

Mee. Aggarwal C-473

14P/300/29

Question Booklet No.....

(To be filled up by the candidate by blue/black ball-point pen)

Roll No.

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Roll No.

(Write the digits in words) .....

Serial No. of OMR Answer Sheet .....

Day and Date .....

(Signature of Invigilator)

### INSTRUCTIONS TO CANDIDATES

(Use only blue/black ball-point pen in the space above and on both sides of the Answer Sheet)

1. Within 10 minutes of the issue of the Question Booklet, check the Question Booklet to ensure that it contains all the pages in correct sequence and that no page/question is missing. In case of faulty Question Booklet bring it to the notice of the Superintendent/Invigilators immediately to obtain a fresh Question Booklet.
2. Do not bring any loose paper, written or blank, inside the Examination Hall except the Admit Card without its envelope.
3. A separate Answer Sheet is given. It should not be folded or mutilated. A second Answer Sheet shall not be provided. Only the Answer Sheet will be evaluated.
4. Write your Roll Number and Serial Number of the Answer Sheet by pen in the space provided above.
5. On the front page of the Answer Sheet, write by pen your Roll Number in the space provided at the top, and by darkening the circles at the bottom. Also, wherever applicable, write the Question Booklet Number and the Set Number in appropriate places.
6. No overwriting is allowed in the entries of Roll No., Question Booklet No. and Set No. (if any) on OMR sheet and also Roll No. and OMR Sheet No. on the Question Booklet.
7. Any change in the aforesaid entries is to be verified by the invigilator, otherwise it will be taken as unfair means.
8. Each question in this Booklet is followed by four alternative answers. For each question, you are to record the correct option on the Answer Sheet by darkening the appropriate circle in the corresponding row of the Answer Sheet, by ball-point pen as mentioned in the guidelines given on the first page of the Answer Sheet.
9. For each question, darken only one circle on the Answer Sheet. If you darken more than one circle or darken a circle partially, the answer will be treated as incorrect.
10. Note that the answer once filled in ink cannot be changed. If you do not wish to attempt a question, leave all the circles in the corresponding row blank (such question will be awarded zero mark).
11. For rough work, use the inner back page of the title cover and the blank page at the end of this Booklet.
12. Deposit only the OMR Answer Sheet at the end of the Test.
13. You are not permitted to leave the Examination Hall until the end of the Test.
14. If a candidate attempts to use any form of unfair means, he/she shall be liable to such punishment as the University may determine and impose on him/her.

उपर्युक्त निर्देश हिन्दी में अन्तिम आवरण-पृष्ठ पर दिये गए हैं।

[No. of Printed Pages : 20+2





14P/300/29

No. of Questions/प्रश्नों की संख्या : 120

Time/समय : 2 Hours/घण्टे

Full Marks/पूर्णांक : 360

**Note :** (1) Attempt as many questions as you can. Each question carries 3 marks. One mark will be deducted for each incorrect answer. Zero mark will be awarded for each unattempted question.

अधिकतम प्रश्नों को हल करने का प्रयत्न करें। प्रत्येक प्रश्न 3 अंक का है। प्रत्येक गलत उत्तर के लिए एक अंक काटा जाएगा। प्रत्येक अनुत्तरित प्रश्न का प्राप्तांक शून्य होगा।

(2) If more than one alternative answers seem to be approximate to the correct answer, choose the closest one.

बदि एकाधिक वैकल्पिक उत्तर सही उत्तर के निकट प्रतीत हों, तो निकटतम सही उत्तर दें।

1. Cavity spot is a serious problem in which of the following?

- (1) Cabbage      (2) Radish      (3) Carrot      (4) Turnip

2. Cabbage head is a variety of

- (1) Cabbage      (2) Lettuce  
(3) Chinese cabbage      (4) Red cabbage

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(P.T.O.)

3. Kashi Ganga is a variety of  
(1) bottle gourd      (2) French bean      (3) carrot      (4) radish
4. In vegetable pea, the presence of sugar is about  
(1) 8%      (2) 16%      (3) 10%      (4) 12%
5. The harmful element in Palak is  
(1) chloride      (2) bromide  
(3) sulphate      (4) nitrate and oxalate
6. The botanical name of tomato is  
(1) *Lycopersicon esculentum* Mill.  
(2) *Lycopersicon esculentus* L.  
(3) *Solanum Lycopersicon* (Mill.) Wettst.  
(4) *Solanum Lycopersicum* L.
7. Fabaceae is the new family of  
(1) carrot      (2) radish      (3) turnip      (4) pea
8. Approximate nursery size for a raising onion seeding is  
(1) 1/10 ha      (2) 1/20 ha      (3) 1/25 ha      (4) 1/50 ha
9. Presently the vegetable production in India is  
(1) 156.33 mt      (2) 135.65 mt      (3) 146.55 mt      (4) 129.87 mt

10. Presently the productivity of vegetable in India is  
(1) 17.30 t/ha (2) 17.39 t/ha (3) 11.39 t/ha (4) 11.70 t/ha.
11. Yellow vein mosaic tolerant variety of Okra is  
(1) Kashi Pragati (2) Kashi Gaurav  
(3) Parvati Kranti (4) Pusa Sawani
12. In tomato the average sugar content is  
(1) 5% (2) 6% (3) 8% (4) 4%
13. Seed production increases when the flower is  
(1) short styled (2) long styled  
(3) pseudo short styled (4) midged styled
14. Which of the following has male and female flowers on separate plants?  
(1) Pointed gourd (2) Bottle gourd  
(3) Sponge gourd (4) Bitter gourd
15. Isolation distance in Chilies and Capsicum is  
(1) 50 m (2) 100 m (3) 200 m (4) 250 m
16. Seeds of tomato obtained from  $ha^{-1}$  area is  
(1) 50-100 q  $ha^{-1}$  (2) 200-220 q  $ha^{-1}$   
(3) 220-250 q  $ha^{-1}$  (4) 100-150 q  $ha^{-1}$



17. Which of the following is not sown/transplanted side by side?  
(1) Tomato and brinjal (2) Cucumber and long melon  
(3) Sponge gourd and ridge gourd (4) pea and cowpea
18. Cytoplasmic male sterility is found in  
(1) tomato (2) radish (3) pea (4) ash gourd
19. Which method is followed for the seed production of carrot?  
(1) *In situ* (2) Stekling  
(3) Seed plot technique (4) Go-go method
20. Common Palak is also known as  
(1) *Beta vulgaris bengalensis* (2) *Raphanus sativus*  
(3) *Spinacia vulgaris* (4) *Spinacia oleracea*
21. Whiptail in cauliflower indicates  
(1) hollow stem  
(2) improper development of leaf blade  
(3) plant without terminal bud  
(4) development of small curd
22. Choose the wrong pair  
(1) Pusa Pragati—Cowpea (2) Pusa Sadabahar—Chilli  
(3) Pusa Shakti—Ash gourd (4) Pusa Meghali—Carrot

23. Which procedure is followed for stump method of seed production in cabbage?
- (1) the head is kept as such
  - (2) the out leaves of head are removed
  - (3) the head is removed and only sump is left
  - (4) a cross cut is given to the head
24. Incompatibility in cauliflower is
- (1) gametophytic
  - (2) sporophytic
  - (3) heteromorphic
  - (4) homomorphic
25. The vegetable not belonging to monocotyledons is
- (1) Chow-chow
  - (2) Arvi
  - (3) Leek
  - (4) Garlic
26. Hollow heart in potato is due to
- (1) moisture deficiency
  - (2) excessive nitrogen
  - (3) poor ventilation
  - (4) low temperature
27. Which of the following is the important source of iodine?
- (1) Tomato
  - (2) Okra
  - (3) Spinach
  - (4) Tapioca
28. Choose the wrong pair
- (1) Beet root  $(2n) = 18$
  - (2) Carrot  $(2n) = 18$
  - (3) Onion  $(2n) = 18$
  - (4) Radish  $(2n) = 18$

29. Length of the Surveyor's chain is .  
(1) 150 ft            (2) 100 ft            (3) 33 ft            (4) 66 ft
30. The word forest is derived from  
(1) Foris            (2) Fores            (3) Forees            (4) Fories
31. The word forest is derived from ——— language.  
(1) Greek            (2) Latin            (3) American            (4) French
32. In case of natural uneven aged forests difference up to ———% of the rotation is usually allowed, where forest is not harvested for 100 or more.  
(1) 20            (2) 30            (3) 25            (4) 35
33. In high forest the regeneration is obtained by  
(1) cuttings            (2) grafting            (3) seeds            (4) budding
34. Pure forest are composed of almost entirely of one species, usually to the extent of not less than  
(1) 80 per cent            (2) 75 per cent            (3) 55 per cent            (4) 50 per cent
35. A reserve forest is an area with complete protection constituted according to the  
(1) Indian Forest Act, 1927  
(2) National Forest Policy, 1952  
(3) Indian Wildlife Act, 1972  
(4) National Commission on Agriculture, 1976



36. Which of the following is not a objective of social forestry?

- (1) Meeting the fuel wood, fodder and small timber
- (2) Protection of agriculture against wind
- (3) Meeting the industrial needs
- (4) Meeting the recreational needs

37. Which of the following species produces oil seeds?

- (1) *Madhica indica*
- (2) *Shorea robusta*
- (3) Only (1)
- (4) Both (1) and (2)

38. — is host species for Lac insect.

- (1) *Acacia mangium*
- (2) Teak
- (3) *Butea monosperma*
- (4) *Leucaena leucocephala*

39. Champion and Seth classification how many major groups of forest types are there?

- (1) 6
- (2) 4
- (3) 5
- (4) 7

40. Champion and Seth in major groups have further grouped into — groups.

- (1) 9
- (2) 12
- (3) 16
- (4) 17

41. Tropical forests have differentiated into — groups.

- (1) 9
- (2) 8
- (3) 7
- (4) 12

42. Diamond back moth is a serious pest of

- (1) rice                      (2) wheat                      (3) maize                      (4) cabbage

43. Match the following :

- |                         |                                  |
|-------------------------|----------------------------------|
| (a) Tropical forest     | (i) Dry deciduous forests        |
| (b) Montane subtropical | (ii) Himalayan temperate forests |
| (c) Montane temperate   | (iii) Dry alpine scrub           |
| (d) Alpine              | (iv) Pine forest                 |
- (1) (a), (d), (b), (c)                      (2) (a), (d), (c), (b)  
(3) (d), (b), (a), (c)                      (4) (d), (a), (b), (c)

44. The State having highest forest area is

- (1) Sikkim                                      (2) Madhya Pradesh  
(3) Karnataka                                      (4) Bihar

45. According to FAO, 90% of deforestation is caused by

- (1) mining  
(2) industrial plantation  
(3) unsustainable agriculture  
(4) construction of hydroelectric dams

46. In most parts of the world, deforestation accelerated during  
 (1) 1980's (2) 1970's (3) 1990's (4) 1960's
47. The word Social Forestry was coined by  
 (1) Raintree (2) Westoby (3) P. K. Nair (4) Brandis
48. What is not correct about home garden Agroforestry system?  
 (1) Humid tropical climates (2) High rainfall  
 (3) Low rainfall (4) Multitier system
49. Which species is not suitable for dry land in Agroforestry system?  
 (1) *Acacia tortilis* (2) *Zizyphus mauritiana*  
 (3) *Tectona grandis* (4) *Terminalia arjuna*
50. Which species is not suitable for Marshy soils?  
 (1) *Terminalia arjuna* (2) *Leucaena leucocephala*  
 (3) *Eucalyptus camaldulensis* (4) *Gmelina arborea*
51. Where is the ICRAF Centre situated?  
 (1) Nairobi (2) Indonesia (3) Rome (4) Pakistan
52. Which is the best species for sand dune stabilization?  
 (1) *Acacia auriculiformis* (2) *Prosopis juliflora*  
 (3) *Acacia tortilis* (4) *Tectona grandis*



- 53. The sustainable land use systems involving trees combined with crops and/or animals on the same unit of land, is termed as**
- (1) Agroforestry
  - (2) Sustainable Forest Management
  - (3) Social Forestry
  - (4) Farm Forestry
- 54. When the use of land is directed towards satisfying basic needs and is managed by the owner, is said to be**
- (1) Commercial Agroforestry Systems
  - (2) Intermediate Agroforestry Systems
  - (3) Subsistence Agroforestry Systems
  - (4) Social Agroforestry
- 55. Suitable Agroforestry System for wasteland is**
- (1) Agrisilviculture
  - (2) Agrihorticulture
  - (3) Silvipasture
  - (4) Hortisilviculture
- 56. The practice of forestry in areas devoid of tree growth and other vegetation outside the conventional forest areas is called**
- (1) Social Forestry
  - (2) Extension Forestry
  - (3) Farm Forestry
  - (4) Afforestation

57. — is not a timber yielding tree species.
- (1) Teak                      (2) Sissoo                      (3) Rose wood                      (4) Subabul
58. Which species is known as Paragon of Indian timber?
- (1) Teak                      (2) Arjun                      (3) Pine                      (4) Mahua
59. Plantations grow as linear strips of lands on the sides of public roads, canals and railway lines are called as
- (1) Linear Strip Plantations                      (2) Commercial Forestry  
(3) Avenue Plantations                      (4) Urban Forestry
60. Home Garden Agroforestry System is practiced in
- (1) humid tropical climates                      (2) semi-arid lands  
(3) high lands                      (4) sub-humid low lands
61. Seed potato dormancy is broken by
- (1) Enthral                      (2) Thiourea                      (3) IAA                      (4) NAA
62. Metsulfuron dose in wheat is
- (1) 1-2 g a.i/ha                      (2) 5-6 g a.i/ha  
(3) 100-150 g a.i/ha                      (4) 500-1000 g a.i/ha
63. Enlargement of cotton fibres resulting in tiny knots in the yarn is called
- (1) Count                      (2) Croppy                      (3) Nippiness                      (4) Dazed fibre

64. In forecasting of rainfall the word 'isolated rain' denotes ——— area receiving rain.  
(1) 1/5                      (2) 1/4                      (3) 1/3                      (4) 1/2
65. When soil pH changes from 7.0 to 6.0, its H-ion conc. increases ——— times.  
(1) 1                          (2) 10                          (3) 100                          (4) 1000
66. 5000 p.p.m. is same as ———%.  
(1) 0.5                          (2) 0.05                          (3) 0.005                          (4) 0.0005
67. The 17th nutrient added to the list of essential elements is  
(1) boron                      (2) molybdenum                      (3) chlorine                      (4) nickel
68. Peg in groundnut is a stalk-like structure (originating from the meristemic region at the base of the ovary) known as  
(1) Androphore                      (2) Gynophore  
(3) Perianth                      (4) Androgynophore
69. The first State Agriculture University of India is  
(1) PAU, Ludhiana                      (2) GBPUAT, Pantnagar  
(3) RAUT, Udaipur                      (4) GAU, Gujarat
70. 'Dapog' method of raising nursery is followed in  
(1) Tobacco                      (2) Paddy                      (3) Bajra                      (4) Onion



71. If an economy is operating at an efficient level of production, then
- (1) labour is almost at full employment
  - (2) some resources are idle
  - (3) the country is producing the maximum output given the available resources
  - (4) there will always be some inefficiently used resources
72. One of the weaknesses of a centrally planned economy is all of the following, *except*
- (1) underproduction of what consumer really want
  - (2) chronic shortage of goods
  - (3) low cost production of quality goods that are in demands
  - (4) the rationing of goods
73. When Government subsidize irrigation water being purchased by farmers, the result is
- (1) higher marginal costs of production
  - (2) lower fixed costs to farmers
  - (3) increased output because marginal costs are lower
  - (4) higher fixed costs to farmers
74. Which of the following is not generally a characteristics feature of agriculture?
- |                            |                                     |
|----------------------------|-------------------------------------|
| (1) Ease of entry and exit | (2) Market power                    |
| (3) Homogeneous product    | (4) Artificial restraints on prices |



80. Apparently the first inbreeding experiments with Maize were those reported by

- (1) Darwin (1876) (2) Shull (1874)  
 (3) East (1914) (4) Hull (1876)

81. Moisture content for safe storage of cereal grain is to be maintained at

- (1) 12-16% (2) 16-20% (3) 8-12% (4) 20-25%

82. Recommended dose of aluminium phosphide is

- (1) 5 tablets/ton of grain (2) 6 tablets/ton of grain  
 (3) 10 tablets/ton of grain (4) 3 tablets/ton of grain

83. Scientific name of house rat is

- (1) *Rattus rattus* (2) *Tatera indica*  
 (3) *Musbooduga* (4) *Bandicota bengalensis*

84. Which bioagent is used for the control of *Parthenium* weed?

- (1) *Zygogramma bicolorata* (2) *Coccinella septempunctata*  
 (3) *Trichogramma* sp. (4) *Chrysoperla carnea*

85. Insect pest control by irradiation is known as

- (1) chemical control (2) biological control  
 (3) cultural control (4) physical control





93. River which has the highest groundwater potential basin in India is  
(1) Godavari (2) Ganga (3) Cauvery (4) Krishna
94. The arrangement of soil particles (sand, silt and clay) within the soil is termed as  
(1) soil structure (2) soil colloids (3) soil texture (4) soil tilth
95. The National Bank of Agriculture and Rural Development came into existence on  
(1) 1979 (2) 1981 (3) 1982 (4) 1983
96. 1000 seed weight of *Phalaris minor* is  
(1) 40 g (2) 22 g (3) 4 g (4) 2 g
97. 'Nominee gold' herbicide is the trade name of  
(1) Chlorimuron + Metsulfuron (2) Bispyribac sodium  
(3) Pyrozosulfuron (4) Pretilachlor + Bensulfuron
98. The moisture content at which the wilting is complete and plant die is called  
(1) wilting point (2) ultimate wilting point  
(3) permanent wilting point (4) incipient wilting point
99. One cubic-metre is equal to ——— litres of water.  
(1) 10 (2) 100 (3) 1000 (4) 10000

100. Indian Institute of Soil Science is located at  
(1) Karnal, Haryana (2) Bhopal, Madhya Pradesh  
(3) Kanpur, Uttar Pradesh (4) New Delhi
101. The WHO standard critical limit for  $\text{NO}_3\text{-N}$ /litre in drinking water is ——— mg/litre.  
(1) 5 (2) 10 (3) 15 (4) 20
102. The State having the highest area under wastelands in India is  
(1) Rajasthan (2) Madhya Pradesh  
(3) Jammu & Kashmir (4) Jharkhand
103. In conservation tillage, at least ——— percent soil surface should be covered with crop residue.  
(1) 20 (2) 30 (3) 40 (4) 50
104. Biotic environment includes  
(1) soil  
(2) relative humidity and sunlight  
(3) rainfall and temperature  
(4) producers, consumers and decomposers
105. Decomposers include  
(1) bacteria and fungi (2) actinomycetes  
(3) algae (4) animals



106. Abiotic environment does not include  
(1) air (2) water (3) soil (4) plants
107. Vermicomposting is done by  
(1) fungus (2) bacteria (3) worms (4) animals
108. The group of organisms which convert light into food are called  
(1) Autotrophs (2) Heterotrophs (3) Decomposers (4) Omnivores
109. Which one of the following is not biodegradable?  
(1) Vegetables (2) Fruits  
(3) Earthworm (4) Aluminium foil
110. Which bird is active at night?  
(1) Parrot (2) Peacock (3) Sparrow (4) Owl
111. An animal that can tolerate the heat of the desert is  
(1) rats (2) camel (3) cow (4) lion
112. Air pollution is caused by  
(1) insecticides (2) sewage (3) smoke (4) loud speakers
113. If waste materials contaminate the source of drinking water which of the following diseases will spread?  
(1) Scary (2) Typhoid (3) Malaria (4) ~~Angina~~

114. In our country, the Van Mahotsav Day is observed on
- (1) Second of October (2) First of December  
(3) Tenth of August (4) First of July
115. Which of the following wastes cannot be decomposed by bacteria to form compost?
- (1) Kitchen wastes (2) Plastic and polythene bags  
(3) Dead plants (4) Bodies of insects living in the soil
116. Which of the following problems is not created by noise pollution?
- (1) Diarrhoea (2) Hypertension (3) Deafness (4) Irritation
117. Plants are green because of the presence of a pigment called
- (1) glucose (2) nitrogen (3) chlorophyll (4) oxygen
118. Air is composed of gases, water vapours and
- (1) dust particles (2) rainfall (3) snowfall (4) light
119. Medicine of quinine is provided by
- (1) Eucalyptus plant (2) Aconite plant  
(3) Cinchona plant (4) Money plant
120. Chief source of energy in environment is
- (1) fire (2) moon (3) sun (4) stars

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## अभ्यर्थियों के लिए निर्देश

(इस पुस्तिका के प्रथम आवरण-पृष्ठ पर तथा उत्तर-पत्र के दोनों पृष्ठों पर केवल नीली या काली बाल-प्वाइंट पेन से ही लिखें)

1. प्रश्न पुस्तिका मिलने के 10 मिनट के अन्दर ही देख लें कि प्रश्नपत्र में सभी पृष्ठ मौजूद हैं और कोई प्रश्न छूटा नहीं है। पुस्तिका दोषयुक्त पाये जाने पर इसकी सूचना तत्काल कक्ष-निरीक्षक को देकर सम्पूर्ण प्रश्नपत्र की दूसरी पुस्तिका प्राप्त कर लें।
2. परीक्षा भवन में लिफाफा रहित प्रवेश-पत्र के अतिरिक्त, लिखा या सादा कोई भी खुला कागज साथ में न लायें।
3. उत्तर-पत्र अलग से दिया गया है। इसे न तो मोड़ें और न ही विकृत करें। दूसरा उत्तर-पत्र नहीं दिया जायेगा, केवल उत्तर-पत्र का ही मूल्यांकन किया जायेगा।
4. अपना अनुक्रमांक तथा उत्तर-पत्र का क्रमांक प्रथम आवरण-पृष्ठ पर पेन से निर्धारित स्थान पर लिखें।
5. उत्तर-पत्र के प्रथम पृष्ठ पर पेन से अपना अनुक्रमांक निर्धारित स्थान पर लिखें तथा नीचे दिये वृत्तों को गाढ़ा कर दें। जहाँ-जहाँ आवश्यक हो वहाँ प्रश्न-पुस्तिका का क्रमांक तथा सेट का नम्बर उचित स्थानों पर लिखें।
6. ओ० एम० आर० पत्र पर अनुक्रमांक संख्या, प्रश्न-पुस्तिका संख्या व सेट संख्या (यदि कोई हो) तथा प्रश्न-पुस्तिका पर अनुक्रमांक सं० और ओ० एम० आर० पत्र सं० की प्रविष्टियों में उपरिलेखन की अनुमति नहीं है।
7. उपर्युक्त प्रविष्टियों में कोई भी परिवर्तन कक्ष निरीक्षक द्वारा प्रमाणित होना चाहिये अन्यथा यह एक अनुचित साधन का प्रयोग माना जायेगा।
8. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं। प्रत्येक प्रश्न के वैकल्पिक उत्तर के लिये आपको उत्तर-पत्र की सम्बन्धित पंक्ति के सामने दिये गये वृत्त को उत्तर-पत्र के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार पेन से गाढ़ा करना है।
9. प्रत्येक प्रश्न के उत्तर के लिये केवल एक ही वृत्त को गाढ़ा करें। एक से अधिक वृत्तों को गाढ़ा करने पर अथवा एव वृत्त को अपूर्ण भरने पर वह उत्तर गलत माना जायेगा।
10. ध्यान दें कि एक बार स्याही द्वारा अंकित उत्तर बदला नहीं जा सकता है। यदि आप किसी प्रश्न का उत्तर नहीं देना चाहते हैं, तो सम्बन्धित पंक्ति के सामने दिये गये सभी वृत्तों को खाली छोड़ दें। ऐसे प्रश्नों पर शून्य अंक दिये जायेंगे।
11. रफ़ कार्य के लिये प्रश्न-पुस्तिका के मुखपृष्ठ के अन्दर वाले पृष्ठ तथा अंतिम पृष्ठ का प्रयोग करें।
12. परीक्षा के उपरान्त केवल ओ०एम०आर० उत्तर-पत्र परीक्षा भवन में जमा कर दें।
13. परीक्षा समाप्त होने से पहले परीक्षा भवन से बाहर जाने की अनुमति नहीं होगी।
14. यदि कोई अभ्यर्थी परीक्षा में अनुचित साधनों का प्रयोग करता है, तो वह विश्वविद्यालय द्वारा निर्धारित दंड का/की, भोगेगा/होगी।

