Total No. of Questions : 5] **[Total No. of Pages : 1**

P732

[4068]-1
S.Y. B.Des. (Product Design)
ERGONOMICS - II
(Sem. - IV)

Time : 3 Hours] ***[Max. Marks : 100***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Figures to the right indicate the marks.***
3) ***Elaborate with sketches wherever necessary.***

Q1) Write short note on any four : **[20]**

a) Cognitive ergonomics.
b) Perceived affordance.
c) Occupational health concerns from ergonomic perspective. Elaborate on any one occupation.
d) Importance of Anthropometric Data in Design Process.
e) Short term memory and long term memory.

Q2) Write the task flow of using a stapler. Analyze it with respect to man and tool usability. Identify areas of concern if any from ergonomic perspective. (Analyze it with appropriate sketches). **[30]**

Q3) Explain the factors responsible for the design selection and location of controls with appropriate examples and sketches. **[20]**

Q4) Describe with the help of appropriate sketches the various factors to be considered while designing the ergonomically comfortable chair. **[20]**

Q5) Elaborate with examples the importance of ergonomics in Design Process. **[10]**

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Total No. of Questions : 7] **[Total No. of Pages : 1**

P733

[4068]-2
S.Y. B.Des. (Product Design)
MATERIALS AND PROCESSING - II
(Sem. - IV)

Time : 3 Hours] ***[Max. Marks : 100***

Instructions to the candidates:

1) ***Attempt any five questions.***
2) ***All questions carry equal marks.***

Q1) Explain in detail, the difference between physical properties and mechanical properties of a material. Give appropriate examples.

Q2) Explain the blow moulding process with a detail sketch. Suggest household products which can be produced with the process, drawing carries 5 marks.

Q3) Explain the thermoplastics and thermoset family of polymer, with 3 materials from each family.

Q4) Design a "flip top cap for a fairness cream tube". Suggest suitable polymer for flipping property and justify the selected material. Explain the Flip joint by a detail drawing, drawing carries 5 marks.

Q5) Design a water bottle and cap, specify the product requirements and suggest the polymer material, explain how the specific properties of polymer are fulfilling your design requirement, drawing carries 5 marks.

Q6) Define grades of stainless steel and its application. Explain how the property of stainless steel is obtained in the material.

Q7) Explain in brief (any four) :

a) Property and application of ABS.
b) Property and application of Nylon.
c) Rotational moulding.
d) Compression moulding.
e) Properties of polymer.
f) Extrusion of polymer.

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Total No. of Questions : 5] **[Total No. of Pages : 1**

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[4068]-3
S.Y. B.Des. (Product Design)
HISTORY
(Sem. - IV)

Time : 3 Hours] ***[Max. Marks : 100***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Figures to the right indicate the marks.***
3) ***Elaborate with sketches wherever necessary.***

Q1) Write short notes on (any four) : **[20]**

a) Ross Love grove.
b) Philip Starck.
c) Rashid karim.
d) Dieter Rams.
e) Chris Bangle.

Q2) Discuss principles of Bauhaus w.r.t. **[20]**

a) Design philosophy.
b) Designers working in Bauhaus.

Q3) Write short notes on : **[20]**

a) Pop Art.
b) Impressionism.
c) Expressionism.
d) Futurism.
e) Machine Style.

Q4) Distinguish between craftsmen and product of designer. Write about impact of the modern technology on product design. **[20]**

Q5) Write evolution of a product of your choice with respect to **[20]**

a) Evolution of form.
b) Adaption of technology.

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Total No. of Questions : 4] **[Total No. of Pages : 2**

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[4068]-4
S.Y. B.Des. (Set Design)
MATERIALS AND CONSTRUCTION - II
(Sem. - IV)

Time : 3 Hours] ***[Max. Marks : 100***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Draw neat diagrams wherever necessary.***

Q1) Answer the following (any five) : **[30]**

a) What is acrylic? Write advantages of Acrylic as a construction material.

b) Write in brief about manufacturing process of glass.

c) Discuss timber as construction material in set design.

d) Explain the importance and methods of seasoning of timber.

e) Explain lengthening joint with any two example.

f) What are the advantages and disadvantages of M.D.F?

Q2) Write short note (any five) : **[25]**

a) Etching of glass.

b) Mortise and Tenon joint.

c) Flemish bond.

d) Characteristics of good timber.

e) Angle joint.

f) Any five trees usually used in carpentry work.

Q3) Explain with the sketches (any five) : **[25]**

a) Bat

b) Wedge.

c) Sliding window.

d) Framed door.

e) Dovetail joint.

f) Casement window.

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Q4) Explain the following (any five) : **[20]**

a) Header.

b) Twisted fiber.

c) Queen closure.

d) Stretcher bond.

e) Types of glass.

f) Shouldered joint.

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Total No. of Questions : 5] **[Total No. of Pages : 1**

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[4068]-5
S.Y. B.Des. (Set Design)
HISTORY OF ARCHITECTURE - II
(Sem. - IV)

Time : 3 Hours] ***[Max. Marks : 100***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Figures to the right indicate the marks.***
3) ***Elaborate with sketches wherever necessary.***

Q1) Write about evolution of temple in Nagara style and derivation from Bamboo hut. **[20]**

Q2) Write with examples the use of study of history with reference to set design. **[20]**

Q3) Write short notes on : **[20]**

a) Nagara style.
b) Pida.
c) Antarala.
d) Deoul.

Q4) Define the various elements of a typical Indian temple. Explain with illustrations. **[20]**

Q5) Write short notes on (any four) : **[20]**

a) Kudu motif.
b) Garbh gripha.
c) Prakara.
d) Mandapn.

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