Sub. Code	
82215	

#### **B.Voc. DEGREE EXAMINATION, NOVEMBER 2022**

### **First Semester**

# **Manufacturing Technology**

# **PRODUCTION TECHNOLOGY**

#### (2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A  $(10 \times 2 = 20)$ 

Answer **all** the questions.

- 1. What is meant by machining economics?
- 2. Write the uses of cutting fluid.
- 3. Write short note on temperature in cutting.
- 4. Why boring machines are used?
- 5. Write any two uses of drilling machines.
- 6. Write about multi spindle automats.
- 7. Write a note on turret lathe.
- 8. Write a note on cutting screw thread.
- 9. What are bonded abrasives?
- 10. Define grinding fluid.

Part B

 $(5 \times 5 = 25)$ 

Answer all the questions.

11. (a) Write the mechanics of chip formation.

Or

- (b) Discuss about vibration and chatters in machining.
- 12. (a) Write the design consideration for drilling.

Or

- (b) Write about Swiss type and automatic screw machine.
- 13. (a) Write about broaching and broaching machines.

 $\mathbf{Or}$ 

- (b) Discuss briefly about milling operation.
- 14. (a) Write about economics of grinding.

Or

- (b) Describe wheel gear grinding operations.
- 15. (a) Write about abrasive flow machining.

Or

(b) Write the salient features of electric discharge machining.

**Part C**  $(3 \times 10 = 30)$ 

Answer all the questions.

16. (a) Explain in detail the mechanics of orthogonal and oblique cutting.

Or

(b) Explain the types of chips produced in cutting.

 $\mathbf{2}$ 

17. (a) Explain machine tools and process for producing round shape.

Or

- (b) Explain in detail reaming and reamers, tapping and taps.
- 18. (a) Explain the design consideration for grinding.

Or

(b) Explain in detail about laser beam machining.

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#### **B.Voc. DEGREE EXAMINATION, NOVEMBER 2022**

### Third Semester

# Manufacturing Technology

# EFFECTIVE EMPLOYABILITY SKILLS

#### (2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

Answer **all** questions.

- 1. Define Resume.
- 2. Write the merits of Interview.
- 3. Name any two Social Media Platform in which you apply for job.
- 4. What is meant by extracurricular activities?
- 5. Write the types of Leadership.
- 6. Why listening skill is important?
- 7. What is Extrinsic motivation?
- 8. Name any three great leaders you admire.
- 9. What are the merits of collaborative work?
- 10. Write any three qualities of Leadership.

#### Part B

 $(5 \times 5 = 25)$ 

Answer **all** questions.

11. (a) Why interpersonal communication is important?

Or

- (b) Write short note on one to one communication.
- 12. (a) Write the importance of ice breaking session.

#### $\mathbf{Or}$

- (b) Describe the process in management.
- 13. (a) Write the steps in review of the team work.

#### Or

- (b) Write the merits of organizational behaviour.
- 14. (a) Write the importance of managerial skills.

Or

- (b) How will you improve your personality?
- 15. (a) Highlight the dress code in an interview.

Or

(b) How does Goal setting and Positive thinking helps in an organization?

### **Part C** $(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Prepare your own curriculum vitae to apply for a job.

Or

(b) How will you face the interview effectively?

 $\mathbf{2}$ 

17. (a) Elaborate on the importance of group discussion in an organization.

Or

- (b) Elaborate on the merits and demerits of teamwork in an organization.
- 18. (a) Elaborate on the Leadership skills and practices.

Or

(b) Explain the employability skills needed for the present scenario.

3

#### **B.Voc. DEGREE EXAMINATION, NOVEMBER 2022**

### Fourth Semester

# **Manufacturing Technology**

### **DESIGN OF MACHINE ELEMENTS**

#### (2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$ 

Answer **all** the questions.

- 1. Define- Mechanical properties.
- 2. List out the few factors of safety.
- 3. Point out the usage of shafts.
- 4. What is critical speed?
- 5. State the process of riveted joints.
- 6. What is Knuckle joints?
- 7. List out the advantage of rubber springs.
- 8. Point out the benefits of rims.
- 9. Define Rolling contact bearings.
- 10. What is Raimondi?

#### Part B

 $(5 \times 5 = 25)$ 

Answer all the questions.

11. (a) Briefly explain about shock loading.

Or

- (b) Give a short note on fits and tolerances.
- 12. (a) Describe about functions of keys.

Or

- (b) Differentiate between shafts and couplings.
- 13. (a) Briefly explain about bolded joints.

Or

- (b) Give a short note on Temporary joints.
- 14. (a) Describe about functions of crank shafts.

Or

- (b) Point out the role of flywheels.
- 15. (a) Briefly explain about sommerfeld number.

Or

(b) Write a short note on role of bearings in machines.

**Part C**  $(3 \times 10 = 30)$ 

Answer **all** the questions.

16. (a) Explain in detail about design for variable loading.

Or

(b) Describe about designing process of solid and hollow shafts.

 $\mathbf{2}$ 

17. (a) Enumerate the importance of cotton joints.

Or

- (b) Narrate about components of engine.
- 18. (a) Explain in detail about crane hook and 'C' frame.

Or

(b) Describe about functional process of engine.

3

### **B.Voc. DEGREE EXAMINATION, NOVEMBER 2022**

### Fifth Semester

# Manufacturing Technology

# **BASICS OF LEGAL AND HR POLICIES**

#### (2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$ 

Answer **all** the questions.

- 1. What is fulltime employment?
- 2. What are the skills required in an organisation?
- 3. Define Communication.
- 4. What is Case study?
- 5. Why team work is important?
- 6. What is intrapersonal communication?
- 7. Write the merits of insurance.
- 8. Write the concept of overtime.
- 9. What is Legal literacy?
- 10. List any two public sectors.

#### Part B

 $(5 \times 5 = 25)$ 

Answer **all** the questions.

11. (a) Highlight the merits of teamwork.

Or

- (b) State the importance of training.
- 12. (a) Discuss the tax impact of the salary components.

Or

- (b) Write short note on bond and other commitments.
- 13. (a) Write about Indian legal system.

Or

- (b) Write about Apprentice Act, 1961.
- 14. (a) Write about the Sexual harassment of women Act, 2013.

 $\mathbf{Or}$ 

- (b) State the concept of sector and public sector employment.
- 15. (a) State the salient features of Minimum wages Act, 1948.

Or

(b) Write about the basics of Criminal law.

### Part C

 $(3 \times 10 = 30)$ 

Answer all the questions.

16. (a) Explain in detail about the types of employment.

Or

(b) Explain in detail about the components of salary.

 $\mathbf{2}$ 

17. (a) Explain the importance of Human Rights in detail.

 $\mathbf{Or}$ 

- (b) Explain in detail the Right to Information Act, 2015
- 18. (a) Explain in detail about Employees Provident Fund and Misc. provisions Act, 1952.

Or

(b) Explain in detail the Social security investment avenues available to private sector employees and self- employed.

3

#### **B.Voc. DEGREE EXAMINATION, APRIL 2022.**

### Sixth Semester

# Manufacturing Technology

#### INDUSTRIAL SAFETY

#### (2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

Answer all questions.

- 1. Narrate the two factors which reduce accidents in a machine shop.
- 2. State the preventive measures to run engine lathes safely.
- 3. Define the term Zero Mechanical State (ZMS)
- 4. Point out hazards associated with turret lathes and screw machines.
- 5. How leak detection can be carried out in pipeline.
- 6. What is flashback arrestor?
- 7. List out the types of injuries that occur in kick presses.
- 8. Discuss about cold working.
- 9. Where dynamic balancing is required?
- 10. Analyze the need for hydro testing

**Part B** (5 × 5 = 25)

Answer all questions

11. (a) Explain the procedure for safely removing chips, shavings, and cuttings.

Or

- (b) Write the inspection procedure for boring machine.
- 12. (a) Differentiate mechanical and non-mechanical Hazards.

Or

- (b) Analyze in detail about the hazards associated with boring and drilling.
- 13. (a) Explain the common hazards in welding two metals.

Or

- (b) Generalize the safety measures in storing of gas cylinders.
- 14. (a) Explain point of operation safeguarding in cold working.

Or

- (b) Explain in detail about various operations in power presses.
- 15. (a) Explain the precautions to be taken during nitriding.

Or

(b) Describe the safety measures for electroplating.

 $\mathbf{2}$ 

**Part C**  $(3 \times 10 = 30)$ 

Answer **all** questions.

16. (a) Discuss in detail about the general safety rules in metal working industry.

Or

- (b) Explain safety precautions while manufacturing gears in milling machine.
- 17. (a) Explain in detail various personal protective equipment used in welding process.

Or

- (b) Recommend and explain suitable practices for Industrial safety.
- 18. (a) Explain the safety training process in hot working.

 $\mathbf{Or}$ 

(b) Recommend the suitable procedure for safety in inspection and testing.

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Sub. Code 16/17/23/25/ 26/27/29

# COMMON FOR ALL U.G DEGREE COURSES EXAMINATION, NOVEMBER 2022

### **First/Second Semester**

### **ENVIRONMENTAL STUDIES**

### (2019/2020 onwards)

Duration: 3 Hours

Maximum : 75 Marks

Part A  $(10 \times 2 = 20)$ 

Answer all questions.

- 1. Nonrenewable resources
- 2. Ecosystem
- 3. Food Chain of forest ecosystem.
- 4. Pandemic Emergencies.
- 5. Red Data Book
- 6. Hot spots
- 7. Climate Change
- 8. Deforestation
- 9. Biodiversity
- 10. Acid Rain

**Part B**  $(5 \times 5 = 25)$ 

Answer **all** questions.

11. (a) Differentiate renewable and nonrenewable energy resources.

Or

- (b) Write notes on structure and functions of grassland ecosystem.
- 12. (a) Write notes on Food Webs of Forest Ecosystem with suitable examples.

Or

- (b) Write notes on Genetic, Species and Ecosystem Diversity.
- 13. (a) Write short notes on Food resources and its problems associated with them.

Or

- (b) Write notes on land resources and problem associated with them.
- 14. (a) Write notes on thermal pollution.

Or

- (b) Write notes on energy pyramids with suitable examples.
- 15. (a) Explore the threats to biodiversity.

Or

(b) Write note on man-made disaster with special reference to strike.

 $\mathbf{2}$ 

**Part C**  $(3 \times 10 = 30)$ 

Answer **all** the questions.

16. (a) Write an essay on multidisciplinary nature of environmental studies and about the need for public awareness on environment.

Or

- (b) Write an essay on Water Resources and problem associated with over-utilization of various water resources.
- 17. (a) Write an essay on Biogeographical classification of India.

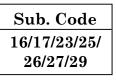
Or

- (b) Write an essay on values of biodiversity.
- 18. (a) Write an essay on causes, effects and control measures of water pollution.

Or

(b) Enumerate various strategies in managing disasters caused due to natural calamities.

3



### Common for All U.G. B.Sc./B.B.A. DEGREE EXAMINATION, APRIL 2022

**First/Second Semester** 

# **ENVIRONMENTAL STUDIES**

# (2019/2020 onwards)

Duration : 3 Hours

Maximum : 75 Marks

 $(10 \times 2 = 20)$ 

Part A

Answer **all** the questions.

- 1. ZSI.
- 2. WII.
- 3. What is renewable energy?
- 4. Food web.
- 5. Pyramid of numbers in aquatic ecosystem.
- 6. Red data book.
- 7. List out any five Endemic species of India.
- 8. List out marine pollutants.
- 9. *Ex Situ* Conservation.
- 10. Enlist Option Values of Biodiversity.

#### **Part B** (5 × 5 = 25)

Answer all the questions.

11. (a) Write notes on definition, scope and importance of environmental studies.

Or

- (b) Write notes on soil erosion and desertification.
- 12. (a) Write notes on energy flow in the ecosystem.

Or

- (b) Write notes on threads to biodiversity.
- (a) Write notes on Biodiversity at Global, National and Local levels.

Or

- (b) Write notes on various strategies of conservation of Biodiversity.
- 14. (a) Write notes on ecological pyramids.

Or

- (b) Write notes on air pollution.
- 15. (a) Write notes on noise pollution.

Or

(b) Write notes on effects and control measures of nuclear hazards.

 $\mathbf{2}$ 

**Part C**  $(3 \times 10 = 30)$ 

Answer **all** questions.

16. (a) Write an essay on the multidisciplinary nature of Environmental Studies.

 $\mathbf{Or}$ 

- (b) Write an essay on the following resources with special emphasis to how they are overexploited/utilized which in turn damage the environment, (i) Forest Resources and (ii) Food Resources.
- 17. (a) Write an essay on "India is a mega-diversity nation".

Or

- (b) Write an essay on Biodiversity and their values.
- (a) Write an essay on causes, effects and control measures of (i) Marine Pollution and (ii) Water Pollution.

Or

(b) Write an essay on concept, structure and function of ecosystem.

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