

अधिसूचना

क्रमांक : ५८/२०१७

दिनांक : २२-०६-२०१७

**विषय : महाविद्यालय बंद करण्याबाबत..**

सर्व सामान्यांच्या माहितीकरीता सूचित करण्यात येते की, खालील महाविद्यालय बंद करण्याबाबतचा प्रस्ताव संस्थेकडून प्राप्त झाला होता. प्राप्त प्रस्ताव महाराष्ट्र विद्यापीठे कायदा, १९९४ मधील कलम ९२ च्या तरतुदीनुसार विद्वत परिषद व व्यवस्थापन परिषदेने मान्यता दिल्यानुसार सदर महाविद्यालय बंद करण्याबाबत संस्थेस ना हरकत प्रमाणपत्र देण्यात आले होते.

महाराष्ट्र शासनाने शासन पत्र क्र.TEM-2017/C.R.119/TE-4, दि. ०७ मार्च, २०१७ अन्वये खालील महाविद्यालय बंद करण्यास मान्यता दिलेली आहे. त्यानुसार खालील तक्त्यामध्ये दर्शविलेले महाविद्यालय टप्या-टप्याने शैक्षणिक सत्र २०१७-१८ पासून महाराष्ट्र विद्यापीठे कायदा, १९९४ मधील कलम ९२ च्या तरतुदीनुसार शासन पत्रातील अटीच्या अधीन राहून बंद करण्यात येत आहे.

अ.क्र	महाविद्यालयाचे नांव व सांकेतिक क्रमांक	संस्थेचे नांव	महाविद्यालयातील अभ्यासक्रम व प्रवेश क्षमता
१.	२.	३.	४.
१.	पी.आर. पाटील कॉलेज ऑफ इंजिनियरींग अँड टेक्नॉलॉजी, गजानन टाऊनशिप कॅम्पस, कठोरा रोड, अमरावती, (सांकेतिक क्र.२००)	मराठा शिक्षण संस्था,आष्टी, जि.वर्धा द्वारा : प्रविण बिल्डर्स अँड डेव्हलपर्स कॅम्प रोड, अमरावती.	बी.ई. १.सीव्हील इंजीनियरींग - ६० २.कॉम्प्युटर सायन्स अँड इंजीनियरींग - ६० ३.इलेक्ट्रीकल इंजीनियरींग - ६० ४.इलेक्ट्रॉनिक्स अँड टेलीकम्युनिकेशन इंजीनियरींग - ६० ५.इन्फॉर्मेशन टेक्नॉलॉजी - ६०  एम.ई. १.कॉम्प्युटर सायन्स अँड इंजीनियरींग - २४ २.इलेक्ट्रॉनिक्स अँड टेलीकम्युनिकेशन इंजीनियरींग - २४ ३.एम.बी.ए. - ६०

स्वा/-  
कुलसचिव  
संत गाडगे बाबा अमरावती विद्यापीठ

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NOTIFICATION

No. : 59 /2017

Date : 22/062017

**Subject : Continuation of Prospectus No. 2011113 of B.A. Final.**

It is notified for general information of all concerned that the Prospectus No. 2011113 prescribed for B.A. Final Examination of Summer-2011 which was continued for Summer-2012, Summer-2013, Summer-2014, Summer-2015, Summer-2016 and Summer-2017 Examinations shall also be continued for B.A. Final Examination of Summer-2018 with the following additions/substitutions.

Sr.No.	Prospectus & Page Nos.	Additions/substitutions
1.	Pros. No. 2011113 (B.A. Final)	The syllabus for the optional Subject "Statistics" Printed on Page Nos. 67 to 71 of the Prospectus be substituted by the revised syllabus as given in Appendix-'A' appended with this Notification.

Sd/-  
Registrar  
Sant Gadge Baba Amravati University

**B.A. Part-III  
STATISTICS  
PAPER-V**

**(Economic Statistics, Statistical Quality Control )**

**(To be Implemented from 2017-2018 Session)**

**Unit-I Demand Analysis**

1. Concept of Demand and Supply.
2. Laws of Demand and Supply of Equilibrium.
3. Price Elasticity of Demand, Supply, Numerical Problem.
4. Partial elasticity of demand.

**Unit-II Basic Econometrics.**

1. Theory of Consumer Behavior.
2. Utility Functions.
3. Indifference Curve.
4. Pareto's Law of Income Distribution.

**Unit-III Statistical Quality Control**

1. Definition, Purpose and uses of SQC.
2. General Theory of Control Charts.
3. Causes of Variation, Control Limits.
4. Control Charts for Variables X-Bar and R-Chart.

**Unit-IV Acceptance Sampling Plans**

1. Acceptance of sampling by attributes.
2. Concept of AQL, LTPD, AOQL, ATI, ASN.
3. Producer's and consumer's risk.
4. Single and double sampling plan and OC curves.

**Unit-V Linear Programming**

1. Introduction of OR, LPP Definition of LPP.
2. Mathematical formulation of LPP with example.
3. Graphical method of solving LPP.
4. Transportation problem.
5. Methods to find general basic feasible solution to a Transportation problem.
  - a. North- West corner Rule.
  - b. Matrix Minima method.
  - c. Vogel's Approximation method.

**References:**

1. Grant E.L. (1964):Statistical Quality Control, Mc Graw Hill.
2. Damodar Gujrati: Basic Electronics.
3. A.A Walter: An Introduction to Econometrics.
4. Gupta S.C. and Kapoor V.K.: Fundamentals of Applied Statistics, Sultan Chand and Sons.
5. Gauss S.L (1975): Linear Programming Methods and Applications, Mc Graw Hill.
6. Tata H.A (1989): Operations Research: An Introduction, Macmillan Publishing Company.
7. Kantiswaroop, Manmohan, Gupta: Operations Research.

**List of Practicals**

1. Calculation of various Elasticities of demand.
2. Utility functions.
3. Construction h control charts for variables.
4. Drawing of OC curve for single sampling plan.
5. Drawing of OC curve for double sampling plan.
6. Formulation of LPP.
7. Solution of LPP by Graphical Method.
8. To find bfs to transportation Problem by-
  - a. North- west control rule.
  - b. Matrix minima method.
  - c. Vogel's method.

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**B.A. PART-III  
STATISTICS  
PAPER-VI  
(Sample Surveys, ANOVA, Designs of Experiment)**

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**Unit-I Sample Surveys.**

1. Population and sample, sampling unit, sampling frame.
2. Meaning and need of sample surveys, advantages of sample survey over census, conducting sample survey, its limitations.
3. Sample size, types of simple random non-sampling, techniques of drawing a random sample, sampling, sampling and non-sampling errors.
4. SRSWOR, SRSWR, simple theorem, mean and variance of SRSWOR and SRSWR, (without derivation), their comparison.

**Unit-II Stratified Random Sampling**

1. Need, meaning and procedure of drawing a sample in stratified sampling, stratification factor, uses of stratified sampling.
2. Sample mean, variance of sample mean, sample mean as unbiased estimate of population mean.
3. Proportional allocation, Neyman allocation, variance of sample mean in these allocations and their comparison.

**Unit-III Systematic and Cluster Sampling**

1. Concept of systematic sample with example.
2. Mean and variance (without derivation) of systematic sampling.
3. Concept of cluster sampling with example.
4. Mean and variance of cluster sampling (without derivation) with equal cluster size.
5. Comparison systematic and cluster sampling with sampling random sampling.

**Unit-IV Analysis of Variance**

1. Concept of definition of ANOVA, chance causes, assignable causes, assumptions in ANOVA.
2. Analysis of one-way classified data-layout, mathematical model, null hypothesis, least square estimate and ANOVA table.
3. Analysis of two-way classified data (one observation per cell)-layout, mathematical model, null hypothesis, least square estimate and ANOVA table.

**Unit-V Designs of Experiments**

1. Definition and Need of experiment, Some definitions-experiment, Treatment, experimental unit, plots and block, yield, uniformity trials.
2. Basic principles in design of experiment replication, randomization and local control.
3. Concept of CRD, RBD, LSD, their layout, advantages and disadvantages.

**References :**

1. Gupta S.C and Kapoor V.K.: Fundamentals of Applied Statistics, Sultan Chand and Sons.
2. Murthy M.N (1976) : Sampling theory and methods, Statistical Publishing Society, Calcutta.
3. Sukhatme B.V (1984): Sample Survey methods and its Applications, Indian Society of Agricultural Statistics.
4. Des Raj (2000): Sample Survey Theory, Narosa Publishing House.
5. Parimal Mukhopadhyay: Teory and Methods of Survey Sampling, Prentice Hall.
6. Sukhatme P.V. and Sukhatme B.V.: Sampling Theory of Surveys with Applications.
7. Gupta S.C. and Kapoor V.K.: .: Fundamentals of Applied Statistics, Sultan Chand and Sons.
8. Cochran W.G. and Cox G.M. (1975): Experimental Design, John Wiley and Sons.
9. DasM.N. and Giri (1986): Design and Analysis of Experiments, Springer Verlag.
10. Goon A.N. Gupta M.K., Das Gupta B.(1986): Fundamentals of statistics, Vol.II, Wold Press Calcutta.

**List of Practicals :**

1. Drawing a random sampe by Random number method.
2. Estimation of population mean and variance using simple sampling.
3. Estimation of population mean and variance simple sampling using various allocations of stratified random sampling.
4. Estimation of population mean and variance using systematic Sampling.
5. Estimation of mean and variance using cluster sampling.
6. ANOVA: One way classification.
7. ANOVA: Two way classification with one observation per cell.
8. Analysis of completely randomized designed.
9. Analysis of randomized block Design.
10. Analysis of Latin square Design.

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