commands.
- 7 a. Analyze how maven plugins are applied?  
OR  
b. Explain the notations behind the Maven build lifecycle.
- 8 a. Explain the two types of Jenkins.  
OR  
b. Classify the ways for creating database in Jenkins.
- 9 a. Discuss the benefits of using Jenkins pipeline.  
OR  
b. Explain how to send notifications in Jenkins?
- 10 a. State the main components of kubernetes cluster.  
OR  
b. Explain pods in kubernetes.

Cont...

**SECTION -C (30 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** Marks

(5 x 6 = 30)

11 a. Interpret the track for DevOps in the current scenario.

OR

b. Predict the features of GitHub forks.

12 a. Create an appraisal note on "Maven POM".

OR

b. Differentiate the ways of using Repositories by Maven-External Dependency".

13 a. Demonstrate the method of configuring Jenkins.

OR

b. Develop an appraisal note on Jenkins authorization.

14 a. Create your own simple Jenkins pipeline.

OR

b. Compile the ways of managing plugins in Jenkins.

15 a. Analyze the architecture of kubernetes.

OR

b. Make a model for kubernetes networking.

Z-Z-Z

END



**PSG COLLEGE OF ARTS & SCIENCE**  
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**PG DEGREE EXAMINATION DECEMBER 2023**  
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**TRANS DISCIPLINARY COURSE**  
(Common to PG Programmes)  
**BUSINESS INTELLIGENCE AND ANALYTICS**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 The statements prepared to indicate the profit and loss, and financial position of a business is called \_\_\_\_\_.  
 (i) Trial balances (ii) Financial statements  
 (iii) Bank reconciliation statements (iv) All of the above
- 2 Basic objective of cost accounting is \_\_\_\_\_.  
 (i) Tax compliance (ii) Financial audit  
 (iii) Cost ascertainment (iv) Cost increasing
- 3 What is the main objective of management accounting?  
 (i) To identify and analyze the result of business operations  
 (ii) To study business transactions  
 (iii) To check and maintain accounting records  
 (iv) To remind the amount due to customers
- 4 \_\_\_\_\_ is the buying and selling of goods and services through Which function is used to add the values in a range?  
 (i) Count() (ii) Sum() (iii) ABS() (iv) Sumif()
- 5 Total number of Ledgers, Groups, Entries etc. can be shown from \_\_\_\_\_.  
 (i) Company Information (ii) Tally Audit  
 (iii) Statistics (iv) Accounts Information

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a What is accounting? Explain the objectives of accounting?  
OR  
b Discuss the different accounting concepts.
- 7 a Explain the objectives of cost accounting.  
OR  
b During the year 2020, X Ltd., produced 50,000 units of a product. The following were the expenses:

Particulars	Amount (Rs)
Stock of raw materials on 1.1.2020	10,000
Stock of raw materials on 31.12.2020	20,000
Purchases	1,60,000
Direct wages	75,000
Direct expenses	25,000
Factory expenses	37,500
Office expenses	62,500
Selling expenses	25,000

You are required to show a Cost Sheet showing cost per unit and total cost at each stage.

- 8 a Explain the scope and objectives of Management Accounting.  
OR  
b Describe the Skills Required to Become an IT Business Analyst.
- 9 a Illustrate the functions of Excel in accounting.  
OR  
b Explain the procedure to create dropdown lists in Excel.

Cont...

- 10 a Explain Tally and its applications.  
OR  
b Explain the procedure for company creation in Tally.

**SECTION -C (30 Marks)**

Answer ANY THREE questions  
ALL questions carry EQUAL Marks

(3 x 10= 30)

- 11 The following are some of the balances extracted from the ledger of Mr.Sundaram as on 31<sup>st</sup> December 2016. Prepare a trading account.  
Stock 1.1.2016 12, 500  
Purchases 100,000  
Sales 150,000  
Returns outwards 5,000  
Returns inwards 10,000  
Salaries 4,400  
Wages 7,500  
Rent 2,750  
Carriage inwards 2,500  
Carriage outwards 750  
Power, coal, gas 1,000  
Stock on 31.12.2016 was valued at RS. 14, 000.
- 12 From the following information prepare cost sheet

Particulars	Amount (Rs)
Direct materials	1,00,000
Direct Wages	25,000
Direct expenses	5,000
Wages for foreman	2,500
Electric power	500
Lighting - Factory	1,500
Lighting - Office	500
Rent - Factory	5,000
Rent - Office	2,500
Salaries to salesman	1,250
Advertising	1,250
Income tax	10,000
Sales	1,89,500

- 13 From the following data, Find out
- Gross profit ratio
  - Net profit ratio
  - Return on total assets
  - Inventory turnover

Particulars	Amount	Particulars	Amount
Sales	2520000	Fixed assets	1440000
Cost of sales	1920000	Net worth	1500000
Net profit	360000	Debt	900000
Inventory	800000	Current liabilities	600000
Other current assets	760000		

- 14 What is an Excel Function? List out the Most Frequently Used Functions in Excel.
- 15 Explain the accounting vouchers used in Tally.

Z-Z-Z

END



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TRANS DISCIPLINARY COURSE  
(Common to PG Programmes)

**SETTING UP OF BUSINESS ENTITIES**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

1. The structure in which there is a separation of ownership and management is called  
(i) Sole proprietorship (ii) Partnership  
(iii) Company (iv) All business organization
2. How many designated partners are required in LLP?  
(i) At least two designated partners (ii) Seven designated partners  
(iii) Two designated partners (iv) At least seven designated partners
3. Most start-up enterprises when they are founded would be \_\_\_\_  
(i) Large-scale enterprises (ii) Medium-scale enterprises  
(iii) Not-for-profit enterprises (iv) Small-scale enterprises
4. What does ZED stand for in the context of MSMEs and certification in manufacturing?  
(i) Zero Defect Zero Effect  
(ii) Zero Effect Zero Defect  
(iii) Zero Effectiveness Zero Defectiveness  
(iv) Zero Delays Zero Effect
5. What is the full form of GST?  
(i) Goods and Supply Tax (ii) Goods and Services Tax  
(iii) General Sales Tax (iv) Government Sales Tax

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

6. a. State the important privileges available to a private company.  
(OR)  
b. Discuss the types of forms of business organizations.
7. a. Sketch out the persons that who cannot become partner in limited liability partnership.  
(OR)  
b. Explain about limited liability partnership in very short.
8. a. How does a person determine whether he is capable of starting a business?  
(OR)  
b. Explain in short about Crowd funding.
9. a. What are the classifications of enterprises?  
(OR)  
b. State the objectives of A Scheme for Promoting Innovation, Rural Industry & Entrepreneurship (ASPIRE).

Cont...



10. a. How many taxes are included in GST?  
(OR)  
b. Who is eligible for PF?

**SECTION -C (30 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** Marks (5 x 6 = 30)

11. a. Discuss the characteristics of the cooperative form of organization. Also, describe briefly different types of cooperative societies.  
(OR)  
b. What are the factors that affect the choice of an organization?
12. a. Enumerate the steps in registration of limited liability partnership.  
(OR)  
b. Elucidate the characteristic features of limited liability partnership.
13. a. Why businesses plan important and state the contents of good business plan?  
(OR)  
b. Enumerate the different types of Startup capital.
14. a. State the list of MSME schemes in India.  
(OR)  
b. State the Benefits offered by MSME Registration to the Small Scale Units.
15. a. State the advantages of GST.  
(OR)  
b. Bring out the benefits available to employees under ESI Act.

Z-Z-Z      END



PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)  
PG DEGREE EXAMINATION DECEMBER 2023  
(Third Semester)

TRANS DISCIPLINARY COURSE  
(Common to PG Programmes)

EXPORT MANAGEMENT

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

1. The exporter gets \_\_\_\_\_ from DGFT.  
(i) IEC number (ii) PAN number  
(iii) Aadhaar number (iv) Credit number
2. Who heads the department of import export in India?  
(i) GOI (ii) DGFT  
(iii) WTO (iv) None of the Above
3. The CHA is also known as \_\_\_\_\_.  
(i) C&F agent (ii) Consignor  
(iii) Customs official (iv) Shipping company
4. Extension period of credit for export.  
(i) 180 days (ii) 90 days  
(iii) 220 days (iv) 270 days
5. For direct export the packing credit should normally be granted only against  
(i) A letter of credit (ii) Firm order  
(iii) Export license (iv) A letter of credit or firm order

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

6. a. Show IEC and their role in Export.  
OR  
b. State the Objectives of Foreign Trade Policy.
7. a. Discuss the role of Export Promotion Council.  
OR  
b. What is EPCG? Explain its benefits in foreign trade.
8. a. Assume the freight forwarders and their importance in export business.  
OR  
b. Classify 3PL service providers in India.
9. a. Analyze the advance payment method in international trade.  
OR  
b. Explain various risks associated with the international payment systems.
10. a. Discuss the marketing Strategies for export.  
OR  
b. Illustrate the uses of HS code in India.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

11. a. Discuss Role of Export business in Indian Economy.  
OR  
b. Analyze the purpose of DGFT in Export.
12. a. Design the Foreign Trade Policy and their features.  
OR  
b. Determine the functions of Commodity Boards in detail.
13. a. Justify the role of service providers in EXIM transaction.  
OR  
b. Categorize the Exporters in India? Also give a detailed explanation.
14. a. Elucidate the methods of payment using in foreign trade transaction.  
OR  
b. Interpret Letter of Credit and their types.
- 15 a. Develop the process of starting export business in India.  
OR  
b. Classify the Export Goods in India.

Z-Z-Z

END



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(Third Semester)

TRANS DISCIPLINARY COURSE  
(Common to PG Programmes)

**SHARE TRADING OPERATIONS**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

1. Buying low and selling high, making a large capital gain is associated with  
(i) Investment (ii) Speculation  
(iii) Gambling (iv) Arbitrage
2. SEBI has power to grant approval to \_\_\_\_\_ stock exchange.  
(i) RBI (ii) Regulation (iii) byelaws (iv) Director
3. Depository system reduces time for \_\_\_\_\_ of securities.  
(i) Buyer (ii) transfer (iii) seller (iv) process
4. To be appointed as Registrar, registration with \_\_\_\_\_ is essential.  
(i) SEBI (ii) BSE (iii) NSE (iv) OTCEI
5. New issue market deals with \_\_\_\_\_ securities.  
(i) Excising (ii) new (iii) High price (iv) low price

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

6. (a) What are the principles of investment?  
Or  
(b) Write a short note Indirect Securities. Give an example.
7. (a) Distinguish between money market and capital market.  
Or  
(b) Explain the various new instruments introduced in new issue market.
8. (a) Discuss the functions of stock exchanges.  
Or  
(b) Explain the benefits of listing securities.
9. (a) Write a note on Depository participants.  
Or  
(b) Describe the advantages of depository system.
10. (a) Describe the different types of options.  
Or  
(b) How does SEBI protect the interest of investor?

Cont...

**SECTION -C (30 Marks)**

Answer **ANY THREE** questions

**ALL** questions carry **EQUAL** Marks (3 × 10 = 30)

11. How will you measure risk?
12. Explain the various new instruments introduced in the capital market.
13. Discuss the salient features of NSE in the capital market.
14. Discuss the drawbacks of the depository system and suggest measure to make it an efficient one.
15. Explain the various factors influencing the share price.

Z-Z-Z

END



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TRANS DISCIPLINARY COURSE  
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**DESIGN THINKING AND INNOVATION**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Design Thinking is:  
(i) Thinking about Design  
(ii) Designing ways in which people think  
(iii) Asking users to solve problems  
(iv) Defining, framing, and solving problems from users' perspectives
- 2 What are the steps of the design thinking process?  
(i) Understand > Draw > Ideate > Create > Test  
(ii) Empathise > Define > Ideate > Prototype > Test  
(iii) Empathise > Design > Implement > Produce > Test  
(iv) Understand > Define > Ideate > Produce > Try
- 3 Design Thinking typically helps in \_\_\_\_\_.  
(i) Innovation (ii) Data Analytics  
(iii) Financial Planning (iv) Operational Efficiency
- 4 What is the first step in the Designing Thinking Process?  
(i) Empathise (ii) Define  
(iii) Ideate (iv) Prototype
- 5 After Prototype, the next is to \_\_\_\_\_.  
(i) Test (ii) Define  
(iii) Ideate (iv) Empathise

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Infer Cognitive Creativity.  
OR  
b Enumerate the concept of design thinking.
- 7 a Infer the term mind mapping.  
OR  
b Examine brainstorming and reverse brainstorming.
- 8 a Demonstrate the concept of converting need into demand.  
OR  
b Infer a note on basics of service Design.
- 9 a Examine the term Innovation.  
OR  
b Infer the characteristics of Design innovation process model.

Cont...

- 10 a Enumerate how design thinking is applied to solve business problems.  
OR  
b Infer the meaning Design activism.

**SECTION -C (30 Marks)**

Answer ALL questions  
ALL questions carry EQUAL Marks (5 x 6 = 30)

- 11 a Analyse the principles of design thinking.  
OR  
b Enumerate the need for design thinking.
- 12 a Illustrate cause and effect diagram.  
OR  
b Interpret a note on design thinking techniques.
- 13 a Infer the use of design thinking in service sector.  
OR  
b Explain the principles of service design thinking.
- 14 a Analyze the different types of innovation frame work.  
OR  
b Illustrate the role of innovation and creativity in an organization.
- 15 a Infer how design thinking can be applied to solve social problems with an example.  
OR  
b Elucidate on business models.

Z-Z-Z

END